Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 2/16/2021 11:57:58 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Czarina C Cooper [Cooper.Czarina@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/16/2020 3:00:00 PM
End: 7/16/2020 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
Occurs every Thursday from 11:00 AM to 12:00 PM effective 7/16/2020 until 12/30/2021.
Required Attendees: Jacobs, Brittany; Lindberg, Casey; Soares, Barbara; Miller, GregoryG
Optional Attendees: Cunningham, Kelly; Euling, Susan; Czarina C Cooper

Standing Agenda

- SYR4
- Meeting coverage for upcoming week
- Meeting reviews (ADP workgroup, check-in with Betsy, etc)
- PFOA/PFOS items
- DBPs

6/2/21: Adding Kelly as optional and moving SY4R as first agenda item so Greg and Kelly can jump off if needed

2/16/2021: Adding Greg on to this meeting invite so we can coordinate on PFOA/PFOS work and I guess also six year review 4.

Updating meeting title to include DBPs

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)

Ex. 6 Personal Privacy (PP) States, Washington DC

Find a local number | Reset PIN

By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Learn More | Meeting options

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
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Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

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Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Busy

Required Attendees: Owscheduling; Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

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Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 4:19:18 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Susan Lanberg [susan.lanberg@tetratech.com]

Subject: HOLD FSTRAC PFBS and GenX chemicals tox assessments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 11/28/2018 6:00:00 PM
End: 11/28/2018 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Owens, Beth; Lambert, Jason; Jones, Samantha; Akhter, Shamima; Susan Lanberg

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/20/2018 6:50:06 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]
CC: Ross, David P [ross.davidp@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: GenX chemicals and PFBS celebration
Location: Occidental Grill

Start: 12/12/2018 9:00:00 PM
End: 12/12/2018 11:30:00 PM
Show Time As: Busy

Required Attendees: Jones, Samantha; Lambert, Jason; Owens, Beth; Champlin, Anna; Bahadori, Tina; Jacobs, Brittany; Miller, Gregory; Behl, Betsy; Flaherty, Colleen; Lalley, Cara; Harper, Ashley; Drinkard, Andrea; Grevatt, Peter; Wadlington, Christina; Mattas-Curry, Lahne; Nagle, Deborah; Holsinger, Hannah; Brinkerhoff, Chris; Soares, Barbara; Benson, Amy; Burneson, Eric; Babcock, Amy; Henry, Tala; Albert, Ryan; Donohue, Joyce; Mclain, Jennifer
Optional Attendees: Penman, Crystal; Ross, David P

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/8/2018 12:38:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: FW: Internal Q and As GenX
Location: DCRoomWest5231L/DC-CCW-OST

Start: 11/8/2018 4:00:00 PM
End: 11/8/2018 5:00:00 PM
Show Time As: Busy

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]; McDonough, Owen [mcdonough.owen@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P; McDonough, Owen
Optional Attendees: Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:34 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/14/2018 6:07:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: DETAILED ROLL OUT: Toxicity values

Way to go team!

From: Jacobs, Brittany
Sent: Wednesday, November 14, 2018 12:33 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: DETAILED ROLL OUT: Toxicity values

Woohoo!!! Thanks for getting us there! This has been a great team experience! ☺ ☺ ☺

From: Strong, Jamie
Sent: Wednesday, November 14, 2018 12:27 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: DETAILED ROLL OUT: Toxicity values

You guys are a dream team! Well done. Great work and even more perseverance. Be proud of this.

From: Wadlington, Christina
Sent: Wednesday, November 14, 2018 12:26 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: DETAILED ROLL OUT: Toxicity values

We are live: https://www.epa.gov/pfas

From: Wadlington, Christina
Sent: Thursday, November 08, 2018 2:52 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin,

Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: DETAILED ROLL OUT: Toxicity values

Adding the most recent version to this email so it's all in one place.

<< File: Tox Assessment Press Release and Public Fact Sheet_11.8.18.docx >>
Afternoon everyone,

Updated based on our discussion today. Please add to/edit/comment as needed.

TICK TOCK
11/13

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/19/2019 12:48:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Additional public comments on GenX chemicals draft Document; Klaunig
Attachments: Comments - Dr. James Klaunig - 2 15 19.pdf

From: jklauni@gmail.com <jklauni@gmail.com>
Sent: Friday, February 15, 2019 7:29 PM
To: Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: jklauni@gmail.com
Subject: Additional public comments on GenX chemicals draft Document; Klaunig

Please see the attached letter, which includes additional public comments on the draft document *"Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'"* Thank you for your consideration of these comments.

James E. Klaunig, Ph.D., Fellow ATS, Fellow IATP
Professor, Environmental Health
Professor, School of Public and Environmental Affairs
1025 E 7th St
Bloomington , IN 47405
812 856 3957

LAB
Innovation Center
Office Rm 256
Laboratory 230-236
2719E 10th St
Bloomington Indiana 47408
Klauniglab.com
812 856 3957
jklauni@indiana.edu

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:00 PM
To: Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in 20 **Ex. 6 Personal Privacy (PP)**
Attachments: Canceled: Finalizing GenX and PFBS assessments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:07:45 PM
To: Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:50 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2019 1:26:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX schedule and comments

Start: 2/27/2019 7:30:00 PM
End: 2/27/2019 8:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2019 1:26:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX schedule and comments

Start: 2/27/2019 7:30:00 PM
End: 2/27/2019 8:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

Sent: 2/28/2019 5:32:00 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]; Conley, Justin [Conley.Justin@epa.gov]
BCC: DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: Chat about PPARalpha and the GenX chemicals public comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/12/2019 3:00:00 PM
End: 3/12/2019 4:00:00 PM
Show Time As: Busy

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:33 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/7/2018 8:16:49 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: FW: GenX Assessment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 12/3/2018 4:00:00 PM
End: 12/3/2018 5:00:00 PM
Show Time As: Tentative

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/7/2018 3:59:50 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: FW: NCSU briefing on GenX exposure study
Location: see webinar info in message

Start: 11/8/2018 6:00:00 PM
End: 11/8/2018 7:00:00 PM
Show Time As: Tentative

Appointment

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 3/14/2019 1:56:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: GenX strategizing session
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 3/14/2019 6:00:00 PM
End: 3/14/2019 7:00:00 PM

Recurrence: (none)

Appointment

From: DCRoomWest5233AA/DC-CCW-OST [DCRoomWest5233AA@epa.gov]
Sent: 3/14/2019 1:54:24 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: GenX strategizing session
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 3/14/2019 6:00:00 PM
End: 3/14/2019 7:00:00 PM

Recurrence: (none)

Appointment

From: DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
Sent: 3/14/2019 1:36:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: Chat about PPARalpha and the GenX chemicals public comments
Location: DCRoomWest5231L/DC-CCW-OST

Start: 3/20/2019 5:00:00 PM
End: 3/20/2019 6:00:00 PM

Recurrence: (none)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/8/2018 12:38:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: Internal Q and As GenX
Location: DCRoomWest5231L/DC-CCW-OST

Start: 11/8/2018 4:00:00 PM
End: 11/8/2018 5:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Microsoft Outlook [MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@usepa.onmicrosoft.com]
Sent: 4/30/2019 10:38:36 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/8/2018 12:25:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Greene, Sophie [greene.sophie@epa.gov]

Subject: FW: GenX Assessment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 12/3/2018 4:00:00 PM
End: 12/3/2018 5:00:00 PM
Show Time As: Tentative

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:14:25 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Ross, David P [ross.davidp@epa.gov]
Sent: 5/13/2019 7:05:58 PM
To: Ross, David P [ross.davidp@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]
CC: Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: Canceled: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 6:00:00 PM
End: 6/19/2019 6:45:00 PM
Show Time As: Free

Importance: High

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven
Optional Attendees: Weyer, Erica; Penman, Crystal

Appointment

From: Penman, Crystal [Penman.Crystal@epa.gov]
Sent: 5/13/2019 7:05:57 PM
To: Ross, David P [ross.davidp@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]
CC: Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 6:00:00 PM
End: 6/19/2019 6:45:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven
Optional Attendees: Weyer, Erica; Penman, Crystal

Appointment

From: Penman, Crystal [Penman.Crystal@epa.gov]
Sent: 5/13/2019 7:08:30 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]
CC: Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: Canceled: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 6:00:00 PM
End: 6/19/2019 6:45:00 PM
Show Time As: Free

Importance: High

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven
Optional Attendees: Weyer, Erica; Penman, Crystal

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:40 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:12:39 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 4:00:00 AM
End: 6/19/2019 4:45:00 AM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/8/2018 4:05:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]

Subject: FW: Internal Q and As GenX
Location: DCRoomWest5231L/DC-CCW-OST

Start: 11/8/2018 4:00:00 PM
End: 11/8/2018 5:00:00 PM
Show Time As: Tentative

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in 2 Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments: Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/16/2019 4:10:53 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:04:57 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:48:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:43 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/18/2019 2:00:00 PM
End: 4/18/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:48:51 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2019 12:28:29 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/5/2019 4:43:23 PM
To: Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Start: 4/10/2019 1:00:00 PM
End: 4/10/2019 2:00:00 PM
Show Time As: Free

Importance: High

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Lambert, Jason; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/5/2019 12:07:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: FW: Chemours/GenX FOIA 2018-004509 - OGC Meeting with Offices/Regions to Discuss Search Terms
Location: WJCN 6013 - Video Conference Using Tandberg or Participate Using Conference Line 2(Ex. 6 Personal Privacy (PP)

Start: 4/11/2019 2:00:00 PM
End: 4/11/2019 3:00:00 PM
Show Time As: Tentative

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/16/2019 4:11:22 PM
To: Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:04:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/18/2019 2:00:00 PM
End: 4/18/2019 3:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/18/2019 2:00:00 PM
End: 4/18/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:57 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:24 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:41 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comment triage

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:33:29 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/11/2019 6:01:12 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231M/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/11/2019 6:05:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231M/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comment triage

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/11/2019 8:13:00 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:34 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2019 12:12:25 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2019 12:11:27 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2019 12:10:49 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/25/2019 4:09:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Canceled: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Free

Importance: High

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/25/2019 12:19:57 PM
To: Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]; Clausen, Rebecca [Clausen.Rebecca@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Smith, Kevin B. [Smith.Kevin@epa.gov]; Oif, Leslie [Oif.Leslie@epa.gov]; Bahk, Benjamin [Bahk.Benjamin@epa.gov]; Gross, Louann [Gross.LouAnn@epa.gov]; Mitchell, Ken [Mitchell.Ken@epa.gov]; Kemker, Carol [Kemker.Carol@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Davis, Molly [Davis.Molly@epa.gov]; Shell, Karrie-Jo [Shell.Karrie-Jo@epa.gov]; Digaetano, Laurie [Benton-Digaetano.Laurie@epa.gov]; Jones, Aaryn [Jones.Aaryn@epa.gov]; Lamberth, Larry [Lamberth.Larry@epa.gov]; Annicella, Alan [Annicella.Alan@epa.gov]; Spann, Tony [Spann.Tony@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: WJCE 3371A

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James; Clausen, Rebecca; Miller, Jesse A.; Garvey, Mark; Gorman, John; Smith, Kevin B.; Oif, Leslie; Bahk, Benjamin; Gross, Louann; Mitchell, Ken; Kemker, Carol; Allenbach, Becky; Davis, Molly; Shell, Karrie-Jo; Digaetano, Laurie; Jones, Aaryn; Lamberth, Larry; Annicella, Alan; Spann, Tony

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 4/24/2019 12:48:26 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Canceled: TO BE RESCHEDULE---Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/24/2019 1:00:00 PM
End: 4/24/2019 2:00:00 PM
Show Time As: Free

Importance: High

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:05:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/26/2019 3:00:00 PM
End: 3/26/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:09:13 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/28/2019 6:30:00 PM
End: 3/28/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:05:43 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/26/2019 3:00:00 PM
End: 3/26/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 4/29/2019 12:26:05 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST; DCRoomWest5233B/DC-CCW-OST

Start: 5/2/2019 2:00:00 PM
End: 5/2/2019 3:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/17/2019 7:25:22 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:30:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Calderon, Wanda [Calderon.Wanda@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Haklar, James [Haklar.James@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Chester, Amy [Chester.Amy@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Latham, John; Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Calderon, Wanda; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Evangelista, Pat; Haklar, James; Garvey, Mark; Chester, Amy; Miller, Jesse A.; Gorman, John; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan
Optional Attendees: Flaherty, Colleen

Appointment

From: DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]
Sent: 3/18/2019 5:14:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: Discuss strategy for next phase of GenX systematic review
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM

Recurrence: (none)

Appointment

From: Thayer, Kris [thayer.kris@epa.gov]
Sent: 3/18/2019 5:13:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: Discuss strategy for next phase of GenX systematic review
Location: Skype Meeting

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM
Show Time As: Busy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:30:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/18/2019 5:14:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: Discuss strategy for next phase of GenX systematic review
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM
Show Time As: Busy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 3/18/2019 5:12:01 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: Discuss strategy for next phase of GenX systematic review
Location: Skype Meeting

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM

Recurrence: (none)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 4:19:17 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: HOLD FSTRAC PFBS and GenX chemicals tox assessments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 11/28/2018 6:00:00 PM
End: 11/28/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 6:12:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: HOLD FSTRAC PFBS and GenX chemicals tox assessments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 11/28/2018 6:00:00 PM
End: 11/28/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/13/2018 1:10:31 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Canceled: FW: Upcoming release of Draft Human Health Toxicity Assessments for GenX Chemicals and PFBS for public review and comment
Location: Conference: 2 Ex. 6 Personal Privacy (PP)

Start: 11/13/2018 3:00:00 PM
End: 11/13/2018 4:00:00 PM
Show Time As: Free

Importance: High

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 3:00:00 PM
End: 4/16/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/19/2019 11:24:06 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/13/2018 1:32:06 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Canceled: FW: Upcoming release of Draft Human Health Toxicity Assessments for GenX Chemicals and PFBS for public review and comment
Location: Conference: Ex. 6 Personal Privacy (PP)

Start: 11/13/2018 3:00:00 PM
End: 11/13/2018 4:00:00 PM
Show Time As: Free

Importance: High

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 1:31:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: FW: PFBS and GenX call with States
Location: 2203

Start: 11/13/2018 3:00:00 PM
End: 11/13/2018 4:00:00 PM
Show Time As: Tentative

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:23 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:00:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/13/2019 1:00:00 PM
End: 2/13/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Jacobs, Brittany [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B8BC7BBE58A7403A89C6AAD8F44C415F-JACOBS, BRI]
Sent: 3/18/2019 5:11:36 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]

Subject: Discuss strategy for next phase of GenX systematic review
Location: Skype Meeting

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Soares, Barbara; Thayer, Kris

Appointment

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/13/2018 1:10:29 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: FW: Upcoming release of Draft Human Health Toxicity Assessments for GenX Chemicals and PFBS for public review and comment
Location: Conference: Ex. 6 Personal Privacy (PP)

Start: 11/13/2018 3:00:00 PM
End: 11/13/2018 4:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 3:00:00 PM
End: 4/16/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:09:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/28/2019 6:30:00 PM
End: 3/28/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Jacobs, Brittany [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B8BC7BBE58A7403A89C6AAD8F44C415F-JACOBS, BRI]
Sent: 3/14/2019 1:54:16 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
BCC: DCRoomWest5233AA/DC-CCW-OST [DCRoomWest5233AA@epa.gov]

Subject: GenX strategizing session
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 3/14/2019 6:00:00 PM
End: 3/14/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Soares, Barbara

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231M/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Jacobs, Brittany [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B8BC7BBE58A7403A89C6AAD8F44C415F-JACOBS, BRI]
Sent: 3/18/2019 5:11:36 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]
BCC: DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: Discuss strategy for next phase of GenX systematic review
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/25/2019 1:00:00 PM
End: 3/25/2019 1:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Soares, Barbara; Thayer, Kris

Appointment

From: Jacobs, Brittany [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B8BC7BBE58A7403A89C6AAD8F44C415F-JACOBS, BRI]
Sent: 3/4/2019 12:41:46 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]; Conley, Justin [Conley.Justin@epa.gov]
BCC: DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Chat about PPARalpha and the GenX chemicals public comments
Location: DCRoomWest5231L/DC-CCW-OST

Start: 3/20/2019 5:00:00 PM
End: 3/20/2019 6:00:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Soares, Barbara; Gray, Earl; Conley, Justin

Appointment

From: Jacobs, Brittany [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B8BC7BBE58A7403A89C6AAD8F44C415F-JACOBS, BRI]
Sent: 2/27/2019 3:29:25 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
BCC: DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Chat about GenX and PFAS projects
Location: DCRoomWest5231L/DC-CCW-OST

Start: 2/27/2019 6:00:00 PM
End: 2/27/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Soares, Barbara

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2019 1:26:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX schedule and comments

Start: 2/27/2019 7:30:00 PM
End: 2/27/2019 8:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 4/23/2019 12:29:00 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: TO BE RESCHEDULE---Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/24/2019 1:00:00 PM
End: 4/24/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2019 3:04:44 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 3:00:00 PM
End: 4/16/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/22/2019 3:39:56 PM
To: Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:28:59 PM
To: Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Calderon, Wanda [Calderon.Wanda@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Haklar, James [Haklar.James@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Chester, Amy [Chester.Amy@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Calderon, Wanda; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Evangelista, Pat; Haklar, James; Garvey, Mark; Chester, Amy; Miller, Jesse A.; Gorman, John; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Canceled: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Free

Importance: High

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Babcock, Amy [babcock.amy@epa.gov]
Sent: 4/11/2018 2:46:39 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Aubee, Catherine [Aubee.Catherine@epa.gov]

Subject: Declined: OST and RAD GenX Assessment Check In
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/12/2018 4:00:00 PM
End: 4/12/2018 4:30:00 PM
Show Time As: Busy

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 4/12/2018 12:56:05 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Declined: OST and RAD GenX Assessment Check In
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/24/2018 4:00:00 PM
End: 4/24/2018 4:30:00 PM
Show Time As: Busy

Appointment

From: Babcock, Amy [babcock.amy@epa.gov]
Sent: 4/11/2018 1:46:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: OST and RAD GenX Assessment Check In
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/12/2018 4:00:00 PM
End: 4/12/2018 4:30:00 PM
Show Time As: Busy

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 4/11/2018 1:46:07 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: Accepted: OST and RAD GenX Assessment Check In
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/12/2018 4:00:00 PM
End: 4/12/2018 4:30:00 PM
Show Time As: Busy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha
Optional Attendees: Champlin, Anna

Message

From: jacobs.brittany@epa.gov
Sent: 3/21/2019 3:34:24 AM
To: conley.justin@epa.gov; jacobs.brittany@epa.gov
Subject: Chat about PPARalpha and the GenX chemicals public comments
Attachments: Klaunig Indiana Univ_1.pdf; Comments - Dr. James Klaunig - 2 15 19_2.pdf

[4:45 PM] Chat about PPARalpha and the GenX chemicals public comments
[5:00 PM] jacobs.brittany@epa.gov joined the conference as a presenter
[5:00 PM] Chat about PPARalpha and the GenX chemicals public comments
[5:00 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:00 PM] jacobs.brittany@epa.gov uploaded content with name "Klaunig Indiana Univ_1.pdf"
[5:00 PM] jacobs.brittany@epa.gov added Original content with name "Klaunig Indiana Univ_1.pdf"
[5:00 PM] Content with name "Klaunig Indiana Univ_1.pdf" can be saved by everyone
[5:00 PM] Content with name "Klaunig Indiana Univ_1.pdf" is viewable to presenters only
[5:00 PM] Content with name "Klaunig Indiana Univ_1.pdf" can be saved by presenters only
[5:00 PM] jacobs.brittany@epa.gov uploaded content with name "Comments - Dr. James Klaunig - 2 15 19_2.pdf"
[5:00 PM] jacobs.brittany@epa.gov added Original content with name "Comments - Dr. James Klaunig - 2 15 19_2.pdf"
[5:00 PM] Content with name "Comments - Dr. James Klaunig - 2 15 19_2.pdf" can be saved by everyone
[5:00 PM] Content with name "Comments - Dr. James Klaunig - 2 15 19_2.pdf" can be saved by presenters only
[5:00 PM] Content with name "Comments - Dr. James Klaunig - 2 15 19_2.pdf" is viewable to presenters only
[5:00 PM] jacobs.brittany@epa.gov uploaded content with name "Comments - Toxstrategies - 2 15 19.pdf"
[5:00 PM] jacobs.brittany@epa.gov added Original content with name "Comments - Toxstrategies - 2 15 19.pdf"
[5:00 PM] Content with name "Comments - Toxstrategies - 2 15 19.pdf" can be saved by everyone
[5:00 PM] Content with name "Comments - Toxstrategies - 2 15 19.pdf" can be saved by presenters only
[5:00 PM] Content with name "Comments - Toxstrategies - 2 15 19.pdf" is viewable to presenters only
[5:00 PM] jacobs.brittany@epa.gov joined the conference as an organizer
[5:00 PM] jacobs.brittany@epa.gov joined the Data Collaboration portion of the conference
[5:00 PM] conley.justin@epa.gov joined the conference as a presenter
[5:01 PM] conley.justin@epa.gov joined the conference as a presenter
[5:01 PM] conley.justin@epa.gov joined the Data Collaboration portion of the conference
jacobs.brittany@epa.gov [5:02 PM]:
Hi Justin, I can see that you are on the call but it looks like your mic is muted
[5:02 PM] jacobs.brittany@epa.gov joined the Instant Message portion of the conference
[5:02 PM] conley.justin@epa.gov joined the Instant Message portion of the conference
conley.justin@epa.gov [5:02 PM]:
919-541-3326
jacobs.brittany@epa.gov [5:02 PM]:
I just call you
jacobs.brittany@epa.gov [5:02 PM]:
and I'll mute my speaker too
[5:02 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:02 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:02 PM] Chat about PPARalpha and the GenX chemicals public comments
[5:02 PM] conley.justin@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] jacobs.brittany@epa.gov joined the Audio-Video portion of the conference
[5:03 PM] conley.justin@epa.gov left the Audio-Video portion of the conference

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: Skype Meeting

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: Skype Meeting

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:34 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/20/2018 6:50:04 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]

Subject: GenX chemicals and PFBS celebration
Location: TBD

Start: 12/12/2018 9:00:00 PM
End: 12/12/2018 11:30:00 PM
Show Time As: Tentative

Required Attendees: Jones, Samantha; Lambert, Jason; Owens, Beth; Champlin, Anna; Bahadori, Tina; Jacobs, Brittany; Miller, Gregory; Behl, Betsy; Flaherty, Colleen; Lalley, Cara; Harper, Ashley; Drinkard, Andrea; Grevatt, Peter; Wadlington, Christina; Mattas-Curry, Lahne; Nagle, Deborah; Holsinger, Hannah; Brinkerhoff, Chris; Benson, Amy; Babcock, Amy; Henry, Tala; Albert, Ryan

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: TO BE RESCHEDULE---Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in
Attachments: Canceled: Finalizing GenX and PFBS assessmer
Location: DCRoomWest5231M/DC-CCW-OST

Ex. 6 Personal Privacy (PP)

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:34 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:47:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]; Clausen, Rebecca [Clausen.Rebecca@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Latham, John; Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James; Clausen, Rebecca

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]; Clausen, Rebecca [Clausen.Rebecca@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Oif, Leslie [Oif.Leslie@epa.gov]; Bahk, Benjamin [Bahk.Benjamin@epa.gov]; Smith, Kevin B. [Smith.Kevin@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Latham, John; Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James; Clausen, Rebecca; Miller, Jesse A.; Garvey, Mark; Gorman, John; Smith, Kevin B.; Oif, Leslie; Bahk, Benjamin

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Newton, Seth [Newton.Seth@epa.gov]; Offenberg, John [Offenberg.John@epa.gov]; Evanko, Peter [Evanko.Peter@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Speir, Jeffrey [speir.jeffrey@epa.gov]; Miles, James [miles.james@epa.gov]; Clausen, Rebecca [Clausen.Rebecca@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Gorman, John [Gorman.John@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Latham, John; Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan; Evanko, Peter; Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Newton, Seth; Offenberg, John
Optional Attendees: Flaherty, Colleen; Speir, Jeffrey; Miles, James; Clausen, Rebecca; Miller, Jesse A.; Garvey, Mark; Gorman, John

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:34 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:44 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 7:15:58 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: Skype Meeting

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:09:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/28/2019 6:30:00 PM
End: 3/28/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/25/2019 2:09:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: talk about GenX and sys review
Location: Betsy's office

Start: 3/28/2019 6:30:00 PM
End: 3/28/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Jacobs, Brittany; Soares, Barbara

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in
Attachments: Canceled: TO BE RESCHEDULE---Finalizing Ge
Location: DCRoomWest5231M/DC-CCW-OST

Ex. 6 Personal Privacy (PP)

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 10/2/2019 5:07:57 PM
To: Owscheduling [Owscheduling@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Aguirre, Janita [Aguirre.Janita@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]
CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: 3233 WJCE

Start: 11/19/2019 3:00:00 PM
End: 11/19/2019 3:45:00 PM
Show Time As: Busy

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie; Aguirre, Janita; Weyer, Erica
Optional Attendees: Penman, Crystal

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 10/2/2019 5:07:57 PM
To: Owscheduling [Owscheduling@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Aguirre, Janita [Aguirre.Janita@epa.gov]
CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: 3233 WJCE

Start: 11/19/2019 3:00:00 PM
End: 11/19/2019 3:45:00 PM
Show Time As: Busy

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie; Aguirre, Janita
Optional Attendees: Penman, Crystal

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; FW: Finalizing GenX and PFBS assessments: call in 202-991-0477 code: 1239896; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 11/18/2019 5:10:15 PM
To: Ross, David P [ross.davidp@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Aguirre, Janita [Aguirre.Janita@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]
CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: 3233 WJCE

Start: 11/19/2019 4:00:00 PM
End: 11/19/2019 4:45:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie; Aguirre, Janita; Weyer, Erica
Optional Attendees: Penman, Crystal

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Canceled: Finalizing GenX and PFBS assessme
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Message

From: hero@epa.gov [hero@epa.gov]
Sent: 3/6/2019 1:42:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: PDF Request Fulfilled -- Projects: GenX Chemicals (CASRN 13252-13-6 and CASRN 62037-80-3)

Brittany Jacobs,

Your request for the document for HEROID 5024247 has been fullfilled.

https://heronet.epa.gov/heronet/index.cfm/reference/details/reference_id/5024247

Associated Projects: GenX Chemicals (CASRN 13252-13-6 and CASRN 62037-80-3)

Associated Tags (by Project):
GenX Chemicals (CASRN 13252-13-6 and CASRN 62037-80-3)
Literature Search- GenX
- Pubmed
- WOS
- Toxline
- TSCATS
- Additional Strategies

Literature Search- GenX Ammonium Salt
- Pubmed
- WOS
- ToxLine
- TSCATS
- Additional Strategies

LitSearch - GenX: July 2017 - Feb 2019
- PubMed
- ToxNet
- TSCATS
- WoS
- Other Sources

LitSearch GenX Ammonium Salt: Feb 2018 - Feb 2019
- PubMed
- ToxNet
- TSCATS
- WoS
- Other Sources

Screening Results
- Excluded/Not on Topic
- Need further review (potentially relevant)
  - No abstract
  - Foreign language
- Human/Epi studies
  - Liver tox
  - Repro tox
  - Developmental tox
  - Developmental neurotox

- Thyroid bioactivity
- Genotox
- Cancer
- Immunotox
- Neurotox
- Other

In vivo animal studies
- Liver tox
- Repro tox
- Developmental tox
- Developmental neurotox
- Thyroid bioactivity
- Genotox
- Cancer
- Immunotox
- Neurotox
- Other

In vitro/ex vivo/in silico
- Genotoxicity
- Endocrine disruption
- Protein binding
- -omics (general)
- Intercellular communication
- Receptor activation
- Peroxisomal proliferation
- Immunotox mech
- Neurotox mech
- SAR
- Other mechanistic studies

Chemical/physical properties

Toxicokinetic studies
- ADME
- PBPK models

Susceptible populations

Reviews/Reg docs

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/19/2020 2:17:09 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: c
Attachments: Finalizing GenX and PFBS assessments: c

Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP)

Location: skype meeting

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

Toll number: Ex. 6 Personal Privacy (PP) English (United States)

Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)
Forgot your dial-in PIN? | Help

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Canceled: Finalizing GenX and PFBS assessments
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) Washington DC (Toll)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

ngton DC (Toll)

Ex. 6 Personal Privacy (PP)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

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Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/19/2019 4:25:15 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/16/2020 3:46:48 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: DuPont-18405-1037.pdf; RE: BMD modeling support request #3 from OW

Hi everyone. I have a plea for help. We are in a big pickle!

Greg and I are working through revisions to our document and while putting together a table comparing the original DuPont data with the NTP PWG we discovered an issue. When DuPont provided slides to NTP for this reevualation they included slides of animals that died on study. In the original DuPont report, the authors don't include these dead animals in the incidence counts for the liver effects. I agree with that practice (we have no idea why the animals died so including them in evaluating treatment related effects seems wrong). Thus, I don't believe that the counts from these animals from the reevaluation should be included in the modeling. I am frustrated, but glad we caught this now.

Problem is that ORD is modeling this new incidence data as we speak. I told them to stand down until we could figure out what to do and potentially send new counts minus these dead animals. I have gotten some push back from the statistician on this path forward. I told him that I would talk to a few more tox/biologists. Enter you all! We are under tremendous pressure to finish these revisions so I am hoping that we can touch base on this next week during our regular check in. I am attaching the email chain with Allen and the study itself. Please let me know if you won't be available during this time.

Thanks,
Jamie

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, February 06, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, January 22, 2020 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

gton DC (Toll)

Ex. 6 Personal Privacy (PP)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

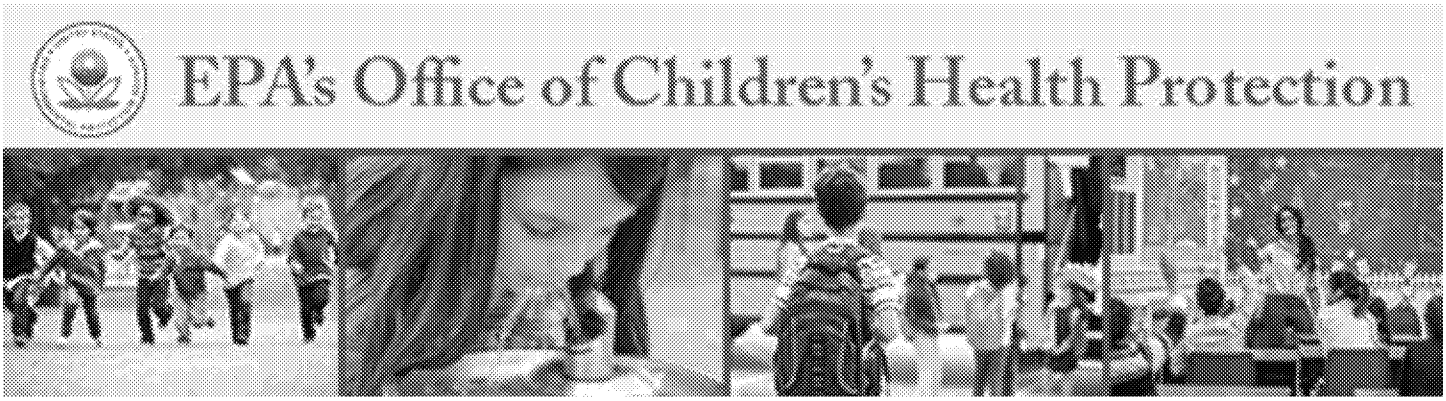
By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/19/2018 12:41:28 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: FW: Children's Environmental Health Newsletter

Hopefully we get some comments from the children's health community. PFAS went out in the OCHP newsletter…

From: Office of Children's Health Protection <noreply-subscriptions@epa.gov>
Sent: Friday, November 16, 2018 3:41 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Children's Environmental Health Newsletter



Children's Environmental Health Newsletter

Learn How to Keep Kids Safe from Carbon Monoxide Poisoning This Winter

Carbon monoxide (CO) is an odorless, colorless and toxic gas. Because it is impossible to see, taste or smell the toxic fumes, CO can kill you before you are aware it is in your home. How we cope with severe winter conditions can cause unintentional environmental problems, indoors or out. For example, the use of unvented kerosene and gas space heaters can lead to carbon monoxide exposure.

Children along with pregnant women, the elderly and those with certain pre-existing conditions are more susceptible to the health effects associated with carbon monoxide exposure. If your child or anyone else in your family starts to feel sick, dizzy or weak or experiences a headache, chest pain or confusion, get to fresh air immediately and seek medical care as soon as possible. Your child's skin under the fingernails may also turn cherry-red if he/she has been exposed to high levels of carbon monoxide. Fetuses and infants are especially vulnerable to the life-threatening effects of carbon monoxide.

Click here to learn more about CO exposure and how to reduce health risks to children.

The Office of Children's Health Protection at EPA has developed this newsletter to get you engaged in children's environmental health activities occurring throughout the agency. Here, you can access information on opportunities for public comment on EPA rulemakings, risk

assessments, upcoming outreach events, grant opportunities, and other federal children's environmental health announcements. For past newsletters and more information on children's health efforts at EPA click here.

In This Month's Bulletin
Announcements & Updates

- Acting EPA Administrator Wheeler Reaffirms the Agency's Commitment to Protecting Children's Health
- Highlights from the Annual NIEHS/EPA Children's Environmental Health and Disease Prevention Centers Meeting & Social Media Workshop, October 22-23, 2018
- New EPA Booklet: *Protecting Children from Lead Exposures*
- **Public Comment Opportunities**
- Draft Human Health Risk Assessment Pesticides (atrazine, simazine, and propazine): **Public Comment by November 23, 2018**
- EPA Seeks Public Input on Draft Toxicity Assessments for PFAS Chemicals

EPA Grant Opportunities

- EPA Announces Availability of $1.5 Million in Environmental Justice Small Grants
- CERCLA Grant: Funding to Establish and Enhance State and Tribal Response Programs for FY2019, $50 million available, **accepting requests through December 14, 2018**
- Water Infrastructure Improvements for the Nation (WIIN) Act Grant: Lead Testing in School and Child Care Program Drinking Water, $20 million in funding available **submit letters of intent to EPA by January 11, 2019**
- Applications are now being accepted for the 2018 President's Environmental Youth Award (PEYA). **All applications are due by February 1, 2019.**

Upcoming Webinars, Workshops & Events

- Webinar: Examining the Evidence: How School Buildings Affect Student Health, Thinking and Performance: **November 29, 2018, 1:00 p.m. – 2:30 p.m. EST**
- Webinar: Engaging Health Professionals in Environmental Public Health: **December 7, 2018, 1:00 p.m. – 2:00 p.m. EST**
- Workshop: EPA IRIS to Hold Workshop on Systematic Review for Mechanistic Data: **December 10-11, 2018**

Federal Partners' Children's Environmental Health Announcements

- HUD Awards $6.7 million in Research Grants to Reduce Lead and Other Housing-Related Health Hazards
- Announcing: HUD's New Healthy Homes Youth App
- U.S. Preventive Services Task Force (USPSTF): Elevated Blood Lead Levels in Children and Pregnant Women: Screening; **Seeking Public Comment by December 3, 2018**

Announcements & Updates

Acting EPA Administrator Wheeler Reaffirms the Agency's Commitment to Protecting Children's Health

"Children in all stages of life, from infancy through adolescence, as well as pregnant women, face environmental health hazards in both the natural and built environments. I am reaffirming EPA's commitment to protecting children's health and to the Agency's 1995 Policy on Evaluating Health Risks to Children (Policy) to consistently and comprehensively address children's unique vulnerabilities. This reaffirmation encourages the continuation of important research to provide child-specific data, new methods, models, risk assessment tools, and Agency guidance necessary for evaluation of children's environmental health risks."

Click here to read the full memo:

Highlights from the Annual NIEHS/EPA Children's Environmental Health and Disease Prevention Centers Meeting & Social Media Workshop, October 22-23, 2018

Raising the Visibility of the Science was the theme that guided the NIEHS/EPA Children's Centers 2018 Annual Meeting. The Children's Environmental Health and Disease Prevention Centers were asked to describe their work using the new NIEHS translational research framework. This meeting provided attendees with the opportunity to review the framework and determine how their efforts and accomplishments align within this new method.

Click here to learn about additional highlights from the annual meeting.

New EPA Booklet: *Protecting Children from Lead Exposures*

Since the 1970s, EPA and its state, tribal, and local governmental partners have made tremendous progress in reducing children's lead exposures and lead-related health risks. EPA efforts to reduce lead exposures and prevent lead poisoning include a wide range of activities such as funding for community interventions and outreach, education and training, surveillance, and regulation and enforcement.

EPA is committed to reducing lead exposures from multiple sources including: paint, water, ambient air, and soil and dust contamination, especially among children who are the most vulnerable to the effects of lead.

Click here to access the booklet and learn more about what EPA is doing to protect children from lead exposures.

Public Comment Opportunities

Request for Nominations of Scientific Experts to be considered for the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) by November 13, 2018

The EPA requests public nominations of scientific experts to be considered for ad hoc participation on the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) through membership on the Food Quality Protection Act (FQPA) Science Review Board (SRB). All nominees will be considered for ad hoc participation providing independent scientific advice to the EPA on health and safety issues related to pesticides. The FIFRA SAP is comprised of biologists, statisticians, toxicologists and other experts and is assisted in their reviews by members of the FQPA SRB.

Individuals nominated should have expertise in one or more of the following areas: Biochemistry; chemistry; epidemiology; human health risk assessment; pathology; PBPK modeling; aquatic modeling; pharmacology; ecological risk assessment; environmental exposure and fate; environmental toxicology; occupational, consumer, and general exposure assessment; toxicology; dose response modeling; environmental engineering; statistics; water quality monitoring; hydrologist; GIS specialist; computational toxicology; entomology; veterinary entomology; medical entomology, insect ecology, allergenicity, research veterinarian; inhalation toxicology; volatile organics; endocrinology, alternative testing methods, high throughput testing approaches, adverse outcome pathways, cross species extrapolation, and systematic review. Nominees should be scientists who have sufficient professional qualifications, including training and experience, and can provide expert comments on the pesticide health and safety related issues for a FIFRA SAP meeting.

Click here for more information and to submit nominations by **November 13, 2018.**

Draft Human Health Risk Assessment for Pesticides (atrazine, simazine, and propazine)**: Public Comment by November 23, 2018**

EPA has released draft human health risk assessments for the pesticides atrazine, simazine, and propazine. EPA has also released a draft cumulative human health risk assessment for these pesticides as a common mechanism group, chlorotriazine herbicides. Since the last human health assessment, new scientific literature has been published which includes epidemiological and toxicity studies on development effects. Epidemiological studies can be found in the Appendices of each risk assessment, and toxicity studies can be found here.

Atrazine

> **What is it?** Atrazine is an herbicide used on agricultural crops and turf, including residential lawns and golf courses.
>
> **What potential risks to children has the EPA identified?** The assessment found that children who crawl and play on lawns sprayed with atrazine can potentially be at risk.
>
> **How EPA proposes to reduce these potential risks to children:** By reducing the amount of atrazine permitted to be applied to lawns and gardens, the risk to children can be mitigated.
>
> **Next steps:** EPA will consider public comments submitted until **November 23, 2018**.

Click here to provide comments and to see the Atrazine Draft Human Health Risk Assessment for Registration Review.

Click here for more information on atrazine from EPA.

Click here for additional documents and more information [Docket EPA-HQ-OPP-2013-0266]

Simazine

What is it? Simazine is an herbicide used on agricultural crops, nursery crops, Christmas trees, turf, including residential lawns and golf courses.

What potential risks to children has the EPA identified? The assessment found that children who crawl and play on lawns sprayed with simazine can potentially be at risk. Additional potential risks to children can come from spray drift after simazine is applied to grapefruits and oranges.

How EPA proposes to reduce these potential risks to children: The potential risks to children can be mitigated by reducing the amount of simazine permitted to be applied to residential lawns and gardens, and by adding a 10-foot buffer from the field edge for agricultural use of simazine.

Next steps: EPA will consider public comments submitted until **November 23, 2018.**

Click here to provide comments and to see the Simazine Draft Human Health Risk Assessment for Registration Review.

Click here for additional documents and more information [Docket EPA-HQ-OPP-2013-0251]

Propazine

What is it? Propazine is an herbicide used on sorghum fields and greenhouse ornamentals.

What potential risks to children has the EPA identified? The assessment did not identify any potential risks to children from the relevant exposure routes (dietary, spray drift).

Next steps: EPA will consider public comments submitted **until November 23, 2018.**

Click here to provide comments and to see the Propazine Draft Human Health Risk Assessment for Registration Review.

Click here for additional documents and more information [Docket EPA-HQ-OPP-2013-0250]

Chlorotriazine Herbicides Cumulative Risk Assessment

What potential risks to children has the EPA identified? Aside from any potential individual risks these three pesticides pose to children on their own, a cumulative risk assessment has found risks of concern to children from granular application.

How EPA proposes to reduce these potential risks to children? By requiring the minimization of the use of these pesticides, as proposed above, the risk to children can be mitigated.

Next steps: EPA will consider public comments submitted until **November 23, 2018.**

Click here to provide comments and to see the Cumulative Risk Assessment for Atrazine, Propazine, and Simazine.

EPA Seeks Public Input on Draft Toxicity Assessments for PFAS Chemicals

The U.S. Environmental Protection Agency (EPA) is seeking public input on draft toxicity assessments for GenX chemicals and perfluorobutane sulfonic acid (PFBS), members of a larger group of per- and polyfluoroalkyl substances (PFAS). PFAS are man-made chemicals used in a wide range of products because of their ability to repel water, grease, and oil. The draft toxicity assessments are part of EPA's efforts to increase the amount of research and information that is publicly available on chemicals in the PFAS family. Once final, states, tribes, and communities can use the information the agency is providing to assess risks, which will help them develop risk management plans and protect their residents. Click here for more information.

EPA Grant Opportunities

EPA Announces Availability of $1.5 Million in Environmental Justice Small Grants

EPA's Office of Environmental Justice just announced the availability of $1.5 million for Environmental Justice Small Grants (EJSG). These funds will be distributed to approximately 50 community-based organizations nationwide that will work to address environmental justice issues in local communities. Each recipient will receive up to $30,000 for one-year, community-driven projects that engage, educate, and empower communities to better understand local environmental and public health issues and to identify ways to address these issues at the local level.

Given projected increases in extreme weather events and the vulnerability of underserved populations, this opportunity will emphasize projects that address emergency preparedness and increase resiliency, as well as projects that include the needs of US military veterans and homeless populations. With support from EPA's Urban Waters program, the program will also support projects that reconnect urban communities with their waterways while encouraging community stewardship.

The application period for the 2018 EJSG will remain open until January 31, 2019. All eligible organizations are encouraged to apply. Click here for more information about EPA's Environmental Justice Small Grants program.

Notice of Grant Funding Guidance to Establish and Enhance State and Tribal Response Programs for FY2019, $50 million in funding available, accepting requests through December 14, 2018

The amended CERCLA [Comprehensive Environmental Response, Compensation, and Liability Act] has authorized a noncompetitive $50 million grant program to establish and enhance state and tribal response programs to address the assessment, cleanup, and redevelopment of brownfields sites and other sites with actual or perceived contamination. The EPA will accept grant requests through **December 14, 2018**.

Click here for more information and to see the Federal Register Notice.

Water Infrastructure and Improvements to the Nation (WIIN) Act Grant: Lead Testing in School and Child Care Program Drinking Water, $20 million in funding available; submit letters of intent to EPA by January 11, 2019

Authorized under the Water Infrastructure Improvements for the Nation Act, the Lead Testing in School and Child Care Program Drinking Water Grant creates a program to assist with voluntary testing for lead in drinking water at schools and child care programs. The grant will include a total of $20 million in funding for states, including $1.2 million set aside specifically for tribal schools. EPA has requested that states interested in participating in the grant program submit letters of intent to EPA by **January 11, 2019.**

To support the new grant program, EPA has updated its 3Ts for Reducing Lead in Drinking Water. The updated document will assist schools and childcare facilities with developing lead in drinking water prevention programs through EPA's 3Ts – training, testing, and taking action. Together, EPA's new grants and the 3Ts, will provide states and schools with the tools they need to help protect children from lead in drinking water.

Click here to learn more.

PEYA Application Period: Applications Now Being Accepted for K-12 Student Awards

Applications are now being accepted for the 2018 President's Environmental Youth Award (PEYA). This program recognizes outstanding environmental stewardship projects by K-12 youth, promoting awareness of our nation's natural resources and encouraging positive community involvement. EPA will select up to two winners in each of EPA's 10 Regions – one regional winner for Grades K-5 and one regional winner for Grades 6-12. All student projects must be sponsored by at least one adult over the age of 21. The application and eligibility information are available at: https://www.epa.gov/education/presidents-environmental-youth-award. **Applications are due February 1, 2019**.

Upcoming Webinars, Workshops & Events

Webinar: Examining the Evidence: How School Buildings Affect Student Health, Thinking and Performance: November 29, 2018, 1:00 p.m. – 2:30 p.m. EST

Join EPA and experts from the Harvard T.H. Chan School of Public Health in a discussion on student health, thinking and performance.

Register for the webinar here.

Click here for information from EPA about creating healthy indoor air quality in schools.

Webinar: Engaging Health Professionals in Environmental Public Heath: December 7, 2018, 1:00 p.m. – 2:00 p.m. EST

The Engaging Health Professionals in Environmental Public Health webinar (sponsored by the National Institute of Health (NIH)) will focus on the importance of working with healthcare professionals to address environmental health issues. Presenters will also discuss strategies they are using to build the environmental health literacy of healthcare professionals.

Presenters include Mark Miller, M.D., M.P.H., UC San Francisco and Nicholas Newman, D.O., M.S., Cincinnati Children's Hospital Medical Center and are experts in the field of children's environmental health.

Registration is required.

Workshop: EPA IRIS to Hold Workshop on Systematic Review for Mechanistic Data: December 10-11, 2018

EPA's Integrated Risk Information System (IRIS) is convening a workshop titled, "Strategies and Tools for Conducting Systematic Reviews of Mechanistic Data to Support Chemical Assessments," in Washington D.C. In order to assist the EPA with developing guidance on conducting systematic reviews of mechanistic data when supporting chemical assessments, this workshop will explore relevant strategies and tools being developed and utilized across the systematic review and risk assessment communities. By developing guidance/methods for systematic reviews and evaluation of mechanistic data for particular chemicals, the agency can better understand the mechanism of action, including the potential for a chemical to cause developmental effects.

Click here for more information, or contact Dahnish Shams at shams.dahnish@epa.gov

Federal Partners' Children's Environmental Health Announcements

HUD Awards $6.7 million in Research Grants to Reduce Lead and Other Housing-Related Health Hazards

To help protect children and seniors from exposure to lead and other home health hazards, the U.S. Department of Housing and Urban Development (HUD) awarded $6.7 million to seven universities and public health organizations to improve methods for identifying and

controlling residential health risks including lead-based paint, mold, secondhand tobacco smoke, and other indoor contaminants.

Click here for a complete project-by-project summary of which programs were awarded grants.

Announcing: HUD's New Healthy Homes Youth App

The U.S. Department of Housing and Urban Development's Office of Lead Hazard Control and Healthy Homes and the U.S. Department of Agriculture's National Institute of Food and Agriculture Healthy Homes Partnership have released a new app to help middle-schoolers learn about potential household contaminants. These range from lead and mold to radon and volatile organic compounds (VOCs- pollutants in air at levels that threaten health). This App helps kids learn about their home's indoor environment, focusing on actions they can take to have a heathy home. Learn about common hazards and what to do. Content is in a fun and easy to understand format. Parents, caregivers and teachers can also benefit from this app.

Click here to learn more and to download the app.

U.S. Preventive Services Task Force (USPSTF): Elevated Blood Lead Levels in Children and Pregnant Women: Screening; Seeking Public Comment by December 3, 2018

The USPSTF is seeking public comment regarding their recent 1) Draft Recommendation Statement, 2) Draft Evidence Review: Children & 3) Draft Evidence Review: Pregnant Women regarding Screening for elevated blood lead levels.

Draft Recommendation Statement

- **Children**: The USPSTF concludes that the current *evidence is insufficient* to assess the balance of benefits and harms of screening for elevated blood lead levels in asymptomatic children.
- ***Pregnant women**: The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for elevated blood lead levels in asymptomatic pregnant women.*

Click here to learn more and **to provide public comment** on these draft recommendations **by December 3, 2018**.

Draft Evidence Review: Children

- In 2006, the U.S. Preventive Task Force found *insufficient evidence* to recommend for or against routine screening for elevated blood lead levels in asymptomatic children aged 1 to 5 who are at increased risk for lead poisoning, and recommended against routine screening for those at average risk. The objective of this review is to update a prior systematic review on screening for elevated blood lead levels in childhood for the U.S. Preventive Task Force.

Click here to learn more and to **provide public comment** on this draft evidence review **by December 3, 2018**.

Draft Evidence Review: Pregnant Women

- In 2006, the U.S. Preventive Task Force *recommended against routine screening* for elevated blood lead levels in asymptomatic pregnant women. The objective of this review is to update a prior systematic review on screening for elevated blood lead levels in pregnancy for the U.S. Preventive Task Force.

Click here to learn more and to provide public comment on this draft evidence review **by December 3, 2018**.

If you would rather not receive future communications from US EPA, Office of Public Engagement, let us know by clicking here.
US EPA, Office of Public Engagement, 1200 Pennsylvania Avenue NW, Washington, DC 20460 United States

Appointment

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CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

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From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

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New Teams meeting

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/10/2020 12:59:06 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: task on GenX

Casey,
Can you do this for us?

Thanks,
Jamie

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 8:56 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Maybe start by pulling chemicals from 2010 – 2020 like last time. And then if there aren't many, pull 2000 – 2020.

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, March 10, 2020 8:14 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: FW: task on GenX

Adding Brittany

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 12:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

The sheet is now updated to include everything since 2000.
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 11:45 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Go ahead and pull 2000 to now. Thanks!!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Jamie,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 9:38 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: task on GenX

Casey,

Ex. 5 Deliberative Process (DP)

Thanks,

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Appointment

From: Euling, Susan [Euling.Susan@epa.gov]
Sent: 4/26/2021 1:49:01 PM
To: Euling, Susan [Euling.Susan@epa.gov]; DAnglada, Lesley [DAnglada.Lesley@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Ravenscroft, John [Ravenscroft.John@epa.gov]; Young, Melanie [Young.Melanie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]; Keel, Adrienne [keel.adrienne@epa.gov]

Subject: HRAB check in
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; HRAB check in; HRAB check in; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 4/27/2021 3:30:00 PM
End: 4/27/2021 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Tuesday from 11:30 AM to 12:00 PM
Required Attendees: DAnglada, Lesley; Miller, Gregory; Akhter, Shamima; Donohue, Joyce; Soares, Barbara; Lindberg, Casey; Ravenscroft, John; Young, Melanie; Jacobs, Brittany; Cunningham, Kelly; Keel, Adrienne

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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/9/2020 3:34:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Canceled: WA 4-16 and DBPs Check-In
Location: Microsoft Teams Meeting

Start: 7/16/2020 3:00:00 PM
End: 7/16/2020 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Thursday from 11:00 AM to 12:00 PM
Required Attendees: Lindberg, Casey; Soares, Barbara; Miller, GregoryG
Optional Attendees: Cunningham, Kelly; Euling, Susan

Standing Agenda

- SYR4
- Meeting coverage for upcoming week
- Meeting reviews (ADP workgroup, check-in with Betsy, etc)
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- DBPs

6/2/21: Adding Kelly as optional and moving SY4R as first agenda item so Greg and Kelly can jump off if needed

2/16/2021: Adding Greg on to this meeting invite so we can coordinate on PFOA/PFOS work and I guess also six year review 4.

Updating meeting title to include DBPs

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CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

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Sent: 7/9/2020 3:34:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/10/2020 1:40:53 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Question: Response to Comments GenX Chemicals

Great! I'll send an updated RTC link soon.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 10, 2020 9:40 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

Same, no edits

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Wednesday, June 10, 2020 9:33 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

No edits here!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 10, 2020 9:31 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

I haven't touched it.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, June 10, 2020 9:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Question: Response to Comments GenX Chemicals

Just want to verify that nobody made any edits on the sharepoint version of the RTC during the period that Betsy was reviewing the document (5/7 to 6/9). The most recent SharePoint modified date makes it look like nobody has touched it since it was sent to Betsy. So I'm hoping we can just upload Betsy's version and use it at the most current. Any objections?

Greg

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, June 9, 2020 11:33 AM

To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: RE: FOR YOUR REVIEW-Response to Comments GenX Chemicals

You all did a fantastic job on this. I made some suggestions for lumping and some other suggestions. Let me know if you want to discuss.

b

From: Behl, Betsy
Sent: Monday, June 01, 2020 5:47 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: RE: FOR YOUR REVIEW-Response to Comments GenX Chemicals

Very nice job. I will review the schedule next and then the response to comments.
Please let me know if you have questions about my comments. You did a great job summarizing a lot of complicated and detailed science and justifying the UFs.

I had suggestions about terminology for the Thompson and NTP re-analyses. See what you think. I found the use of the word "some" a little vague. Made edits for your consideration. I made a few statements a bit bolder than they were. Let me know if I overstated. Overall, limited changes to this good document.

Thanks!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 07, 2020 1:28 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: FOR YOUR REVIEW-Response to Comments GenX Chemicals
Importance: High

Betsy,
Attached is the response to comments document for GenX chemicals. We followed the model used in the cyano rec criteria, summarizing major comments (calling out commenters) and providing a response. We still need TT to fix the TOC and check comment numbering, etc. They will do a full tech edit after your review. We also have a few comments

Ex. 5 Deliberative Process (DP)

remember]). Many thanks to Greg, Casey and Brittany. Please let us know if you have any questions or would like the actual comments (I can share the folder on SharePoint).

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

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Sent: 7/9/2020 3:34:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/10/2020 2:17:47 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments 06 09 2020bb" with you.

Sounds right to me.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 10, 2020 10:14 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments 06 09 2020bb" with you.

okay I would like to be able to reply to her today and tell her that we cant turn this around by the 15th as promised. That is Monday....no way we finish this before Monday let alone the doc itself.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, June 10, 2020 9:54 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments 06 09 2020bb" with you.

Here is the new link for the GenX RTC that includes Betsy's comments. Going to try to keep the document in SharePoint. We can move it to onedrive if it gives us trouble.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments 06 09 2020bb

Open

Microsoft OneDrive

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/9/2020 3:34:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Czarina C Cooper [Cooper.Czarina@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/16/2020 3:00:00 PM
End: 7/16/2020 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Thursday from 11:00 AM to 12:00 PM
Required Attendees: Jacobs, Brittany; Lindberg, Casey; Soares, Barbara; Miller, GregoryG
Optional Attendees: Cunningham, Kelly; Euling, Susan; Czarina C Cooper

Standing Agenda

- SYR4
- Meeting coverage for upcoming week
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2/16/2021: Adding Greg on to this meeting invite so we can coordinate on PFOA/PFOS work and I guess also six year review 4.

Updating meeting title to include DBPs

Microsoft Teams meeting

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 5/7/2020 5:06:32 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: RTC GenX

Send it.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 7, 2020 1:03 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: RTC GenX

Okay thanks. Any one else? If not, I will send it.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, May 07, 2020 12:23 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: RTC GenX

I think I was trying to clarify that most of the comments in section 2.3 of the RTC didn't clearly correspond with a section of the draft assessment so I had trouble placing them when I did the original comment call-outs. It can probably be ignored now.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 7, 2020 12:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Looks good to me. With respect to Casey's comment, I think it's okay if we don't have every topic covered in the comments as an individual section in the response to comments. However, if we want to reorganize the comments so the topics highlighted in Casey's comment are addressed, can we have TT do that? I think it's something we can talk about after we get Betsy's comments back.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 07, 2020 11:46 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Great work guys…I have one comment from Casey in the beginning that I don't know what to do. Other than that I went through and cleaned up (making a few changes here and there as I went). Once you take a final look I will send to Betsy!

Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 07, 2020 7:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Hi Jamie,

The response to comments doc is cleaned up as much as I think it can be. I didn't accept the text edits yet, but if you want me to do that too, I can, just let me know. Greg has gone through it also. There are just a few comments left. Some of them are to show you that I incorporated additional commenters into comments where Casey identified they said similar things. If you are fine with that, you can delete those comments.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 06, 2020 1:25 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Okay agree, so to make this easier let's keep separate, but take a look at the repeated answers. You are right, they either have to be exactly the same (which I don't like because its redundant) or refer back to original comment where we respond and truncate subsequent responses. I prefer the later approach. Open to hearing what others suggest though.

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From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 6, 2020 1:11 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
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From: Strong, Jamie
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Thanks,
Jamie

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Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

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U.S. Environmental Protection Agency
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☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

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Sent: 5/5/2020 6:21:08 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Going forward, please edit this OneDrive file. SharePoint failed again so we moved it over. Hopefully this works.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs 5 5 20

Open

Microsoft OneDrive

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/27/2020 2:32:09 PM
To: Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: GenX: help with 2yr chronic Rat Study
Attachments: Animal Deaths DuPont 18405-1238 App C gMiller.xlsx

I did some averaging using Casey's spreadsheet (see attached Fate Count tab) and added the sentence below into our

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, April 23, 2020 4:57 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Hi all,

Attached is a spreadsheet with the information you asked for. Let me know if you need me to walk you through it – I left in the calculations on some pages, but the numbers you wanted are highlighted.

My counts do seem to align with what's presented in Table 1.

Let me know if you need anything else!
Thanks,
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 22, 2020 3:32 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: GenX: help with 2yr chronic Rat Study

Hi Casey!

Hope you are hanging in there! We need some more GenX help. In going over the 2yr chronic rat study, we noticed that there are quite a few animal deaths on study that DuPont never quantifies in one place. Can you go through Appendix C "Record of Animal Fate and Disposition" (page 215) of DuPont-18405-1238 VO1.pdf and count the number of animals that fall in to each of the following categories? Please do this for each dose group for each sex. Please also calculate the mean week that the animals died for each category. And lastly, see how your death counts align with the deaths by week presented in Table 1 (on page 61). Thank you!

- Interim necropsy
- Terminal necropsy
- Found dead
- Euthanized *in extremis*

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2020 3:28:33 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3

Got through 7, Britt and Greg take a look comments for you both. Should I look at 6 or wait?

From: Strong, Jamie
Sent: Friday, April 10, 2020 8:07 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Sounds good.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, April 10, 2020 7:55 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

It looks like Greg made edits to 6 yesterday and I've worked some more on 6.4 this morning but there is more work to be done. I am off with the kids for now, but will try to hop back on at nap time (around 1pm).

From: Jacobs, Brittany
Sent: Friday, April 10, 2020 6:19 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

7 is updated to reflect our discussions yesterday

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 08, 2020 3:46 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

I also got into 7 but stopped. Lots to talk about.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 08, 2020 3:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Happy to do it however, but the section was meant to mirror what is in the IRIS BaP assessment. I guess their transition is a bit abrupt too. See page 159-160 in the attached pdf.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 8, 2020 3:22 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/27/2020 4:21:36 PM
To: Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, April 27, 2020 12:10 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 27, 2020 11:25 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Was there any mention in the study about the deaths as compared to the historical controls?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 10:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Monday, April 27, 2020 10:32 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

I did some averaging using Casey's spreadsheet (see attached Fate Count tab) and added the sentence below into our

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, April 23, 2020 4:57 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Hi all,

Attached is a spreadsheet with the information you asked for. Let me know if you need me to walk you through it – I left in the calculations on some pages, but the numbers you wanted are highlighted.

My counts do seem to align with what's presented in Table 1.

Let me know if you need anything else!
Thanks,
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 22, 2020 3:32 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: GenX: help with 2yr chronic Rat Study

Hi Casey!
Hope you are hanging in there! We need some more GenX help. In going over the 2yr chronic rat study, we noticed that there are quite a few animal deaths on study that DuPont never quantifies in one place. Can you go through Appendix C "Record of Animal Fate and Disposition" (page 215) of DuPont-18405-1238 VO1.pdf and count the number of animals that fall in to each of the following categories? Please do this for each dose group for each sex. Please also calculate the mean week that the animals died for each category. And lastly, see how your death counts align with the deaths by week presented in Table 1 (on page 61). Thank you!

- Interim necropsy
- Terminal necropsy
- Found dead
- Euthanized *in extremis*

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/7/2020 12:26:53 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: RTC GenX

okay I will look after 930, I am free til the afternoon

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 07, 2020 7:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Hi Jamie,

The response to comments doc is cleaned up as much as I think it can be. I didn't accept the text edits yet, but if you want me to do that too, I can, just let me know. Greg has gone through it also. There are just a few comments left. Some of them are to show you that I incorporated additional commenters into comments where Casey identified they said similar things. If you are fine with that, you can delete those comments.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 06, 2020 1:25 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Okay agree, so to make this easier let's keep separate, but take a look at the repeated answers. You are right, they either have to be exactly the same (which I don't like because its redundant) or refer back to original comment where we respond and truncate subsequent responses. I prefer the later approach. Open to hearing what others suggest though.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 06, 2020 1:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Initially, I was bothered by the repetition, but if these are the comments that were submitted, there is no harm in responding to each one individually. Because multiple commenters touched on the same subjects, it's natural that there would be repetition. We just need to make sure we're consistent in our responses. I'm fine with just saying "see answer to x.x.x above" to minimize some of the repetition, but my fear is that we'll lose some of the detail if we start lumping comments together too liberally.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 6, 2020 1:11 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

We also need to chat about the repetition…I am not sure whether to just leave it for now and have TT fix or try to fix it now. If we leave it, we should flag everything that needs to be combined for Betsy and tell her we will have TT combine things. I have meetings 230 on today. Tomorrow here and there. Let me know when you want to chat.

From: Strong, Jamie
Sent: Wednesday, May 06, 2020 12:50 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RTC GenX

Okay so I got through it. I have made some additional edits to the edits made by you all. Please review. I also started to delete comments if they are addressed. I am overwhelmed with GAO and budget stuff right now. Can you all go through this draft and clean up, deleting other comments that are moot that I missed. Removing the call outs of sections Casey added if that's okay (maybe save the current version so we know where in doc the comment is addressed in case Betsy asks…she likes to keep responses brief and refer to doc). Where we need other offices or Betsy to weigh in clean up comment to just say for so and so. Sorry I am slammed and I need help here!

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/5/2020 7:07:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Sorry. I am now having trouble downloading Sophie's files onto the share drive, so One Drive is so slow. I cant open anything right now. I will try tonight or early tomorrow.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, May 05, 2020 2:21 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Going forward, please edit this OneDrive file. SharePoint failed again so we moved it over. Hopefully this works.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs 5 5 20

Open

Microsoft OneDrive

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2020 7:31:40 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3

Ex. 5 Deliberative Process (DP)

will schedule time to talk tomorrow.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 08, 2020 3:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Happy to do it however, but the section was meant to mirror what is in the IRIS BaP assessment. I guess their transition is a bit abrupt too. See page 159-160 in the attached pdf.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 8, 2020 3:22 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/6/2020 12:34:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs" with you.

Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs" with you.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/12/2020 3:46:22 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 12, 2020 11:26 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, March 12, 2020 10:52 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 10, 2020 2:59 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Let me know if you need anything else!
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 9:06 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Thanks! If you can, flag the liver-related critical effects by highlighting the chemical name.

Greg

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 10, 2020 8:59 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Sure! I'll let you know when I'm done.
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 8:56 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Maybe start by pulling chemicals from 2010 – 2020 like last time. And then if there aren't many, pull 2000 – 2020.

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, March 10, 2020 8:14 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: FW: task on GenX

Adding Brittany

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 12:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

The sheet is now updated to include everything since 2000.
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 11:45 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Go ahead and pull 2000 to now. Thanks!!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Jamie,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 9:38 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: task on GenX

Casey,

Ex. 5 Deliberative Process (DP)

Thanks,

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 9/16/2021 5:58:48 PM
To: Miller, GregoryG [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]
Subject: RE: Revised PWS
Attachments: HHRAB SYR4 and PFAS Amended PWS 9-16-21 FINAL.docx

Thanks everyone, attached is the version I just submitted to William. There were a few minor edits.

Barbara

From: Miller, GregoryG <Miller.Gregory@epa.gov>
Sent: Thursday, September 16, 2021 1:45 PM
To: Soares, Barbara <soares.barbara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

Looks good to go! Thanks for the extra work!

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Thursday, September 16, 2021 1:34 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

Thanks you two. No problem. I'm going to give it one more read-through and then send it over.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 16, 2021 1:29 PM
To: Soares, Barbara <soares.barbara@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

Looks fine to me, thanks Barbara. As an fyi, I'm going to be prepping for my agency presentation for GenX for the next hour. I probably won't be responsive again until around 4pm when that's over.

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Thursday, September 16, 2021 1:11 PM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: Revised PWS

Please take a quick look at highlighted sections for updated sections of PWS. Let me know as soon as you can whether anything is off or if OK to send.

Barbara

Message

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 9/16/2021 11:09:58 PM
To: Miller, GregoryG [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]
Subject: RE: Revised PWS
Attachments: Draft...HHRAB SYR4 and PFAS Amended PWS 9-16-21 CLEAN.docx

I had to make a number of changes following feedback from William. Please see attached for latest version of the PWS.

From: Soares, Barbara
Sent: Thursday, September 16, 2021 1:59 PM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

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From: Miller, GregoryG <Miller.Gregory@epa.gov>
Sent: Thursday, September 16, 2021 1:45 PM
To: Soares, Barbara <soares.barbara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

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Sent: Thursday, September 16, 2021 1:34 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

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Sent: Thursday, September 16, 2021 1:29 PM
To: Soares, Barbara <soares.barbara@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

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Sent: Thursday, September 16, 2021 1:11 PM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey

<Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: Revised PWS

Please take a quick look at highlighted sections for updated sections of PWS. Let me know as soon as you can whether anything is off or if OK to send.

Barbara

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/10/2020 1:40:53 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Question: Response to Comments GenX Chemicals

Great! I'll send an updated RTC link soon.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 10, 2020 9:40 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

Same, no edits

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Wednesday, June 10, 2020 9:33 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

No edits here!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 10, 2020 9:31 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Question: Response to Comments GenX Chemicals

I haven't touched it.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, June 10, 2020 9:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Question: Response to Comments GenX Chemicals

Just want to verify that nobody made any edits on the sharepoint version of the RTC during the period that Betsy was reviewing the document (5/7 to 6/9). The most recent SharePoint modified date makes it look like nobody has touched it since it was sent to Betsy. So I'm hoping we can just upload Betsy's version and use it at the most current. Any objections?

Greg

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, June 9, 2020 11:33 AM

To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: RE: FOR YOUR REVIEW-Response to Comments GenX Chemicals

You all did a fantastic job on this. I made some suggestions for lumping and some other suggestions. Let me know if you want to discuss.

b

From: Behl, Betsy
Sent: Monday, June 01, 2020 5:47 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: RE: FOR YOUR REVIEW-Response to Comments GenX Chemicals

Very nice job. I will review the schedule next and then the response to comments.
Please let me know if you have questions about my comments. You did a great job summarizing a lot of complicated and detailed science and justifying the UFs.

I had suggestions about terminology for the Thompson and NTP re-analyses. See what you think. I found the use of the word "some" a little vague. Made edits for your consideration. I made a few statements a bit bolder than they were. Let me know if I overstated. Overall, limited changes to this good document.

Thanks!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 07, 2020 1:28 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: FOR YOUR REVIEW-Response to Comments GenX Chemicals
Importance: High

Betsy,
Attached is the response to comments document for GenX chemicals. We followed the model used in the cyano rec criteria, summarizing major comments (calling out commenters) and providing a response. We still need TT to fix the TOC and check comment numbering, etc. They will do a full tech edit after your review. We also have a few comments

Ex. 5 Deliberative Process (DP)

Many thanks to Greg, Casey and Brittany. Please let us know if you have any questions or would like the actual comments (I can share the folder on SharePoint).

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/10/2020 1:54:26 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments 06 09 2020bb" with you.

Here is the new link for the GenX RTC that includes Betsy's comments. Going to try to keep the document in SharePoint. We can move it to onedrive if it gives us trouble.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments 06 09 2020bb

Open

Microsoft OneDrive

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 5/7/2020 5:06:32 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: RTC GenX

Send it.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 7, 2020 1:03 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: RTC GenX

Okay thanks. Any one else? If not, I will send it.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, May 07, 2020 12:23 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: RTC GenX

I think I was trying to clarify that most of the comments in section 2.3 of the RTC didn't clearly correspond with a section of the draft assessment so I had trouble placing them when I did the original comment call-outs. It can probably be ignored now.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 7, 2020 12:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Looks good to me. With respect to Casey's comment, I think it's okay if we don't have every topic covered in the comments as an individual section in the response to comments. However, if we want to reorganize the comments so the topics highlighted in Casey's comment are addressed, can we have TT do that? I think it's something we can talk about after we get Betsy's comments back.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, May 07, 2020 11:46 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Great work guys…I have one comment from Casey in the beginning that I don't know what to do. Other than that I went through and cleaned up (making a few changes here and there as I went). Once you take a final look I will send to Betsy!

Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 07, 2020 7:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Hi Jamie,

The response to comments doc is cleaned up as much as I think it can be. I didn't accept the text edits yet, but if you want me to do that too, I can, just let me know. Greg has gone through it also. There are just a few comments left. Some of them are to show you that I incorporated additional commenters into comments where Casey identified they said similar things. If you are fine with that, you can delete those comments.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 06, 2020 1:25 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Okay agree, so to make this easier let's keep separate, but take a look at the repeated answers. You are right, they either have to be exactly the same (which I don't like because its redundant) or refer back to original comment where we respond and truncate subsequent responses. I prefer the later approach. Open to hearing what others suggest though.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 06, 2020 1:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Initially, I was bothered by the repetition, but if these are the comments that were submitted, there is no harm in responding to each one individually. Because multiple commenters touched on the same subjects, it's natural that there would be repetition. We just need to make sure we're consistent in our responses. I'm fine with just saying "see answer to x.x.x above" to minimize some of the repetition, but my fear is that we'll lose some of the detail if we start lumping comments together too liberally.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 6, 2020 1:11 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

We also need to chat about the repetition…I am not sure whether to just leave it for now and have TT fix or try to fix it now. If we leave it, we should flag everything that needs to be combined for Betsy and tell her we will have TT combine things. I have meetings 230 on today. Tomorrow here and there. Let me know when you want to chat.

From: Strong, Jamie
Sent: Wednesday, May 06, 2020 12:50 PM

To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RTC GenX

Okay so I got through it. I have made some additional edits to the edits made by you all. Please review. I also started to delete comments if they are addressed. I am overwhelmed with GAO and budget stuff right now. Can you all go through this draft and clean up, deleting other comments that are moot that I missed. Removing the call outs of sections Casey added if that's okay (maybe save the current version so we know where in doc the comment is addressed in case Betsy asks...she likes to keep responses brief and refer to doc). Where we need other offices or Betsy to weigh in clean up comment to just say for so and so. Sorry I am slammed and I need help here!

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/7/2020 12:26:53 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: RTC GenX

okay I will look after 930, I am free til the afternoon

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, May 07, 2020 7:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

Hi Jamie,

The response to comments doc is cleaned up as much as I think it can be. I didn't accept the text edits yet, but if you want me to do that too, I can, just let me know. Greg has gone through it also. There are just a few comments left. Some of them are to show you that I incorporated additional commenters into comments where Casey identified they said similar things. If you are fine with that, you can delete those comments.

Britt

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Sent: Wednesday, May 06, 2020 1:25 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

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From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 06, 2020 1:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

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From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 6, 2020 1:11 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: RTC GenX

We also need to chat about the repetition…I am not sure whether to just leave it for now and have TT fix or try to fix it now. If we leave it, we should flag everything that needs to be combined for Betsy and tell her we will have TT combine things. I have meetings 230 on today. Tomorrow here and there. Let me know when you want to chat.

From: Strong, Jamie
Sent: Wednesday, May 06, 2020 12:50 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RTC GenX

Okay so I got through it. I have made some additional edits to the edits made by you all. Please review. I also started to delete comments if they are addressed. I am overwhelmed with GAO and budget stuff right now. Can you all go through this draft and clean up, deleting other comments that are moot that I missed. Removing the call outs of sections Casey added if that's okay (maybe save the current version so we know where in doc the comment is addressed in case Betsy asks…she likes to keep responses brief and refer to doc). Where we need other offices or Betsy to weigh in clean up comment to just say for so and so. Sorry I am slammed and I need help here!

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/5/2020 7:07:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Sorry. I am now having trouble downloading Sophie's files onto the share drive, so One Drive is so slow. I cant open anything right now. I will try tonight or early tomorrow.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, May 05, 2020 2:21 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Going forward, please edit this OneDrive file. SharePoint failed again so we moved it over. Hopefully this works.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs 5 5 20

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 5/5/2020 6:21:08 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs 5 5 20" with you.

Going forward, please edit this OneDrive file. SharePoint failed again so we moved it over. Hopefully this works.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs 5 5 20

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/27/2020 4:21:36 PM
To: Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, April 27, 2020 12:10 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 27, 2020 11:25 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Was there any mention in the study about the deaths as compared to the historical controls?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 10:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Monday, April 27, 2020 10:32 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, April 23, 2020 4:57 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX: help with 2yr chronic Rat Study

Hi all,

Attached is a spreadsheet with the information you asked for. Let me know if you need me to walk you through it – I left in the calculations on some pages, but the numbers you wanted are highlighted.

My counts do seem to align with what's presented in Table 1.

Let me know if you need anything else!
Thanks,
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 22, 2020 3:32 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: GenX: help with 2yr chronic Rat Study

Hi Casey!
Hope you are hanging in there! We need some more GenX help. In going over the 2yr chronic rat study, we noticed that there are quite a few animal deaths on study that DuPont never quantifies in one place. Can you go through Appendix C "Record of Animal Fate and Disposition" (page 215) of DuPont-18405-1238 VO1.pdf and count the number of animals that fall in to each of the following categories? Please do this for each dose group for each sex. Please also calculate the mean week that the animals died for each category. And lastly, see how your death counts align with the deaths by week presented in Table 1 (on page 61). Thank you!

- Interim necropsy
- Terminal necropsy
- Found dead
- Euthanized *in extremis*

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2020 7:18:24 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 4.15.2020 Updated and Cleaner version of GenX Chemicals Assessment

Okay, I am not going to start reviewing until you guys get through 6. I will set up time to go through the unresolved comments.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 15, 2020 12:53 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 4.15.2020 Updated and Cleaner version of GenX Chemicals Assessment

Hello,

Attached is our new working assessment for editing. I have edited the liver necrosis out of the tables in section 6 and the BMD modeling appendix. I haven't started working on updating the text yet, but wanted to get you all a link to this version in case there were other things that could be completed. I also accepted text edits where it looked like we have resolved issues and deleted comments that were marked as resolved. You will still see some text in track changes where I thought we hadn't resolved the issues and there are a number of comments that haven't been resolved. I will let you know when I've updated the text in section 6 and in the BMD modeling appendix to reflect our conversation from this morning. I am hoping to get that done later this afternoon, but it might be tonight.

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2020 3:28:33 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3

Got through 7, Britt and Greg take a look comments for you both. Should I look at 6 or wait?

From: Strong, Jamie
Sent: Friday, April 10, 2020 8:07 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Sounds good.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, April 10, 2020 7:55 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

It looks like Greg made edits to 6 yesterday and I've worked some more on 6.4 this morning but there is more work to be done. **Ex. 6 Personal Privacy (PP)**

From: Jacobs, Brittany
Sent: Friday, April 10, 2020 6:19 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

7 is updated to reflect our discussions yesterday

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 08, 2020 3:46 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

I also got into 7 but stopped. Lots to talk about.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 08, 2020 3:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Happy to do it however, but the section was meant to mirror what is in the IRIS BaP assessment. I guess their transition is a bit abrupt too. See page 159-160 in the attached pdf.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 8, 2020 3:22 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2020 12:06:42 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3

Sounds good.

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Sent: Friday, April 10, 2020 7:55 AM
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Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

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From: Jacobs, Brittany
Sent: Friday, April 10, 2020 6:19 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

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Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
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Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
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Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2020 7:31:40 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3

Ex. 5 Deliberative Process (DP)

will schedule time to talk tomorrow.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 08, 2020 3:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: 6.3

Happy to do it however, but the section was meant to mirror what is in the IRIS BaP assessment. I guess their transition is a bit abrupt too. See page 159-160 in the attached pdf.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 8, 2020 3:22 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/6/2020 12:34:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs" with you.

Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments jbs" with you.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments jbs

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/8/2020 7:29:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: 6.3
Attachments: iris BaP.pdf

Happy to do it however, but the section was meant to mirror what is in the IRIS BaP assessment. I guess their transition is a bit abrupt too. See page 159-160 in the attached pdf.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 8, 2020 3:22 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: 6.3
Importance: High

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/10/2020 12:59:06 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: task on GenX

Casey,
Can you do this for us?

Thanks,
Jamie

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 8:56 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Maybe start by pulling chemicals from 2010 – 2020 like last time. And then if there aren't many, pull 2000 – 2020.

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, March 10, 2020 8:14 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: FW: task on GenX

Adding Brittany

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 12:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

The sheet is now updated to include everything since 2000.
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 11:45 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Go ahead and pull 2000 to now. Thanks!!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Jamie,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 9:38 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: task on GenX

Casey,

Ex. 5 Deliberative Process (DP)

Thanks,

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/12/2020 3:46:22 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 12, 2020 11:26 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, March 12, 2020 10:52 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 10, 2020 2:59 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Let me know if you need anything else!
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 9:06 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Thanks! If you can, flag the liver-related critical effects by highlighting the chemical name.

Greg

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 10, 2020 8:59 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: task on GenX

Sure! I'll let you know when I'm done.
Casey

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, March 10, 2020 8:56 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: task on GenX

Ex. 5 Deliberative Process (DP)

Maybe start by pulling chemicals from 2010 – 2020 like last time. And then if there aren't many, pull 2000 – 2020.

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, March 10, 2020 8:14 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: FW: task on GenX

Adding Brittany

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 12:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

The sheet is now updated to include everything since 2000.
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 11:45 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Go ahead and pull 2000 to now. Thanks!!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 05, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: task on GenX

Jamie,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 5, 2020 9:38 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: task on GenX

Casey,

Ex. 5 Deliberative Process (DP)

Thanks,

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 1/26/2021 4:22:43 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: RE: ICF help with GenX

I think we should be ok as it is similar to previous asks, but let's see what Sam says.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, January 26, 2021 11:12 AM
To: Soares, Barbara <soares.barbara@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: ICF help with GenX

Hi Barbara,

Direction has changed yet again for the GenX assessment and I think I need some help from ICF.

Ex. 5 Deliberative Process (DP)

Thanks,
Britt

Message

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 1/29/2021 7:28:58 PM
To: Soares, Barbara [soares.barbara@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
CC: Cronk, Ryan [Ryan.Cronk@icf.com]
Subject: HECD 4-16 TD-18 - Conley et al 2021 GenX study summary
Attachments: Conley et al_2021_GenX_WriteUp.docx

Hi Barbara, Brittany, and Casey,

Please find attached the study summary for the Conley 2021 manuscript you requested for TD-18.

As we chatted about in the meeting today, there are two comment bubbles directed towards you to confirm that section 2.3.3. is referring to the TK section of the GenX assessment. In addition, ICF did not include a paragraph at the end of the summary for the NOAEL/LOAEL (as was done for the example summary) since the study authors did not report this in the manuscript. In it's place, we do provide a summary of effects of the longer (GD8-PND2) study.

Please let us know if you need any additional items for this task.

Have a wonderful weekend,

Sam

SAMANTHA SNOW, PhD, DABT | Lead Toxicologist (she/her/hers)
+1.919.293.1636 direct
+1.302.242.5945 mobile
icf.com | LinkedIn

Message

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 8/2/2021 5:56:21 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Foster, Caroline [Caroline.Foster@icf.com]; Cronk, Ryan [Ryan.Cronk@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Rocha Melogno, Lucas [Lucas.RochaMelogno@icf.com]
Subject: RE: HECD Weekly Meeting
Attachments: ATT00001.txt

Thanks for sending this along, Brittany. I think we should forward along to the writers of the endocrine/thyroid section once we figure out who that will be. After reading through Colette, Mary, and Tammy's responses though, it doesn't seem like it would be too big of an issue given that our chemicals of interest aren't a direct estrogen receptor agonist. I know we took this into account for another project where we were doing SQE on BPA exposure studies (which aligns with Colette's response).

Sam

SAMANTHA SNOW, PhD, DABT | Lead Toxicologist (she/her/hers)
+1.919.293.1636 direct
+1.302.242.5945 mobile
icf.com | LinkedIn

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, August 2, 2021 1:41 PM
To: Snow, Samantha <Samantha.Snow@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Cronk, Ryan <Ryan.Cronk@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <Kaedra.Jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Eftim, Sorina <Sorina.Eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Rocha Melogno, Lucas <Lucas.RochaMelogno@icf.com>
Subject: RE: HECD Weekly Meeting

Hi everyone,

A little delated, but here are the responses I got from ORD folks on soy-based diets as a confounder for endocrine measurements.

Britt

-----Original Appointment-----
From: Snow, Samantha <Samantha.Snow@icf.com>
Sent: Tuesday, July 27, 2021 11:09 AM
To: Foster, Caroline; Cronk, Ryan; Tracy, Wren; Jones, Kaedra; Lin, Cynthia; Sorina Eftim; Soares, Barbara; Lindberg, Casey; Jacobs, Brittany; Etzel, Ruth; Miller, GregoryG

Cc: Rocha Melogno, Lucas
Subject: HECD Weekly Meeting
When: Tuesday, July 27, 2021 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Hi Everyone,

Please find the agenda below for today's meeting. Looking forward to chatting with you all soon.

Thanks!

Sam

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

- GenX Study Quality Evaluations
    - Animal study quality
        - Tertiary assignments by HECD are complete
            - Any tweaks needed to the final SQE heatmap?
        - Any further action needed on TD-19?

Ex. 5 Deliberative Process (DP)

Hi Everyone,

These meetings will carry us through to the end of the 6-month extension.

Thanks!

Sam

Microsoft Teams meeting

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Message

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 11/1/2021 7:49:43 PM
To: Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]; McCabe, Morgan [mccabe.morgan@epa.gov]
Subject: RE: GenX literature searches
Attachments: ATT00001.txt

Sounds good! Let me know if you do need anything on my end GenX related!

Sam

SAMANTHA SNOW, PhD, DABT | Lead Toxicologist (she/her/hers)
+1.919.293.1636 direct
+1.302.242.5945 mobile
icf.com | LinkedIn

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, November 1, 2021 3:48 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Snow, Samantha <Samantha.Snow@icf.com>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; McCabe, Morgan <mccabe.morgan@epa.gov>
Subject: RE: GenX literature searches

Perfect, everyone ignore me I have everything I need!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, November 1, 2021 3:45 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Snow, Samantha <51380@icf.com>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>; McCabe, Morgan <mccabe.morgan@epa.gov>
Subject: RE: GenX literature searches

The GenX HERO page has all of the studies from the literature searches. I'm not sure if Sam will have the RIS files, I can't remember if she or I uploaded them to Distiller. Sam let me know if this is something I need to find in my files.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, November 1, 2021 3:41 PM
To: Snow, Samantha <51380@icf.com>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; McCabe, Morgan <mccabe.morgan@epa.gov>
Subject: GenX literature searches

Hi Sam,

Unrelated to all of our fantastic PFOA/PFOS work, would you be able to send me the literature captured for the GenX tox assessment? I'm looking for an RIS file (preferably) that has all of the search results from the original 2017 search as well as the 3 updated searches, before any screening was done. Related question that might make this request irrelevant: does the GenX HERO project page contain all of the studies or was there some type of screen done on these (e.g., SWIFT filters/title-abstract screen)? If these are the unfiltered results, I can just download them myself ☺
Thanks!!
Casey

Casey Lindberg, Ph.D.
Biologist | U.S. Environmental Protection Agency
Office of Water | Office of Science & Technology
Human Health Risk Assessment Branch
(202) 566-2057

Message

From: Cronk, Ryan [Ryan.Cronk@icf.com]
Sent: 6/22/2021 3:24:48 PM
To: Snow, Samantha [51380@icf.com]; Snow, Samantha [51380@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]; Sorina Eftim [sorina.eftim@icf.com]
Subject: RE: HECD Weekly Meeting

Hi all,

Here's our agenda for today. Talk with you soon!

Ryan

**

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-

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

- GenX Study Quality Evaluations
    - Received the revised TD-19 work assignment on 6/16/21
-
-

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Snow, Samantha <Samantha.Snow@icf.com>
Sent: Tuesday, January 19, 2021 12:30 PM
To: Snow, Samantha; Foster, Caroline; Cronk, Ryan; Tracy, Wren; Lin, Cynthia; Jones, Kaedra; Soares, Barbara; Lindberg, Casey; Jacobs, Brittany; Etzel, Ruth
Cc: Miller, Gregory; Eftim, Sorina
Subject: HECD Weekly Meeting
When: Tuesday, June 22, 2021 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

These new meetings will start on 2/9/21.

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Message

From: Cronk, Ryan [Ryan.Cronk@icf.com]
Sent: 7/6/2021 3:18:20 PM
To: Snow, Samantha [51380@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: HECD Weekly Meeting

Hi everyone,

Here is our agenda for today. Talk to you soon!

Ryan

**

-
-

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

- A
- P
- N
- A

Ex. 5 Deliberative Process (DP)

- GenX Study Quality Evaluations
    - Animal study quality
        - Brittany was assigned all the tertiary reviews
            - "Cheat sheet" containing the final review in the previous assessment was sent along to use as a reference
        - All primary reviews (n=24) are complete and ready for tertiary review
        - Let us know once tertiary is complete and we can develop a SQE heatmap
- [illegible]
- [illegible]

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Snow, Samantha <Samantha.Snow@icf.com>
Sent: Thursday, July 1, 2021 11:54 AM
To: Snow, Samantha; Snow, Samantha; Foster, Caroline; Cronk, Ryan; Tracy, Wren; Jones, Kaedra; Lin, Cynthia; Eftim, Sorina; Soares, Barbara; Lindberg, Casey; Jacobs, Brittany; Etzel, Ruth; Miller, Gregory
Subject: HECD Weekly Meeting
When: Tuesday, July 6, 2021 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Hi Everyone,

These meetings will carry us through to the end of the 6-month extension.

Thanks!

Sam

Microsoft Teams meeting

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Message

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 7/21/2021 1:35:10 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Cronk, Ryan [Ryan.Cronk@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: HECD Weekly Meeting

Thanks for sending this along, Brittany. We are adding this to the pipeline and will push it through ti/ab, full text, lit inventory, SQE, and data extraction (similar to what we are doing now with those mixture papers). We'll fast track this one too since it's a cancer study.

Thanks!

Sam

SAMANTHA SNOW, PhD, DABT | Lead Toxicologist (she/her/hers)
+1.919.293.1636 direct
+1.302.242.5945 mobile
icf.com | LinkedIn

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 21, 2021 7:20 AM
To: Cronk, Ryan <Ryan.Cronk@icf.com>; Snow, Samantha <Samantha.Snow@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <Kaedra.Jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Eftim, Sorina <Sorina.Eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: HECD Weekly Meeting

Hi Everyone,

I received word that a PFOA/PFOS assessment is coming out soon and was able to get my eyes on it, though I can't share it. I noticed a epi cancer paper that was finalized in 2021 and so postdates our lit search. I think we need to add it to our analysis. I will send along anything else I see to give us a head start.

Britt

From: Jacobs, Brittany
Sent: Tuesday, July 20, 2021 10:31 PM
To: 'Cronk, Ryan' <Ryan.Cronk@icf.com>; Snow, Samantha <51380@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <kaedra.jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Sorina Eftim <sorina.eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: HECD Weekly Meeting

Dourson paper attached for your viewing pleasure

From: Cronk, Ryan <Ryan.Cronk@icf.com>
Sent: Tuesday, July 20, 2021 12:38 PM
To: Snow, Samantha <51380@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <kaedra.jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Sorina Eftim <sorina.eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: HECD Weekly Meeting

Hi all,

Here's the agenda for today!

Ryan

**

-
-

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

- GenX Study Quality Evaluations
    - Animal study quality
        - Developed SQE heatmap that will autopopulate as you finalize the tertiary reviews

-
- Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Snow, Samantha <Samantha.Snow@icf.com>
Sent: Thursday, July 1, 2021 11:54 AM
To: Snow, Samantha; Snow, Samantha; Foster, Caroline; Cronk, Ryan; Tracy, Wren; Jones, Kaedra; Lin, Cynthia; Eftim, Sorina; Soares, Barbara; Lindberg, Casey; Jacobs, Brittany; Etzel, Ruth; Miller, Gregory
Subject: HECD Weekly Meeting
When: Tuesday, July 20, 2021 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Hi Everyone,

These meetings will carry us through to the end of the 6-month extension.

Thanks!

Sam

Microsoft Teams meeting

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Message

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 7/21/2021 1:54:01 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Cronk, Ryan [Ryan.Cronk@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: HECD Weekly Meeting

Thanks for sending this paper along, Brittany! I sent it along to Cara and she look it over prior to our meeting on Thursday.

Sam

SAMANTHA SNOW, PhD, DABT | Lead Toxicologist (she/her/hers)
+1.919.293.1636 direct
+1.302.242.5945 mobile
icf.com | LinkedIn

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, July 20, 2021 10:31 PM
To: Cronk, Ryan <Ryan.Cronk@icf.com>; Snow, Samantha <Samantha.Snow@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <Kaedra.Jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Eftim, Sorina <Sorina.Eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: HECD Weekly Meeting

Ex. 5 Deliberative Process (DP)

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Sent: Tuesday, July 20, 2021 12:38 PM
To: Snow, Samantha <51380@icf.com>; Foster, Caroline <Caroline.Foster@icf.com>; Tracy, Wren <Wren.Tracy@icf.com>; Jones, Kaedra <kaedra.jones@icf.com>; Lin, Cynthia <Cynthia.Lin@icf.com>; Sorina Eftim <sorina.eftim@icf.com>; Soares, Barbara <soares.barbara@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Etzel, Ruth <Etzel.Ruth@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
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To: Snow, Samantha; Snow, Samantha; Foster, Caroline; Cronk, Ryan; Tracy, Wren; Jones, Kaedra; Lin, Cynthia; Eftim, Sorina; Soares, Barbara; Lindberg, Casey; Jacobs, Brittany; Etzel, Ruth; Miller, Gregory
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When: Tuesday, July 20, 2021 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
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Message

From: McCabe, Morgan [mccabe.morgan@epa.gov]
Sent: 8/4/2021 3:21:02 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Lindberg, Casey [Lindberg.Casey@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]
Subject: RE: Peer review contract in HECD?

Britt,

Thanks for checking and forwarding along Dahnish's contact info. Will do,

Morgan

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, August 4, 2021 11:20 AM
To: McCabe, Morgan <mccabe.morgan@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>
Subject: RE: Peer review contract in HECD?

Hi Morgan,

I confirmed with Betsy that we don't have a peer review contract in HECD. We used ORD. We coordinated with Dahnish Shams (Shams.Dahnish@epa.gov) to get GenX peer reviewed if you wanted to reach out.

Thanks!
Britt

From: McCabe, Morgan <mccabe.morgan@epa.gov>
Sent: Tuesday, August 3, 2021 12:47 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>
Subject: RE: Peer review contract in HECD?

Ok thanks!

Morgan

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, August 3, 2021 12:46 PM
To: McCabe, Morgan <mccabe.morgan@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>
Subject: RE: Peer review contract in HECD?

Hi Morgan,

I can check in with Sue on this. The most recent peer review we did was through ORD so I'm not sure that we have one.

Britt

From: McCabe, Morgan <mccabe.morgan@epa.gov>
Sent: Tuesday, August 3, 2021 12:21 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Lindberg, Casey <Lindberg.Casey@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>
Subject: Peer review contract in HECD?

Hi Brittany,

We are exploring our options for letter peer reviewing the application of the risk function (Regli et al.2015) for our co-benefits analysis. Does HECD have a peer review vehicle that might be available? Erik Helm mentioned HECD had one in the past.

Best,
Morgan

Morgan McCabe
Physical Scientist
U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
Standards and Risk Management Division
Phone: 202-564-6247

Appointment

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 7/27/2021 3:09:05 PM
To: Foster, Caroline [Caroline.Foster@icf.com]; Cronk, Ryan [Ryan.Cronk@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Rocha Melogno, Lucas [Lucas.RochaMelogno@icf.com]

Subject: HECD Weekly Meeting
Location: Microsoft Teams Meeting

Start: 7/27/2021 5:00:00 PM
End: 7/27/2021 6:30:00 PM
Show Time As: Tentative

Recurrence: (none)

Hi Everyone,

Please find the agenda below for today's meeting. Looking forward to chatting with you all soon.

Thanks!

Sam

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

· GenX Study Quality Evaluations
    - Animal study quality
        - Tertiary assignments by HECD are complete
            - Any tweaks needed to the final SQE heatmap?
        - Any further action needed on TD-19?

Ex. 5 Deliberative Process (DP)

Hi Everyone,

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Thanks!

Sam

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Message

From: Conley, Justin [Conley.Justin@epa.gov]
Sent: 9/20/2021 2:52:11 PM
To: Lambert, Jason [Lambert.Jason@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]
Subject: RE: in vivo PFAS mixture paper

My email always defaults to Christy's address instead of Jason…

Justin Conley
Reproductive Systems Biologist
U.S. Environmental Protection Agency
ORD | CPHEA | PHITD | RDTB
Research Triangle Park, NC
919-541-3326 (office)
606-571-5315 (cell)

From: Conley, Justin
Sent: Monday, September 20, 2021 10:51 AM
To: Lambright, Christy <Lambright.Christy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>; Earl Gray (Gray.Earl@epa.gov) <Gray.Earl@epa.gov>
Subject: in vivo PFAS mixture paper

Just an FYI – I think this might be the first mammalian in vivo toxicity study of a PFAS mixture that includes PFOA and PFOS. It doesn't address additivity or cumulative effects directly, but reports hepatic effects of the mixture, among other endpoints. The mixture they used also includes PFNA, PFHxS, and GenX

Justin Conley
Reproductive Systems Biologist
U.S. Environmental Protection Agency
ORD | CPHEA | PHITD | RDTB
Research Triangle Park, NC
919-541-3326 (office)
606-571-5315 (cell)

Message

From: Conley, Justin [Conley.Justin@epa.gov]
Sent: 9/20/2021 2:50:39 PM
To: Lambright, Christy [Lambright.Christy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]
Subject: in vivo PFAS mixture paper
Attachments: Roth_2021_Exposure_to_a_mixture_of_legacy_alternative_PFAS_sex-dependent_cholesterol_liver_Environ_Int.pdf

Just an FYI – I think this might be the first mammalian in vivo toxicity study of a PFAS mixture that includes PFOA and PFOS. It doesn't address additivity or cumulative effects directly, but reports hepatic effects of the mixture, among other endpoints. The mixture they used also includes PFNA, PFHxS, and GenX

Justin Conley
Reproductive Systems Biologist
U.S. Environmental Protection Agency
ORD | CPHEA | PHITD | RDTB
Research Triangle Park, NC
919-541-3326 (office)
606-571-5315 (cell)

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/11/2020 1:45:40 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: PFBS MW conversions - applicable to GenX?
Attachments: PFBS MW Adjustment Info v2.docx

Casey put together this very helpful 1-pager describing the molecular weight conversions used in the PFBS assessment. I added some comments in the margins that show the parallels with GenX. I'm leaning toward adding a similar conversion to GenX unless you all feel differently. I suspect that any analytical methods for GenX in water will detect the free acid, not the salt. But maybe we should verify that.

Greg

Message

From: Lindberg, Casey [lindberg.casey@epa.gov]
Sent: 6/11/2020 6:05:46 PM
To: +1 (202) 494-3080 [+1 (202) 494-3080@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: GenX comments discussion

GenX comments discussion

Duration: 04 Minutes 05 Seconds

+1 (202) 494-3080
Other: + Ex. 6 Personal Privacy (PP)

Strong, Jamie
BRANCH CHIEF , OW
Email: strong.jamie@epa.gov
IM: strong.jamie@epa.gov

Jacobs, Brittany
OW
Work: Ex. 6 Personal Privacy (PP)
Email: jacobs.brittany@epa.gov
IM: jacobs.brittany@epa.gov

Skype for Business

Message

From: Lindberg, Casey [lindberg.casey@epa.gov]
Sent: 12/17/2020 7:29:24 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Conversation with Jacobs, Brittany

Lindberg, Casey 2:06 PM:

if the 3M study is claiming a result is transient and not related to dose response even though it's statistically significant, should I not report it or should I stick with what the stats say?

Jacobs, Brittany 2:07 PM:
i always report it if it's stat sig

Jacobs, Brittany 2:07 PM:
DuPont did that all of the time too and we always reported it

Lindberg, Casey 2:08 PM:
ok great thanks!

Jacobs, Brittany 2:09 PM:
thanks for asking!

Jacobs, Brittany 2:09 PM:

Ex. 5 Deliberative Process (DP)

Message

From: Miller, Gregory [miller.gregory@epa.gov]
Sent: 3/16/2020 1:26:27 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Conversation with jacobs.brittany@epa.gov, Miller, Gregory, Strong, Jamie

Miller, Gregory 9:12 AM:

Adding Casey to our GenX chat.

Miller, Gregory 9:13 AM:

Adding Casey to our GenX chat. my computer keeps dropping me off the internet.

Message

From: Miller, Gregory [miller.gregory@epa.gov]
Sent: 3/16/2020 1:30:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Conversation with Jacobs, Brittany, Miller, Gregory, Strong, Jamie

Miller, Gregory 9:12 AM:

Adding Casey to our GenX chat.

Miller, Gregory 9:13 AM:

Adding Casey to our GenX chat. my computer keeps dropping me off the internet.

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 3/24/2020 6:03:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Conversation with Jacobs, Brittany

Jacobs, Brittany 1:52 PM:

Hey Casey! If you have some free time, do you want to help me out with a something for the GenX chemicals assessment?

Lindberg, Casey 1:52 PM:

Sure! I can get to a good stopping point and transition. What do you need?

Jacobs, Brittany 1:55 PM:

Okay great! There isn't a huge rush on this. I'm realizing that some of the mechanistic studies are dissolving the HFPO chemicals in DMSO. We found out at SOT last year that the HFPO chemicals don't dissolve in DMSO. Can you go through the mechanistic studies and note if the study says what the chemicals are dissolved in? I want to make a point in the study summary if it is DMSO.

Jacobs, Brittany 1:55 PM:

I can try sharing my mechanistic studies folder with you

Jacobs, Brittany 1:55 PM:

has onedrive/sharepoint been working for you?

Lindberg, Casey 1:56 PM:

Yes I definitely noticed that in at least one of the papers. I can go back and check. Yes, my onedrive has been working. I think I have most of them from emails you sent in the past too

Jacobs, Brittany 1:57 PM:

Great! I've added about 5 more studies to that section so I'll send you a link to the folder

Lindberg, Casey 1:58 PM:

Sounds good! I'll let you know when I've finished.

Jacobs, Brittany 1:58 PM:

thanks so much! no rush on this

Message

From: Lindberg, Casey [lindberg.casey@epa.gov]
Sent: 3/25/2020 7:10:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
Subject: Chat through GenX Toxicokinetic Section

Chat through GenX Toxicokinetic Section

Jacobs, Brittany
OW
Work: Ex. 6 Personal Privacy (PP)
Email: jacobs.brittany@epa.gov
IM: jacobs.brittany@epa.gov

Skype for Business

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 10/14/2020 2:55:17 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
Subject: RE: DBP Public Meeting

Yes, I was planning on attending for most of the day. I need to step out at 1 for a CCL meeting, but otherwise will be listening in.

Let me know if there's something I can help with for GenX!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, October 14, 2020 10:53 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Subject: DBP Public Meeting

Hello,

GenX is internally combusting apparently and Jamie has pulled me off of everything else to work on this. I'm trying to make sure some of my meetings today and tomorrow are covered. Were you two planning on attending the DBP public meeting?

Thanks,
Brittany

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 2/10/2021 1:28:31 PM
To: Soares, Barbara [soares.barbara@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Biweekly with OST/OGWDW on PFAS

!!!

Got it, will report back with updates and responses.

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Wednesday, February 10, 2021 7:19 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Biweekly with OST/OGWDW on PFAS

"EPA career scientists have reviewed content shared in a January 19, 2021 press release, which can be found here , and made an initial determination that the conclusions in the PFBS (Perfluorobutanesulfonic acid, a PFAS compound) Toxicity Assessment posted in that release were compromised by political interference as well as infringement of authorship and the scientific independence of the authors' conclusions. This constitutes a violation of the agency's Scientific Integrity Policy and the documents have been removed from the EPA website while the agency completes its review

Science is the backbone of EPA and allows the agency to effectively pursue its mission to protect public health and the environment," said senior career scientist Dr. Jennifer Orme-Zavaleta, Acting Assistant Administrator for the Office of Research and Development and the agency's Acting Science Advisor. "Issuing documents, like the PFBS Toxicity Assessment, that include conclusions purporting to reflect science when in fact they are the product of biased political interference undermines the agency's scientific integrity policy and erodes the trust that the American public has in EPA, the quality of our science, and our ability to protect their health and the environment.""

Some great morning reading for sure.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 10, 2021 6:14 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Soares, Barbara <soares.barbara@epa.gov>
Subject: RE: Biweekly with OST/OGWDW on PFAS

Thanks again for covering this meeting. Things to bring up to OGWDW PFAS team. I usually let them start with their updates and then say what I know.

-
-
-
-
-

Ex. 5 Deliberative Process (DP)

I think that's it. I'll follow up if I think of anything else.

-----Original Appointment-----
From: Lan, Alexis <lan.alexis@epa.gov>
Sent: Wednesday, April 29, 2020 5:39 PM
To: Lan, Alexis; Harmon, Molly; Jacobs, Brittany; Heinrich, Austin; McCabe, Morgan; Holsinger, Hannah
Cc: Greene, Sophie; Weisman, Richard; Greene, Ashley; Gonsenhauser, Rachel; Lindberg, Casey; Soares, Barbara
Subject: Biweekly with OST/OGWDW on PFAS
When: Wednesday, February 10, 2021 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

6/16 note: adjusting time to 3-4pm

Purpose: establish a standing forum for coordination on regdet and potential future rulemaking activities related to PFAS. Invitees include staff from OST/HECD and OGWDW/SRMD.

Microsoft Teams meeting

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Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 2/10/2021 8:56:53 PM
To: Soares, Barbara [soares.barbara@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: 0RE: Biweekly with OST/OGWDW on PFAS
Attachments: Additional PFAS for Reg Det_Briefing Document_Final_February2021.docx

Short meeting today… see notes below and let me know if you have any questions!
Hannah updates:

-
-
-

Alex u

-
-
-

Austin

-
-

Casey/

-
-

Ex. 5 Deliberative Process (DP)

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Cc: Soares, Barbara <soares.barbara@epa.gov>
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- Ex. 5 Deliberative Process (DP)

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Sent: Wednesday, April 29, 2020 5:39 PM
To: Lan, Alexis; Harmon, Molly; Jacobs, Brittany; Heinrich, Austin; McCabe, Morgan; Holsinger, Hannah
Cc: Greene, Sophie; Weisman, Richard; Greene, Ashley; Gonsenhauser, Rachel; Lindberg, Casey; Soares, Barbara
Subject: Biweekly with OST/OGWDW on PFAS
When: Wednesday, February 10, 2021 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
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Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 2/24/2021 4:26:04 PM
To: Soares, Barbara [soares.barbara@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Biweekly with OST/OGWDW on PFAS

I can also be there.

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Wednesday, February 24, 2021 11:16 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Biweekly with OST/OGWDW on PFAS

I can cover/co-cover this meeting.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 24, 2021 11:15 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Subject: RE: Biweekly with OST/OGWDW on PFAS

Hi,

Can one or both of you cover this meeting for me? I have to talk to SRMD management about DBPs today. I can report out on how that meeting goes when we touch base tomorrow.

Some points to bring up:

- PFBS is expected to go out next week (fingers crossed)
- GenX MIGHT go to internal EPA review next week if I **Ex. 6 Personal Privacy (PP)**

Thanks!
Britt

-----Original Appointment-----
From: Lan, Alexis <lan.alexis@epa.gov>
Sent: Wednesday, April 29, 2020 5:39 PM
To: Lan, Alexis; Harmon, Molly; Jacobs, Brittany; Heinrich, Austin; McCabe, Morgan; Holsinger, Hannah
Cc: Greene, Sophie; Weisman, Richard; Greene, Ashley; Gonsenhauser, Rachel; Lindberg, Casey; Soares, Barbara
Subject: Biweekly with OST/OGWDW on PFAS
When: Wednesday, February 24, 2021 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

6/16 note: adjusting time to 3-4pm

Purpose: establish a standing forum for coordination on regdet and potential future rulemaking activities related to PFAS. Invitees include staff from OST/HECD and OGWDW/SRMD.

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)

Ex. 6 Personal Privacy (PP) tates, Washington DC

Find a local number | Reset PIN

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Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 5/26/2021 1:05:21 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Giant dump of all the PFOA/PFOS emails you were not copied on

This must've been what everyone was trying to remember! Thank you for passing along, I will forward to Kelly.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, May 26, 2021 8:58 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Giant dump of all the PFOA/PFOS emails you were not copied on

Hi Casey,

Slowly making my way through this. One thing I think might be helpful to Kelly is something Katie Bentley at the end of last year, including adding in RSC's from state assessments (attached). Here is what she did:

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Friday, May 21, 2021 12:37 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Giant dump of all the PFOA/PFOS emails you were not copied on

Hi Britt,
Sorry in advance for this mess… I went through all my emails from the past 2 months and have sorted through some of the important attachments that you may have missed or were not included on. Figured it was best to have them all in one email. Here is a description of each (I attempted to go in chronological order) and a few other snippets from emails that you may be interested in:

Keeping this on your radar so you're not blindsided if OGWDW asks for something like this in the future.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

I think that's it!!

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 5/21/2021 4:36:32 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: Giant dump of all the PFOA/PFOS emails you were not copied on
Attachments: PFOA-PFOS Workgroup Overview for OST_4.6.21.docx; PFAS and serum lipids systematic review_abstract.docx; HECD 4-16 PFOA PFOS Tox Species and Study Design.xlsx; OST Memo Requesting Support from ORD 4.14.21.pdf; HECD 4-16 PFOA PFOS Low Quality Tox Studies Health Outcomes.xlsx; HECD 4-16 PFOA PFOS SR Joyce's PFAS list tracker.xlsx; Conley_Gray_Proposed_Combined_PFOA_PFOS_in_vivo_mixture_study_2021-04-19.docx; PFAS 150 SEM manuscript_STICS jbs gMiller.docx; Animal Tox Subgroup Update - 5.5.21 .pptx; HECD 4-16 PFOA PFOS Extraction Report Developmental 5.6.2021.xlsx; HECD 4-16 PFOA PFOS Extraction Report immune serum lipids update 5.7.2021.xlsx; HECD 4-16 PFOA PFOS Extraction Report hepatic 5.10.2021.xlsx; PFAS NPDWR AA briefing_May17 DD review draft - SRRB.docx; FRN_PFOS.PFOA Panel Formation_5_18_2021.docx; PFOA PFOS SR literature inventory revision options 5.19.2021.docx; PFOA PFOS ADME Screening and Extraction Results 4.29.2021.xlsx; HECD 4-16 PFOA PFOS PBPK Data Needs.xlsx

<!--[if lte mso 15 || CheckWebRef]-->

Lindberg, Casey has shared a OneDrive for Business file with you. To view it, click the link below.

SABSO Project Sheet.docx

<!--[endif]-->

Hi Britt,

Sorry in advance for this mess… I went through all my emails from the past 2 months and have sorted through some of the important attachments that you may have missed or were not included on. Figured it was best to have them all in one email. Here is a description of each (I attempted to go in chronological order) and a few other snippets from emails that you may be interested in:

Keeping this on your radar so you're not blindsided if OGWDW asks for something like this in the future.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

I think that's it!!

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 3/16/2020 12:10:20 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Help with GenX Assessment

Hi Britt,

ORISE never got any formal guidance so we are unofficially teleworking until told otherwise.

I can start on those sections today. If you need to reach me, I've forwarded my office phone and I'll be online all day.

Stay safe out there!
Thanks,
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 16, 2020 5:52 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Help with GenX Assessment

Hi Casey,

Thanks! I'm hoping they are letting ORISE telework. If you are able to telework, could you look through the metabolism (2.3.4) and excretion (2.3.5) sections?

Thanks!!!
Britt

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Friday, March 13, 2020 2:53 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Help with GenX Assessment

Hey Britt,

I just finished going through the absorption section and the document is saving (and freaking out per usual) so you should see my edits/comments pop up soon.

There was nothing extremely concerning, but I made a few edits or comments throughout all of the studies when I felt like something wasn't completely correct or was missing information. All of the edits to Table 2 appear to be correct, but there are a few sections which may need your attention and further editing.

Let me know if you want me to look through any other Toxicokinetics sections. I am currently on hold for other projects.

Thanks and enjoy your weekend!
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 12, 2020 2:34 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Help with GenX Assessment

No worries! I appreciate the help

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 12, 2020 2:31 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Help with GenX Assessment

Yes, that worked. Sorry, I lost that email in the shuffle. I'll get back to you when I'm finished this section.
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 12, 2020 2:17 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Help with GenX Assessment

Hey Casey,

Yes, I didn't send you that study originally because there weren't new edits to the paragraph describing that study. I've attached it to this email, but you will need the rest of the studies mentioned in this section now that we are checking everything. I sent you a link to the DuPont studies in an earlier email but here it is again: https://usepa-

Ex. 6 Personal Privacy (PP)

Let me know if you can't access this link.

Thanks again for your help.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, March 12, 2020 1:57 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Help with GenX Assessment

Hey Britt,

Am I missing a study (18405-1017)? The entire first paragraph of section 1.1.1 is supposedly from that study. At first I thought it was a typo, but 18647-1017 is discussed in the paragraph below and 18405-1307 has no mention of urine sampling that I can find.
Thanks,
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 12, 2020 7:57 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Help with GenX Assessment

Good Morning Casey,

Thanks for making edits to those mechanistic studies, it's always good to get a third person to weigh in when there are two different takes on the data.

If you have some more time, I'd like to get your help checking edits in the toxicokinetic section. Let's start with the absorption section (2.3.1). It looks like edits were made to DuPont-18647-1017 RV1, 2011 and just one or two edits to DuPont-25292, 2008. Could you also triple check Table 2 in this section? I made edits to Table 2 because some of the numbers were initially wrong. The data in Table 2 is from Dupont-18405-1307 (2010) on pages 327 and 328 of the PDF. I've attached all of these studies to this email. If you haven't looked at industry studies before, it can take a little bit to get oriented with them so let me know if you have questions.

I'm teleworking today, but you can Skype/email/call (2025661352) if you have any questions.

Thanks again!
Britt

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 10, 2020 1:23 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Help with GenX Assessment

No problem! I will get started this afternoon and will let you know if I have any issues.
Thanks,
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, March 10, 2020 1:17 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Help with GenX Assessment

Hi Casey,

Thanks for being willing to help out with some of the to-dos for the GenX chemicals assessment. Attached in the OneDrive copy of the assessment. This is the version we are currently editing. The first thing I'd like to have you do is in the mechanistic section (4.6.2). Joyce made a lot of edits to two of the summaries I wrote up for the drafts and I think having a third person look at these edits for accuracy and clarity would be good. The two write-ups to review are Wang et al., 2017 and Sheng et al., 2018 (I've attached the papers to this email). Please check all of the numbers reported in these write-ups for accuracy. If you find an inaccuracy with a number reported, please edit it in the assessment to be accurate. Also, please leave comments if you disagree with any statements made. If you have any questions or would like to meet to discuss anything, let me know! Also, let me know when you are finished with this task as I could also use some help in the toxicokinetic section.

All the best and thanks again!
Britt

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 9/16/2021 5:31:22 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]
Subject: RE: Revised PWS

Looks good to me as well, thanks!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 16, 2021 1:29 PM
To: Soares, Barbara <soares.barbara@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: RE: Revised PWS

Looks fine to me, thanks Barbara. As an fyi, I'm going to be prepping for my agency presentation for GenX for the next hour. I probably won't be responsive again until around 4pm when that's over.

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Thursday, September 16, 2021 1:11 PM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>; Cunningham, Kelly <cunningham.kelly@epa.gov>
Subject: Revised PWS

Please take a quick look at highlighted sections for updated sections of PWS. Let me know as soon as you can whether anything is off or if OK to send.

Barbara

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 3/18/2020 4:58:33 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Jacobs, Brittany shared a folder with you

Done! Only one edit in the table and a few small things in the text.
I'm available if you need me.
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, March 18, 2020 10:29 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Hi Casey,

Okay, I thought of one more thing you can do as time allows. Can you check my new additions to 7.5 Comparison of PFOA and GenX Chemicals? That information is from the Blake et al., 2020 paper. I especially wanted a double check of the table I put in there because I was pulling numbers from a few of the tables in Blake (these can be found in the supplemental materials). If I think of anything else, I'll send along.

Thanks!
Brittany

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Wednesday, March 18, 2020 9:16 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Finished with this section! Any others? You can give me a few if that's easier… this project is my priority until HRL discussions resume.
Thanks!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, March 17, 2020 2:32 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Here you go Casey! Thanks!!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 17, 2020 2:27 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

No problem! Do you have a PDF of Gannon et al. (2016)? I believe that's the only one I'm missing for this section.
Thanks!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, March 17, 2020 11:17 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Awesome! Thanks so much! If you have time, let's just keep you moving onto the 2.3.6 Pharmacokinetic Clearance and Half-life Data. It's the biggest section. I am going back through and doing a double check so this is awesome to have two people QCing and getting familiar with the toxicokinetic studies. Let me know if something changes and you need studies.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Tuesday, March 17, 2020 11:13 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Alright, I've made it through this section. Today I appear to have access to OneDrive and SharePoint so let me know if you have any other sections you want me to go through!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 16, 2020 1:07 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Shoot girl you are flying! Yes, would love your help on checking the distribution during gestation and lactation section. I added a lot of new information in there that needs a double check, but it will also be good to check the original text. I think I have attached all of the studies you will need. Thanks again!

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, March 16, 2020 12:31 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

I just finished with the metabolism and excretion sections. I ended up saving a copy of the GenX doc to my harddrive because I can't currently save anything through sharepoint (☺). Once I'm back up I can make those changes to your version.

Any other sections you want me to start on?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 16, 2020 12:18 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Okay, good times! Lol. Let me know if you need other studies.

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Monday, March 16, 2020 12:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Jacobs, Brittany shared a folder with you

Hmm still not working… when I click the link it redirects me to fs.epa.gov which states I don't have authorization. I think I must be part of the MassMailer issue that was sent out this morning. I could access OneDrive last night.

I'll keep checking sporadically throughout the day and see if anything changes.
Thanks,
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 16, 2020 12:15 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Jacobs, Brittany shared a folder with you

Here's a OneDrive link to GenX Studies.

Message

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 3/24/2020 7:04:37 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Jacobs, Brittany shared the folder "Mechanistic Papers" with you.

Studies that used DMSO as a vehicle:

Behr et al., 2018 (I think.. they use 0.1% DMSO as a vehicle control, no mention of how they actually prepared chemicals)
Sheng et al., 2018
Li et al., 2019
Xin et al., 2019
Wen et al., 2020

Behr et al., 2020 does not say anything about a vehicle, but 2018 study appears to use DMSO.

Let me know if you need anything else!
Casey

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, March 24, 2020 1:58 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: Jacobs, Brittany shared the folder "Mechanistic Papers" with you.

GenX mechanistic papers

This link only works for the direct recipients of this message.

Mechanistic Papers

Open

Microsoft OneDrive

Sender will be notified when you open this link for the first time.

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Appointment

From: Lindberg, Casey [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A073F1632BA417EA6AB505253D44D7F-LINDBERG, C]
Sent: 3/25/2020 11:48:43 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: Accepted: Chat through GenX Toxicokinetic Section
Location: Skype Meeting

Start: 3/25/2020 7:00:00 PM
End: 3/25/2020 8:00:00 PM
Show Time As: Busy

Yes, this works for me!
Talk to you later.
Casey

Appointment

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 7/1/2021 3:54:01 PM
To: Snow, Samantha [Samantha.Snow@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Cronk, Ryan [Ryan.Cronk@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Jasperse, Caroline [Caroline.Jasperse@icf.com]
CC: Rocha Melogno, Lucas [Lucas.RochaMelogno@icf.com]; Fitzharris, Lauren [Lauren.FitzHarris@icf.com]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]

Subject: Canceled: HECD Weekly Meeting
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/6/2021 5:00:00 PM
End: 7/6/2021 6:30:00 PM
Show Time As: Free

Importance: High

Recurrence: (none)

Hi Everyone,

These meetings will carry us through to the end of the 6-month extension.

Thanks!

Sam

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
Ex. 6 Personal Privacy (PP) ates, Arlington

Find a local number | Reset PIN

Learn More | Meeting options | Legal

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/30/2020 5:21:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]

Subject: SDWA/GenX meeting (setting up w/Teams)
Location: Microsoft Teams Meeting

Start: 9/30/2020 6:00:00 PM
End: 9/30/2020 7:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Lindberg, Casey

first half SDWA, second half GenX

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) hington DC (Toll)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

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Appointment

From: Euling, Susan [Euling.Susan@epa.gov]
Sent: 5/18/2021 2:17:11 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discussion of budget FY21 and 22 PFAS
Location: Microsoft Teams Meeting

Start: 5/18/2021 6:00:00 PM
End: 5/18/2021 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, GregoryG; Soares, Barbara; Jacobs, Brittany; Lindberg, Casey
Optional Attendees: Flaherty, Colleen

To finalize –

	Activity	FY21 $	FY21 FTE	FY22 $	FY22 FTE
EAD	PFAS incl. Methods, Detailed Study, rulemaking	Ex. 5 Deliberative Process (DP)			
HECD	Ecological Risk Ambient Water Quality Criteria for PFOA and PFOS				
HECD	Human Health Ambient Water Quality Criteria for PFOA and PFOS				
HECD	SDWA Health Effects Support (PFOA, PFOS, GenX chemicals)				
SHPD	Human Health Monitoring through Fish Studies and Evaluations				
	Total				

Note: FTE rate = $160k per.

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
Ex. 6 Personal Privacy (PP) es, Washington DC

Find a local number | Reset PIN

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Learn More | Meeting options

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 3/25/2020 11:32:20 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]

Subject: Chat through GenX Toxicokinetic Section
Location: Skype Meeting

Start: 3/25/2020 7:00:00 PM
End: 3/25/2020 8:00:00 PM
Show Time As: Busy

Required Attendees: Lindberg, Casey

Hi Casey,

Do you have some time today to chat through some of the remaining comments in the GenX assessment? I think you and I are most familiar with the details of the toxicokinetic studies at this point, so I'm hoping together we can clear up the questions I still have. Feel free to change the time if this doesn't work for you.

Thanks!
Britt

Join Skype Meeting

Trouble Joining? Try Skype Web App

Help

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/11/2020 1:24:43 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]

Subject: GenX comments discussion
Location: Skype Meeting

Start: 6/11/2020 6:00:00 PM
End: 6/11/2020 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

-----Original Appointment-----
From: Strong, Jamie
Sent: Thursday, June 11, 2020 7:51 AM
To: Strong, Jamie; Jacobs, Brittany; Miller, Gregory
Subject: GenX comments discussion
When: Thursday, June 11, 2020 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Skype Meeting

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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/9/2020 3:34:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Czarina C Cooper [Cooper.Czarina@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/16/2020 3:00:00 PM
End: 7/16/2020 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Thursday from 11:00 AM to 12:00 PM
Required Attendees: Jacobs, Brittany; Lindberg, Casey; Soares, Barbara; Miller, GregoryG
Optional Attendees: Cunningham, Kelly; Euling, Susan; Czarina C Cooper

Standing Agenda

- SYR4
- Meeting coverage for upcoming week
- Meeting reviews (ADP workgroup, check-in with Betsy, etc)
- PFOA/PFOS items
- DBPs

6/2/21: Adding Kelly as optional and moving SY4R as first agenda item so Greg and Kelly can jump off if needed

2/16/2021: Adding Greg on to this meeting invite so we can coordinate on PFOA/PFOS work and I guess also six year review 4.

Updating meeting title to include DBPs

Microsoft Teams meeting

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Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 5/19/2021 2:13:06 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

ok good. one question they have for us is if we just want a binary mixture of PFOA/PFOS in the mixture study

Ex. 5 Deliberative Process (DP)

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 5/19/2021 2:16:20 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

we were considering GenX but yeah, definitely open to discussion. no decisions have been made but will need to be made relatively soon

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 7/29/2021 7:39:10 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

how's genx going?

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 7/30/2021 11:49:50 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

If you need a break from genx today can i ask you for an annoying favor. PFAS council strikes again.

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 9/8/2021 8:01:50 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

there's a comment for you about genx in table 2-7 on pg 65

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 10/11/2021 9:31:44 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

is omb for genx?

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 10/18/2021 7:57:46 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Ex. 5 Deliberative Process (DP)

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 10/18/2021 8:08:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Ex. 5 Deliberative Process (DP)

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 10/18/2021 8:11:45 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

Ex. 5 Deliberative Process (DP)

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 10/25/2021 3:55:08 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

how are you feeling about genx?

Message

From: Lindberg, Casey [Lindberg.Casey@epa.gov]
Sent: 11/1/2021 7:29:01 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]

i'm working with OGWDW's ICF to start the RSC development for Ex. 5 Deliberative Process (DP) s it ok with you if I ask Sam to send that group the search string and results from the genx lit searches?

Appointment

From: Akhter, Shamima [Akhter.Shamima@epa.gov]
Sent: 10/26/2021 5:48:47 PM
To: Akhter, Shamima [Akhter.Shamima@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: FSTRAC Webinar on EPA's Final Human Health Toxicity Values for GenX Chemicals

Start: 11/4/2021 4:45:00 PM
End: 11/4/2021 6:00:00 PM
Show Time As: Tentative

Recurrence: (none)

Required Attendees: Jacobs, Brittany; Miller, GregoryG; Euling, Susan; Flaherty, Colleen; Behl, Betsy

Agenda for FSTRAC Webinar Scheduled for Thursday, November 4, 2018, from 1:00 – 2:00 p.m., Eastern time

- Welcome and Introduction
- Recent release of EPA's final Toxicity Assessment for GenX Chemicals - Brittany Jacobs, Ph.D., OW/EPA

On October 25th, the U.S. Environmental Protection Agency (EPA) released the final human health toxicity assessment for Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (referred to as "GenX chemicals"). The final GenX chemicals assessment is part of EPA's efforts to increase the amount of information that is publicly available on chemicals in the PFAS class noted in EPA's Strategic Roadmap to address per- and polyfluoroalkyl substances (PFAS). The assessment presents a critical review of the available human health effects information on GenX chemicals. The assessment provides hazard identification, dose-response information, and derives toxicity values called oral reference doses (RfDs) for chronic and subchronic exposures. A toxicity assessment is a written summary of the potential health effects associated with a chemical and is similar to assessments developed under EPA's Integrated Risk Information System (IRIS). EPA plans to use this toxicity assessment and information on exposure, analytical methods and treatment to develop a Drinking Water Health Advisory in the spring of 2022. Link to the assessment: https://www.epa.gov/chemical-research/human-health-toxicity-assessments-genx-chemicals

Please use the instructions below to join the FSTRAC Webinar

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Then, click on "Open your Teams app" or "Continue on this browser" to join.

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Sent: 10/26/2021 5:48:47 PM
To: Akhter, Shamima [Akhter.Shamima@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: FSTRAC Webinar on EPA's Final Human Health Toxicity Values for GenX Chemicals

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End: 11/4/2021 6:00:00 PM
Show Time As: Tentative

Recurrence: (none)

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From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 2/16/2021 11:57:58 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

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Show Time As: Busy

Recurrence: Weekly
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Required Attendees: Lindberg, Casey; Soares, Barbara; Miller, GregoryG
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From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 12:03:12 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan [Euling.Susan@epa.gov]; Jennifer Palmiotto [jennifer@nrwa.org]; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric [Burneson.Eric@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
CC: Chris Moody [CMoody@awwa.org]; Miller, GregoryG [Miller.Gregory@epa.gov]; Sarah Buck [sbuck@rcap.org]

Subject: Final toxicity assessment for GenX chemicals
Location: Microsoft Teams Meeting

Start: 11/2/2021 6:30:00 PM
End: 11/2/2021 7:30:00 PM
Show Time As: Busy

Required Attendees: svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan; Jennifer Palmiotto; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric; Rodgers-Jenkins, Crystal; Jacobs, Brittany
Optional Attendees: Chris Moody; Sarah Buck; Miller, GregoryG

The U.S. Environmental Protection Agency (EPA) will release shortly the final human health toxicity assessment for Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (referred to as "GenX chemicals"). The finalization of the assessment fulfills/constitutes/is part of EPA's efforts to increase the amount of information that is publicly available on chemicals in the PFAS class. A toxicity assessment is a written summary of the potential health effects associated with a chemical and is similar to assessments developed under EPA's Integrated Risk Information System (IRIS). The assessment provides hazard identification, dose-response information, and derives toxicity values called oral reference doses (RfDs) for chronic and subchronic exposures. EPA plans to use this toxicity assessment and information on exposure, analytical methods and treatment to develop a Drinking Water Health Advisory in the spring of 2022.

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From: Gaines, Linda [Gaines.Linda@epa.gov]
Sent: 11/1/2021 5:08:48 PM
To: Gaines, Linda [Gaines.Linda@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Armann, Steve [Armann.Steve@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Beringer, Mike [Beringer.Michael@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Fischer, Timothy [Fischer.Timothy@epa.gov]; Gervais, Gregory [Gervais.Gregory@epa.gov]; Mohollen, Laura [Mohollen.Laura@epa.gov]; Tanaka, Joan [Tanaka.Joan@epa.gov]; Graveline, Alyssa [Graveline.Alyssa@epa.gov]; Villarreal, Chris [villarreal.chris@epa.gov]; Lyons, John [Lyons.John@epa.gov]; Wall, Dan [wall.dan@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Schlieger, Brian [schlieger.brian@epa.gov]; Schuver, Henry [Schuver.Henry@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Anderson, RobinM [Anderson.RobinM@epa.gov]; Sands, Charles [Sands.Charles@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Lovely, William [Lovely.William@epa.gov]; Jennings, Lynne [Jennings.Lynne@epa.gov]; Loughlin, Anni [loughlin.anni@epa.gov]; Carroll, Courtney [Carroll.Courtney@epa.gov]; Cunningham, Lisa Bradford [Cunningham.Lisa@epa.gov]; Lloyd, Diedre [Lloyd.Diedre@epa.gov]; Hudson, Kimberly [Hudson.Kimberly@epa.gov]; Pluta, Bruce [Pluta.Bruce@epa.gov]; Cutt, Diana [Cutt.Diana@epa.gov]; Messinger, Lisa [Messinger.Lisa@epa.gov]; Brauner, David [brauner.david@epa.gov]; Muniz, Nuria [Muniz.Nuria@epa.gov]; Wilson, David [wilson.david@epa.gov]; Frey, Rebecca [frey.rebecca@epa.gov]; Quadri, Syed [quadri.syed@epa.gov]; Prendiville, Timothy [prendiville.timothy@epa.gov]; Novak, Dion [novak.dion@epa.gov]; Hardin, David (Erik) [hardin.erik@epa.gov]; Cianciarulo, Robert [Cianciarulo.Bob@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Tuttle, Jeffrey [Tuttle.Jeffrey@epa.gov]; Davies, Kathy [Davies.Kathy@epa.gov]; Wendel, Jennifer [Wendel.Jennifer@epa.gov]; Taylor, Dawn [Taylor.Dawn@epa.gov]; Thornton, Hilary [Thornton.Hilary@epa.gov]; Watson, Linda (R3) [Watson.Linda@epa.gov]; Lyssy, Gregory [lyssy.gregory@epa.gov]; Shaffer, Caleb [Shaffer.Caleb@epa.gov]; Goldblum, Deborah [Goldblum.Deborah@epa.gov]; Azzam, Nidal [Azzam.Nidal@epa.gov]; Allen, Elizabeth [allen.elizabeth@epa.gov]; Metz, Chloe [Metz.Chloe@epa.gov]; Vu, Chau [Vu.Chau@epa.gov]; Halstead, Sandra [Halstead.Sandra@epa.gov]; Rossi, Debra [Rossi.Debra@epa.gov]; Carpenter, Angela [Carpenter.Angela@epa.gov]; Sivak, Michael [Sivak.Michael@epa.gov]; Aultz, Erica [aultz.erica@epa.gov]; Hamblin, Patrick [hamblin.patrick@epa.gov]; Seely, David [seely.david@epa.gov]; OBrien, Wendy [OBrien.Wendy@epa.gov]; Stralka, Daniel [Stralka.Daniel@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Burr, Kimberly [burr.kimberly@epa.gov]; Hodes, Colette [Hodes.Colette@epa.gov]; Meyer, John [Meyer.John@epa.gov]; Mooney, Charlotte [Mooney.Charlotte@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Luke, April [Luke.April@epa.gov]; Clements, Mindy [clements.mindy@epa.gov]; Fronczak, David [Fronczak.David@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Thompson, Robert A. [Thompson.Robert@epa.gov]; Filipowicz, Urszula [Filipowicz.Urszula@epa.gov]; Connell, Rebecca [Connell.Rebecca@epa.gov]; Jurist, Karen [Jurist.Karen@epa.gov]; Herrera, Angeles [Herrera.Angeles@epa.gov]; Burchette, John [Burchette.John@epa.gov]; Acheson, Carolyn [Acheson.Carolyn@epa.gov]; Bowen, Sharon [Bowen.Sharon@epa.gov]; Schulz, Susan [Schulz.Susan@epa.gov]; Knittel, Janette [Knittel.Janette@epa.gov]; Fuentes, Rene [fuentes.rene@epa.gov]; Einan, David [Einan.David@epa.gov]; Barbieri, Andrea [Barbieri.Andrea@epa.gov]; Juett, Lynn [Juett.Lynn@epa.gov]; Collins, Charlie [collins.charlie@epa.gov]; Taylor, Melissa [Taylor.Melissag@epa.gov]; Anderson, Kate [Anderson.Kate@epa.gov]; Bhullar, Charnjit [Bhullar.Charnjit@epa.gov]; Everett, Adolph [Everett.Adolph@epa.gov]; Anderson, Arlene [Anderson.Arlene@epa.gov]; Rasso, Mark [Rasso.Mark@epa.gov]; Driscoll, Stacie [Driscoll.Stacie@epa.gov]; Lowe, Jill [Lowe.Jill@epa.gov]; Bleiler, Justin [Bleiler.Justin@epa.gov]; Turner, Philip [Turner.Philip@epa.gov]; Bott, Dustan [Bott.Dustan@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Kidwell, JessicaL [Kidwell.JessicaL@epa.gov]; DAgostino, Daniel [DAgostino.Daniel@epa.gov]; Wilson, Patrick [Wilson.Patrick@epa.gov]; Bhattacharya, Dipanjana [Bhattacharya.Dipanjana@epa.gov]; Khoury, Ghassan [Khoury.Ghassan@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Rauscher, Jon [Rauscher.Jon@epa.gov]; Shewmake, Kenneth [shewmake.kenneth@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Eidelberg, Joseph [Eidelberg.Joseph@epa.gov]; Chan, Sydney [chan.sydney@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Tsui-Bowen, Alethea [Tsui-Bowen.Alethea@epa.gov]; King, Laurie [king.laurie@epa.gov]; Chow, Eugenia [Chow.Eugenia@epa.gov]; Mitguard, Matt [Mitguard.Matt@EPA.GOV]; Ramirez, Leslie [Ramirez.Leslie@epa.gov]; Koporec, Kevin [Koporec.Kevin@epa.gov]; Tavassoli, Lily [tavassoli.lily@epa.gov]; Kimble, Jeffrey [kimble.jeffrey@epa.gov]; Fusinski, Keith [fusinski.keith@epa.gov]; Ferreira, James [Ferreira.James@epa.gov]; Meier, Kathleen [meier.kathleen@epa.gov]; Caporale, Cynthia [Caporale.Cynthia@epa.gov]; Mankowski, Matthew [mankowski.matthew@epa.gov]; Mendez, Thomas [mendez.thomas@epa.gov]; Polster, Jenny [polster.jenny@epa.gov]; Leonard, Paul [leonard.paul@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Morton,

Michael [Morton.Michael@epa.gov]; Shimeles, Taetaye [Shimeles.Taetaye@epa.gov]; Weber, Robert [Weber.Robert@epa.gov]; O'Loughlin, Connor [oloughlin.connor@epa.gov]; Edwards, Jennifer [Edwards.Jennifer@epa.gov]; Conetta, Benny [Conetta.Benny@epa.gov]; Haklar, James [Haklar.James@epa.gov]; O'Connor, Daniel [oconnor.daniel@epa.gov]; Birchfield, Norman [Birchfield.Norman@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Cisneros, Jose [Cisneros.Jose@epa.gov]; Moore, Tammy [moore.tammy@epa.gov]; Beedle, Michael [beedle.michael@epa.gov]; McLeod, Jennifer [McLeod.Jennifer@epa.gov]; Folland, William [folland.william@epa.gov]; Wainberg, Daniel [Wainberg.Daniel@epa.gov]; Newman, Keriema [Newman.Keriema@epa.gov]; Jones, Aaryn [Jones.Aaryn@epa.gov]; Blake, Leslie [Blake.Leslie@epa.gov]; Clark, Jacqueline [clark.jacqueline@epa.gov]; Buelow, Laura [Buelow.Laura@epa.gov]; Kolak, Shari [kolak.shari@epa.gov]; Safakas, Kirstin [Safakas.Kirstin@epa.gov]; Leipert, Mark [leipert.mark@epa.gov]; Williams, Thomas [williams.tom@epa.gov]; Dodds, Jennifer [dodds.jennifer@epa.gov]; Neal, Conor [Neal.Conor@epa.gov]; Sundar, Bhooma [sundar.bhooma@epa.gov]; Ash, Christine [Ash.Christine@epa.gov]; Russell, Diane [russell.diane@epa.gov]; Kloss, Sarah [Kloss.Sarah@epa.gov]; Johnston, John E. [Johnston.John@epa.gov]; Fisher, Susan [Fisher.Susan@epa.gov]; Galbraith, Michael [Galbraith.Michael@epa.gov]; Atkins, Blake [Atkins.Blake@epa.gov]; Baier-Anderson, Caroline [Baier-Anderson.Caroline@epa.gov]; Wooster-Brown, Catherine [Wooster-Brown.Catherine@epa.gov]; Nevshehirlian, Stepan [Nevshehirlian.Stepan@epa.gov]; Keating, Carol [Keating.Carol@epa.gov]; Reimer, Steve [Reimer.Steve@epa.gov]; Reese, Diane [Reese.Diane@epa.gov]; Strock, Troy [strock.troy@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Holst, Linda [holst.linda@epa.gov]; Sasnow, Zachary [sasnow.zachary@epa.gov]; Freed, Elisabeth [Freed.Elisabeth@epa.gov]; Shah, Harry [Shah.Harry@epa.gov]; Pane, Vickie [Pane.Vickie@epa.gov]; Langlois-Miller, Christina [Langlois-Miller.Christina@epa.gov]; Fagnant, Daniel [fagnant.daniel@epa.gov]; Helms, Greg [Helms.Greg@epa.gov]; Kirkland, Kim [Kirkland.Kim@epa.gov]; Lamberth, Larry [Lamberth.Larry@epa.gov]; Yap-deffler, Yazmine [Yap-Deffler.Yazmine@epa.gov]; Edgerton, David [edgerton.david@epa.gov]; Canova, Judy [canova.judy@epa.gov]; Aguilar, Marcus [Aguilar.Marcus@epa.gov]; Hidalgo, Chelsea [Hidalgo.Chelsea@epa.gov]; Lohwater, Natasha [Lohwater.Natasha@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; McKeePerez, Nancy [McKeePerez.Nancy@epa.gov]; Pachon, Carlos [Pachon.Carlos@epa.gov]; Gilbert, Edward [Gilbert.Edward@epa.gov]; Poulos, Lauren [poulos.lauren@epa.gov]; Blocker, Shawn [Blocker.Shawn@epa.gov]; Beller, Harry [Beller.Harry@epa.gov]; Frederick, Tim [Frederick.Tim@epa.gov]; Gerhard, Sasha [Gerhard.Sasha@epa.gov]; Ross, Stephanie D [Ross.StephanieD@epa.gov]; O'Neal, Kelly [ONeal.Kelly@epa.gov]; Schmalstieg, Jared [Schmalstieg.Jared@epa.gov]; Peck, Michelle [Peck.Michelle@epa.gov]; Garnett, Becky [Garnett.Becky@epa.gov]; Garcia, Javier [Garcia.Javier@epa.gov]; Andrews, David [Andrews.David@epa.gov]; Urquhart-Foster, Samantha [Urquhart-Foster.Samantha@epa.gov]; Bailey, Lynn [Bailey.Lynn@epa.gov]

CC: Pendleton, Gracie [Pendleton.Gracie@epa.gov]; Asque, Gillian [asque.gillian@epa.gov]; Huffman, Diane [Huffman.Diane@epa.gov]; Royal, Emily [Royal.Emily@epa.gov]; Kennedy, Cathleen [Kennedy.Cathleen@epa.gov]; Vanlerberghe, Daren [Vanlerberghe.Daren@epa.gov]; Gaffney, Kristeen [gaffney.kristeen@epa.gov]; Churchill, Stephen [Churchill.Stephen@epa.gov]; Alexander, Shanna [Alexander.Shanna@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Keteles, Kristen [Keteles.Kristen@epa.gov]; Hartzell, Sharon [hartzell.sharon@epa.gov]; Mollin, Jessica [Mollin.Jessica@epa.gov]; Hockey, David [Hockey.David@epa.gov]; Haug, Susanne [Haug.Susanne@epa.gov]; Davis, Ifeyinwa [Davis.Ifeyinwa@epa.gov]; Lynn Bailey [lynnbaileyepa@gmail.com]; Solis Marcano, Nadja [SolisMarcano.Nadja@epa.gov]; Mroz, Aaron [mroz.aaron@epa.gov]; Cashman, Michaela [Cashman.Michaela@epa.gov]; Aker, Sandra [Aker.Sandra@epa.gov]; Masters, Stacie [Masters.Stacie@epa.gov]; Cantwell, Mark [Cantwell.Mark@epa.gov]; Ireland, Sean [Ireland.Sean@epa.gov]; Jones, Leslie [Jones.Leslie@epa.gov]; Walker, Tom [Walker.Tom@epa.gov]; Cuthbertson, Becky [Cuthbertson.Becky@epa.gov]; Crincoli, Klara [Crincoli.Klara@epa.gov]; Davis, Amber [Davis.Amber@epa.gov]; Gross-Davis, CarolAnn [Gross-Davis.CarolAnn@epa.gov]; Deatrick, John [Deatrick.John@epa.gov]; Schaub, Lisa [Schaub.Lisa@epa.gov]; Dressel, Paul [DRESSEL.PAUL@EPA.GOV]; Baxter, Madison [baxter.madison@epa.gov]; Pfeiffer, Tricia [Pfeiffer.Tricia@epa.gov]; Bowen, Ian [Bowen.Ian@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Boucher, Aimee [Boucher.Aimee@epa.gov]; Oxendine, Sharon [Oxendine.Sharon@epa.gov]; Lowrey, Daniel [Lowrey.Daniel@epa.gov]; Vasser, Bryan [vasser.bryan@epa.gov]; Taylor, Daniel [taylor.daniel@epa.gov]; Harden, Samantha [harden.samantha@epa.gov]; Teichert, Candice [Teichert.Candice@epa.gov]; Holleran, Anne [Holleran.Anne@epa.gov]; Chavez, Araceli [Chavez.Araceli@epa.gov]; York, Brooke [York.Brooke@epa.gov]; Scharr, Ruth [Scharr.Ruth@epa.gov]; Hubbard, Jennifer [Hubbard.Jennifer@epa.gov]; Foster, Barbara [Foster.Barbara@epa.gov]; Gerhart, Rebecca [Gerhart.rebecca@epa.gov]; Jones, Athena [Jones.Athena@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Tuazon, Veronica [Tuazon.Veronica@epa.gov]; Latier, Andrea [Latier.Andrea@epa.gov]

Subject: Monthly PFAS Regional Coordination Call

Location: DCRoomPYS5671/OSRTI-Potomac-Yard-South

Start: 11/18/2021 5:00:00 PM
End: 11/18/2021 6:00:00 PM
Show Time As: Tentative

Recurrence: Monthly
the second Thursday of every 1 month(s) from 12:00 PM to 1:00 PM

-----Original Appointment-----
From: Gaines, Linda <Gaines.Linda@epa.gov>
Sent: Monday, October 25, 2021 10:02 AM
To: Gaines, Linda; Adams, Glenn; Armann, Steve; Bachman, Brenda; Beringer, Mike; Cassidy, Meghan; Fischer, Timothy; Gervais, Gregory; Mohollen, Laura; Tanaka, Joan; Graveline, Alyssa; Villarreal, Chris; Lyons, John; Wall, Dan; Cooke, Maryt; Schlieger, Brian; Schuver, Henry; Fitz-James, Schatzi; Anderson, RobinM; Sands, Charles; Foster, Stiven; Raffaele, Kathleen; Lovely, William; Jennings, Lynne; Loughlin, Anni; Carroll, Courtney; Cunningham, Lisa Bradford; Lloyd, Diedre; Hudson, Kimberly; Pluta, Bruce; Cutt, Diana; Messinger, Lisa; Brauner, David; Muniz, Nuria; Wilson, David; Frey, Rebecca; Quadri, Syed; Prendiville, Timothy; Novak, Dion; Hardin, David (Erik); Cianciarulo, Robert; Gehlhaus, Martin; Tuttle, Jeffrey; Davies, Kathy; Wendel, Jennifer; Taylor, Dawn; Thornton, Hilary; Watson, Linda (R3); Lyssy, Gregory; Shaffer, Caleb; Goldblum, Deborah; Azzam, Nidal; Allen, Elizabeth; Metz, Chloe; Vu, Chau; Halstead, Sandra; Rossi, Debra; Carpenter, Angela; Sivak, Michael; Aultz, Erica; Hamblin, Patrick; Seely, David; OBrien, Wendy; Stralka, Daniel; Schumacher, Kelly; Burr, Kimberly; Hodes, Colette; Meyer, John; Mooney, Charlotte; Libelo, Laurence; Luke, April; Clements, Mindy; Fronczak, David; Allenbach, Becky; Thompson, Robert A.; Filipowicz, Urszula; Connell, Rebecca; Jurist, Karen; Herrera, Angeles; Burchette, John; Acheson, Carolyn; Bowen, Sharon; Schulz, Susan; Knittel, Janette; Fuentes, Rene; Einan, David; Barbieri, Andrea; Juett, Lynn; Collins, Charlie; Taylor, Melissa; Anderson, Kate; Bhullar, Charnjit; Everett, Adolph; Anderson, Arlene; Rasso, Mark; Driscoll, Stacie; Lowe, Jill; Bleiler, Justin; Turner, Philip; Bott, Dustan; Harris, Kimberly; Kidwell, JessicaL; DAgostino, Daniel; Wilson, Patrick; Bhattacharya, Dipanjana; Khoury, Ghassan; Milburn, Anna; Rauscher, Jon; Shewmake, Kenneth; Gorman, John; Eidelberg, Joseph; Chan, Sydney; Evangelista, Pat; Tsui-Bowen, Alethea; King, Laurie; Chow, Eugenia; Mitguard, Matt; Ramirez, Leslie; Koporec, Kevin; Tavassoli, Lily; Kimble, Jeffrey; Fusinski, Keith; Ferreira, James; Meier, Kathleen; Caporale, Cynthia; Mankowski, Matthew; Mendez, Thomas; Polster, Jenny; Leonard, Paul; Shields, Amy; Morton, Michael; Shimeles, Taetaye; Weber, Robert; O'Loughlin, Connor; Edwards, Jennifer; Conetta, Benny; Haklar, James; O'Connor, Daniel; Birchfield, Norman; Holsinger, Hannah; Cisneros, Jose; Moore, Tammy; Beedle, Michael; McLeod, Jennifer; Folland, William; Wainberg, Daniel; Newman, Keriema; Jones, Aaryn; Blake, Leslie; Clark, Jacqueline; Buelow, Laura; Kolak, Shari; Safakas, Kirstin; Leipert, Mark; Williams, Thomas; Dodds, Jennifer; Neal, Conor; Sundar, Bhooma; Ash, Christine; Russell, Diane; Kloss, Sarah; Johnston, John E.; Fisher, Susan; Galbraith, Michael; Atkins, Blake; Baier-Anderson, Caroline; Wooster-Brown, Catherine; Nevshehirlian, Stepan; Keating, Carol; Reimer, Steve; Reese, Diane; Strock, Troy; Buso, Roberto X; Holst, Linda; Sasnow, Zachary; Freed, Elisabeth; Shah, Harry; Pane, Vickie; Langlois-Miller, Christina; Fagnant, Daniel; Helms, Greg; Kirkland, Kim; Lamberth, Larry; Yap-deffler, Yazmine; Edgerton, David; Canova, Judy; Aguilar, Marcus; Hidalgo, Chelsea; Lohwater, Natasha; Lan, Alexis; McKeePerez, Nancy; Pachon, Carlos; Gilbert, Edward; Poulos, Lauren; Blocker, Shawn; Beller, Harry; Frederick, Tim; Gerhard, Sasha; Ross, Stephanie D; O'Neal, Kelly; Schmalstieg, Jared; Peck, Michelle; Garnett, Becky; Garcia, Javier; Andrews, David; Urquhart-Foster, Samantha; Bailey, Lynn
Cc: Pendleton, Gracie; Asque, Gillian; Huffman, Diane; Royal, Emily; Kennedy, Cathleen; Vanlerberghe, Daren; Gaffney, Kristeen; Churchill, Stephen; Alexander, Shanna; Small, Matthew; Keteles, Kristen; Hartzell, Sharon; Mollin, Jessica; Hockey, David; Haug, Susanne; Davis, Ifeyinwa; Lynn Bailey; Solis Marcano, Nadja; Mroz, Aaron; Cashman, Michaela; Aker, Sandra; Masters, Stacie; Cantwell, Mark; Ireland, Sean; Jones, Leslie; Walker, Tom; Cuthbertson, Becky; Crincoli, Klara; Davis, Amber; Gross-Davis, CarolAnn; Deatrick, John; Schaub, Lisa; Dressel, Paul; Baxter, Madison; Pfeiffer, Tricia; Bowen, Ian; Benson, Bob; Boucher, Aimee; Oxendine, Sharon; Lowrey, Daniel; Vasser, Bryan; Taylor, Daniel; Harden, Samantha; Teichert, Candice; Holleran, Anne; Chavez, Araceli; York, Brooke; Scharr, Ruth; Hubbard, Jennifer; Foster, Barbara; Gerhart, Rebecca; Jones, Athena; Euling, Susan; Behl, Betsy; Burneson, Eric; Rodgers-Jenkins, Crystal; Olsen, Marian; Tuazon, Veronica; Latier, Andrea

Subject: Monthly PFAS Regional Coordination Call
When: Thursday, November 18, 2021 12:00 PM-1:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomPYS5671/OSRTI-Potomac-Yard-South

Our regularly scheduled call falls on the Veterans Day holiday, so I am rescheduling for the week before. I hope many can make it. (Sorry for rescheduling again. Last minute conflict).

Agenda:

1. Release of the final Human Health Toxicity Assessment for GenX Chemicals - OW

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Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:04:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 12:03:12 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan [Euling.Susan@epa.gov]; Jennifer Palmiotto [jennifer@nrwa.org]; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric [Burneson.Eric@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; jadler@acwa-us.org; janastasio@acwa-us.org; DaniaR@astswmo.org
CC: Chris Moody [CMoody@awwa.org]; Miller, GregoryG [Miller.Gregory@epa.gov]; Sarah Buck [sbuck@rcap.org]

Subject: Final toxicity assessment for GenX chemicals
Location: Microsoft Teams Meeting

Start: 11/2/2021 6:30:00 PM
End: 11/2/2021 7:30:00 PM
Show Time As: Busy

Required Attendees: svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan; Jennifer Palmiotto; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric; Rodgers-Jenkins, Crystal; Jacobs, Brittany; jadler@acwa-us.org; DaniaR@astswmo.org; janastasio@acwa-us.org
Optional Attendees: Chris Moody; Sarah Buck; Miller, GregoryG

The U.S. Environmental Protection Agency (EPA) will release shortly the final human health toxicity assessment for Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (referred to as "GenX chemicals"). The finalization of the assessment fulfills/constitutes/is part of EPA's efforts to increase the amount of information that is publicly available on chemicals in the PFAS class. A toxicity assessment is a written summary of the potential health effects associated with a chemical and is similar to assessments developed under EPA's Integrated Risk Information System (IRIS). The assessment provides hazard identification, dose-response information, and derives toxicity values called oral reference doses (RfDs) for chronic and subchronic exposures. EPA plans to use this toxicity assessment and information on exposure, analytical methods and treatment to develop a Drinking Water Health Advisory in the spring of 2022.

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 6:10:38 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]

Subject: Final toxicity value for GenX chemicals (a PFAS chemical): Briefing to ASTSWMO
Location: Microsoft Teams Meeting

Start: 11/4/2021 2:00:00 PM
End: 11/4/2021 3:00:00 PM
Show Time As: Busy

Required Attendees: ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan; Jacobs, Brittany; Miller, GregoryG; Rodgers-Jenkins, Crystal; Burneson, Eric

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 6:10:38 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]

Subject: Final toxicity value for GenX chemicals (a PFAS chemical): Briefing to ASTSWMO
Location: Microsoft Teams Meeting

Start: 11/4/2021 2:00:00 PM
End: 11/4/2021 3:00:00 PM
Show Time As: Busy

Required Attendees: ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan; Jacobs, Brittany; Miller, GregoryG; Rodgers-Jenkins, Crystal; Burneson, Eric

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 12:03:12 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan [Euling.Susan@epa.gov]; Jennifer Palmiotto [jennifer@nrwa.org]; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric [Burneson.Eric@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; jadler@acwa-us.org; janastasio@acwa-us.org
CC: Chris Moody [CMoody@awwa.org]; Miller, GregoryG [Miller.Gregory@epa.gov]; Sarah Buck [sbuck@rcap.org]

Subject: Final toxicity assessment for GenX chemicals
Location: Microsoft Teams Meeting

Start: 11/2/2021 6:30:00 PM
End: 11/2/2021 7:30:00 PM
Show Time As: Busy

Required Attendees: svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan; Jennifer Palmiotto; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric; Rodgers-Jenkins, Crystal; Jacobs, Brittany; jadler@acwa-us.org; janastasio@acwa-us.org
Optional Attendees: Chris Moody; Sarah Buck; Miller, GregoryG

The U.S. Environmental Protection Agency (EPA) will release shortly the final human health toxicity assessment for Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (referred to as "GenX chemicals"). The finalization of the assessment fulfills/constitutes/is part of EPA's efforts to increase the amount of information that is publicly available on chemicals in the PFAS class. A toxicity assessment is a written summary of the potential health effects associated with a chemical and is similar to assessments developed under EPA's Integrated Risk Information System (IRIS). The assessment provides hazard identification, dose-response information, and derives toxicity values called oral reference doses (RfDs) for chronic and subchronic exposures. EPA plans to use this toxicity assessment and information on exposure, analytical methods and treatment to develop a Drinking Water Health Advisory in the spring of 2022.

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Sent: 10/18/2021 4:23:45 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]; DAnglada, Lesley [DAnglada.Lesley@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Keel, Adrienne [keel.adrienne@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Ravenscroft, John [Ravenscroft.John@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Young, Melanie [Young.Melanie@epa.gov]

Subject: HRAB staff meeting
Attachments: Untitled Attachment
Location: Microsoft Teams Meeting

Start: 10/26/2021 3:30:00 PM
End: 10/26/2021 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Tuesday from 11:30 AM to 12:00 PM
Required Attendees: Akhter, Shamima; Cunningham, Kelly; DAnglada, Lesley; Donohue, Joyce; Jacobs, Brittany; Keel, Adrienne; Lindberg, Casey; Miller, GregoryG; Ravenscroft, John; Soares, Barbara; Young, Melanie

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CC: Chris Moody [CMoody@awwa.org]; Miller, GregoryG [Miller.Gregory@epa.gov]; Sarah Buck [sbuck@rcap.org]

Subject: Final toxicity assessment for GenX chemicals
Location: Microsoft Teams Meeting

Start: 11/2/2021 6:30:00 PM
End: 11/2/2021 7:30:00 PM
Show Time As: Tentative

Required Attendees: svia@awwa.org; matt@nrwa.org; nohle@rcap.org; Euling, Susan; Jennifer Palmiotto; keegan@nrwa.org; vandehei@amwa.net; Burneson, Eric; Rodgers-Jenkins, Crystal; Jacobs, Brittany
Optional Attendees: Chris Moody; Sarah Buck; Miller, GregoryG

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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 3/4/2019 12:41:53 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]; Conley, Justin [Conley.Justin@epa.gov]

Subject: Chat about PPARalpha and the GenX chemicals public comments
Location: DCRoomWest5231L/DC-CCW-OST

Start: 3/20/2019 5:00:00 PM
End: 3/20/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Soares, Barbara; Gray, Earl; Conley, Justin

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/22/2021 2:43:10 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]
CC: Thayer, Kris [thayer.kris@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]; Shirke, Avanti [shirke.avanti@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]

Subject: Monthly PFAS toxicity assessment Meeting
Attachments: Untitled Attachment; Monthly Meeting on PFAS toxicity assessments; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 5/5/2021 1:00:00 PM
End: 5/5/2021 2:00:00 PM
Show Time As: Busy

Recurrence: Monthly
the first Wednesday of every 1 month(s) from 9:00 AM to 10:00 AM
Required Attendees: Behl, Betsy; Jones, Samantha; Miller, GregoryG; Jacobs, Brittany; Lambert, Jason; Owens, Beth; Lavoie, Emma; Euling, Susan
Optional Attendees: Thayer, Kris; Kraft, Andrew; Shirke, Avanti; Strong, Jamie

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Sent: 10/18/2021 4:23:45 PM
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Subject: HRAB staff meeting
Attachments: Untitled Attachment; Canceled: HRAB staff meeting
Location: Microsoft Teams Meeting

Start: 10/26/2021 3:30:00 PM
End: 10/26/2021 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Tuesday from 11:30 AM to 12:00 PM
Required Attendees: Akhter, Shamima; Cunningham, Kelly; DAnglada, Lesley; Donohue, Joyce; Jacobs, Brittany; Keel, Adrienne; Lindberg, Casey; Miller, GregoryG; Ravenscroft, John; Soares, Barbara; Young, Melanie

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/1/2021 6:10:38 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]
CC: Charles Reyes [CharlesR@astswmo.org]

Subject: Final toxicity value for GenX chemicals (a PFAS chemical): Briefing to ASTSWMO
Location: Microsoft Teams Meeting

Start: 11/4/2021 2:00:00 PM
End: 11/4/2021 3:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; ScottL@astswmo.org; DaniaR@astswmo.org; Euling, Susan; Jacobs, Brittany; Miller, GregoryG; Rodgers-Jenkins, Crystal; Burneson, Eric
Optional Attendees: Charles Reyes

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Subject: HRAB staff meeting
Attachments: Untitled Attachment; Untitled Attachment
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Start: 10/26/2021 3:30:00 PM
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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 2/16/2021 11:57:58 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/16/2020 3:00:00 PM
End: 7/16/2020 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Thursday from 11:00 AM to 12:00 PM
Required Attendees: Lindberg, Casey; Soares, Barbara; Miller, GregoryG
Optional Attendees: Cunningham, Kelly; Euling, Susan

Standing Agenda

- SYR4
- Meeting coverage for upcoming week
- Meeting reviews (ADP workgroup, check-in with Betsy, etc)
- PFOA/PFOS items
- DBPs

6/2/21: Adding Kelly as optional and moving SY4R as first agenda item so Greg and Kelly can jump off if needed

2/16/2021: Adding Greg on to this meeting invite so we can coordinate on PFOA/PFOS work and I guess also six year review 4.

Updating meeting title to include DBPs

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CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]

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Appointment

From: Snow, Samantha [Samantha.Snow@icf.com]
Sent: 7/1/2021 3:54:48 PM
To: Snow, Samantha [Samantha.Snow@icf.com]; Foster, Caroline [Caroline.Foster@icf.com]; Cronk, Ryan [Ryan.Cronk@icf.com]; Tracy, Wren [Wren.Tracy@icf.com]; Jones, Kaedra [kaedra.jones@icf.com]; Lin, Cynthia [Cynthia.Lin@icf.com]; Sorina Eftim [sorina.eftim@icf.com]; Soares, Barbara [soares.barbara@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Etzel, Ruth [Etzel.Ruth@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]

Subject: HECD Weekly Meeting
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 7/6/2021 5:00:00 PM
End: 7/6/2021 6:30:00 PM
Show Time As: Busy

Recurrence: (none)

Hi Everyone,

These meetings will carry us through to the end of the 6-month extension.

Thanks!

Sam

Microsoft Teams meeting

Join on your computer or mobile app
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Appointment

From: Euling, Susan [Euling.Susan@epa.gov]
Sent: 10/18/2021 4:23:45 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Cunningham, Kelly [cunningham.kelly@epa.gov]; DAnglada, Lesley [DAnglada.Lesley@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Keel, Adrienne [keel.adrienne@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Ravenscroft, John [Ravenscroft.John@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Young, Melanie [Young.Melanie@epa.gov]; Czarina C Cooper [Cooper.Czarina@epa.gov]

Subject: HRAB staff meeting
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 10/26/2021 3:30:00 PM
End: 10/26/2021 4:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Tuesday from 11:30 AM to 12:00 PM
Required Attendees: Akhter, Shamima; Cunningham, Kelly; DAnglada, Lesley; Donohue, Joyce; Jacobs, Brittany; Keel, Adrienne; Lindberg, Casey; Miller, GregoryG; Ravenscroft, John; Soares, Barbara; Young, Melanie; Czarina C Cooper

---

Microsoft Teams meeting

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tes, Washington DC

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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 2/16/2021 11:57:58 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lindberg, Casey [Lindberg.Casey@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Cunningham, Kelly [cunningham.kelly@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Czarina C Cooper [Cooper.Czarina@epa.gov]

Subject: WA 4-16 and DBPs Check-In
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

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End: 7/16/2020 4:00:00 PM
Show Time As: Busy

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Optional Attendees: Cunningham, Kelly; Euling, Susan; Czarina C Cooper

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- DBPs

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Updating meeting title to include DBPs

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Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 3/4/2019 12:41:53 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]; Conley, Justin [Conley.Justin@epa.gov]

Subject: Chat about PPARalpha and the GenX chemicals public comments
Location: DCRoomWest5231L/DC-CCW-OST

Start: 3/20/2019 5:00:00 PM
End: 3/20/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Soares, Barbara; Gray, Earl; Conley, Justin

Message

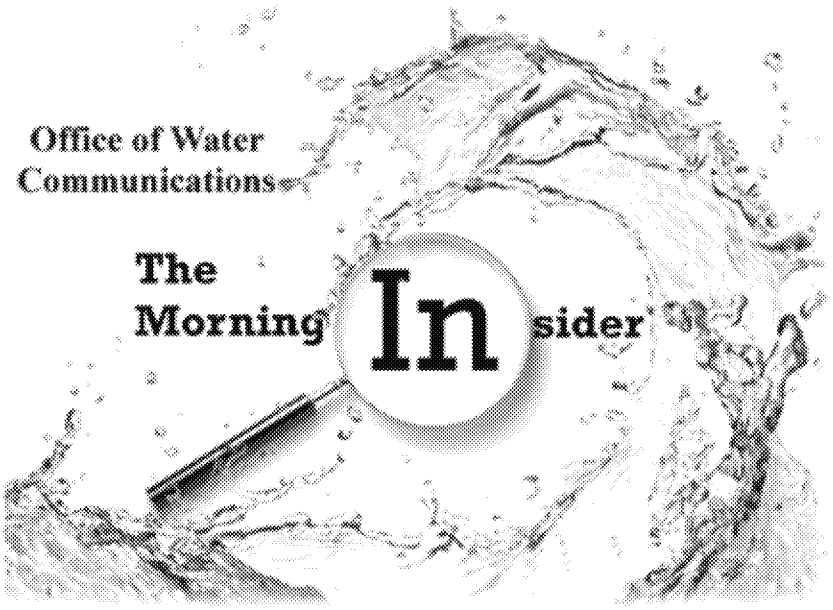
From: Lalley, Cara [Lalley.Cara@epa.gov]
Sent: 11/27/2018 1:21:05 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Fwd: OW-Moring Insider

Kudos for you guys in the first article!

Sent from my iPhone

Begin forwarded message:

> **From:** "Fuld, John" <Fuld.John@epa.gov>
> **Date:** November 27, 2018 at 7:28:34 AM EST
> **To:** "Best-Wong, Benita" <Best-Wong.Benita@epa.gov>, "Bravo, Antonio" <Bravo.Antonio@epa.gov>, "Campbell, Ann" <Campbell.Ann@epa.gov>, "Dennis, Allison" <Dennis.Allison@epa.gov>, "Drinkard, Andrea" <Drinkard.Andrea@epa.gov>, "Forsgren, Lee" <Forsgren.Lee@epa.gov>, "Jones, Enesta" <Jones.Enesta@epa.gov>, "Lalley, Cara" <Lalley.Cara@epa.gov>, "Lieberman, Paige" <Lieberman.Paige@epa.gov>, "Lousberg, Macara" <Lousberg.Macara@epa.gov>, "Lynn, Tricia" <lynn.tricia@epa.gov>, "Mayer, Lauren" <mayer.lauren@epa.gov>, "McDonough, Owen" <mcdonough.owen@epa.gov>, "Ross, David P" <ross.davidp@epa.gov>, "Schollhamer, Mary" <Schollhamer.Mary@epa.gov>, "Stevens, Robert" <Stevens.Robert@epa.gov>, "Tiago, Joseph" <Tiago.Joseph@epa.gov>, "Vazquez, Sharon" <Vazquez.Sharon@epa.gov>, "Wadlington, Christina" <Wadlington.Christina@epa.gov>, "Wildeman, Anna" <wildeman.anna@epa.gov>
> **Subject: OW-Moring Insider**



November 28, 2018

NEWS

<!--[if !vml]--><!--[endif]-->**GenX: November Was A Busy Month for Water Issues**

There are several major developments this month involving the Chemours Company, the Environmental Protection Agency, and a consent order that is awaiting approval by a Bladen County Court.

Just hours before Thanksgiving, word came of a consent order agreed to by Chemours. It's in response to a lawsuit filed by the Department of Environmental Quality and Cape Fear River Watch that requires the company to pay a $12 million civil penalty, $1 million investigative costs, conduct a health study on 4 PFAS compounds, provide more well owners clean water, and do more to clean up its operation or pay additional fines.

The consent order still needs to be approved by a Bladen County Superior Court Judge.
This came on the heels of a draft report from the U.S. Environmental Protection Agency.
The EPA says long-term exposure to compounds currently used in nonstick coatings – such as GenX and other PFAS compounds - appears to be dangerous even in minute amounts.
"Having something from the EPA stating a number about GenX is huge. This is something that our community has been waiting for."

Beth Markesino is the founder of 'North Carolina - Stop GenX in our Water.'
"So in this EPA assessment, it did say subsequently that it would lead to cancer. Also kidney damage in mice and rats, problems with pregnancy and so on and so forth. So those were all things that we knew that in the PFAS family were relevant already."

Specifically, the EPA draft says animal studies show the GenX compound has the potential of affecting the kidneys, blood, immune system, liver and developing fetuses following oral exposure. The data are suggestive of cancer, the draft report says. Some were surprised the EPA came out with its draft, given that it's been more focused on deregulation in recent years.
"I think it shows that in any agency where administration is leading it, that certainly there are professionals behind the scenes who are not so subject to the political leanings of that administration and I think that's what's happening here."

That's Erin Carey, the coastal programs coordinator for the North Carolina Chapter of the Sierra Club.

"I think you have people in the EPA who are long-term professionals and they see a public health crisis and they want to help."

Carey is quick to point out that this is about a lot more than GenX.
"Yeah, and I think that cocktail is part of what people have been concerned about is not necessarily how much of any one chemical we have in our blood or in our system, but what that cocktail of chemicals could do to us long term."

Just two weeks ago, researchers from North Carolina State University said they hadn't found GenX in any of nearly 350 blood samples taken from Wilmingtonians late last year. However they did find other PFAS including Nafion byproduct 2, PFO4DA and PFO5DoDA in nearly all samples taken, and Hydro-EVE in 76 percent.

Dr. Jane Hoppin, the deputy director of the N.C. State Center for Human Health and the Environment, says these are chemicals that the science community knows nothing about.
As for the EPA report, which is now in its public comment period for 60 days, it's unclear whether it will have an impact on the state's current 140 parts per trillion provisional health goal.
Zack Moore is the state epidemiologist with the Department of Health and Human Services.

"This is a draft for public comment, so we're not doing anything in response to this EPA report. Like I said, we've been aware of this and there aren't any surprises in it for us. Once it becomes or if, if it becomes a final EPA approved document, then we'll reconsider whether that has any implications for our provisional drinking water health goal."
Meanwhile Chemours, in an email to WHQR, says the consent agreement provides comprehensive solutions to the environmental concerns raised by the community and a compliance framework for operations at the Fayetteville Works facility. It also says Chemours' commitments are clear with its investment of over $100 million to reduce emissions of GenX and all other PFAS compounds.

GREENWIRE

<!--[if !vml]--><!--[endif]--> Chemours must pay large fine, slash GenX emissions in N.C.

The largest penalty a polluter has paid North Carolina should change the way one of the country's biggest chemical companies makes compounds that EPA said appear dangerous even in small amounts, the state's top environmental official said Friday.

A deal announced late Wednesday requires the Chemours Co. to pay the state a $12 million penalty, add $1 million for investigative costs, sharply reduce air emissions of the nonstick compound known as GenX and spend millions of dollars to provide permanent replacement drinking water supplies to neighbors with contaminated water wells.

"It will change the way this company operates in the state of North Carolina if they are serious about remaining operational here," state Department of Environmental Quality Michael Regan said Friday. Further enforcement action is possible if scientists find health effects for GenX at levels lower than what the state now estimates is safe, he said.

The penalty outstrips the $7 million Duke Energy Corp. agreed to pay in 2015 for persistent groundwater contamination at its 14 coal-burning power plants in North Carolina.

Chemours also agreed to further penalties if by the end of next month it fails to cut air emissions by at least 92 percent from last year's level, and by 99 percent by the end of next year. Failing to

meet next month's target could cost Chemours $350,000, while missing the 99 percent reduction goal next year could cost the company $1 million.

Chemours denied it violated any law, regulation or permit and said the deal it struck last week simply allowed it to avoid the expense and risks of litigation while addressing public concerns.

The company also agreed to conduct health studies into the risks posed by releasing GenX and other per- and polyfluoroalkyl substances, or PFAS, into the environment. PFAS are used in nonstick coatings on products ranging from pans to fast-food wrappers, as well as in firefighting foam.

There are no federal health standards for GenX, just as they are lacking for thousands of man-made chemicals. EPA classifies GenX as an "emerging contaminant" needing research. But animal studies show GenX has the potential of affecting the kidneys, blood, immune system, liver and developing fetuses following oral exposure, EPA said in a draft report released earlier this month. "The data are suggestive of cancer," the report said.

Blood and urine tests performed on 30 volunteers living around Chemours' North Carolina plant found no GenX, but all had in their blood at least four of the 16 similar chemicals tested, the state health department said last month.

The company on Friday repeated that GenX is less hazardous than the compounds it replaced.

Chemours has owned and operated the chemical plant south of Fayetteville for three years. The company was spun off from DuPont, which had operated the 2,100-acre site for nearly half a century.

Because the fluorine-based chemicals produced at the plant are so profitable, the company is spending about $100 million to all but eliminate GenX and all PFAS compounds before 2020

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<!--[if !vml]--><!--[endif]-->6th

Circuit rehearing bid could delay high court groundwater review

Environmentalists are urging the Supreme Court to decline review of cases over Clean Water Act (CWA) liability for groundwater-borne pollution until appellate judges choose whether to grant a petition to rehear one such case, warning that it would not be “appropriate” to take action with the lower court's next steps still pending.

The high court has slated two petitions over CWA-groundwater liability for its Nov. 30 conference, meaning an order could come as soon as that day either granting or denying *certiorari* in the cases.

But environmentalist groups trying to preserve a lower court victory on the subject in *Hawai'i Wildlife Fund, et al., v. County of Maui* are now saying that date is premature because it would come in the middle of a circuit court's review of a still-pending CWA-groundwater suit.

Specifically, they note that the U.S. Court of Appeals for the 6th Circuit, which is the only appellate court to explicitly reject the idea that pollution that the CWA governs pollution that travels through groundwater to surface waters -- creating a circuit split that Maui and others have touted as requiring high court intervention -- has set a timeline for considering a request to rehear that decision that runs past Nov. 30.

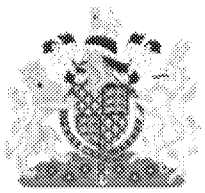
"This development confirms that proceedings are ongoing before the Sixth Circuit, that the Sixth Circuit panel's holdings regarding Clean Water Act liability remain subject to change, and, accordingly, that Petitioner's allegation of a circuit split is premature," the environmentalists say in a Nov. 29 filing on the *County of Maui* petition.

The 6th Circuit last week set Nov. 30 as the deadline for the Tennessee Valley Corporation (TVA) to file its response to environmentalists' rehearing petition in *Tennessee Clean Water Network (TCWN), et al., v. TVA*, which is one of two linked cases where a divided three-judge panel rejected CWA liability for pollution that travels through groundwater to protected surface waters.

Thus, the environmentalists note, the justices could agree to take up either *Maui* or the other CWA-groundwater *cert* petition, *Upstate Forever, et al., v. Kinder Morgan Energy Partners* in part to resolve the circuit split, only to see that split vanish shortly thereafter if the 6th Circuit agrees to rehear *TCWN*.

Instead, they conclude that the *Maui* and *Kinder Morgan* petitions should be denied, and "this Court should allow the law in the circuits to develop further before deciding whether review is appropriate."

John W. Fuld, Ph.D.
U.S. Media Relations Manager, Office of Water
Environmental Protection Agency
1200 Constitution Ave
Washington DC 20460
Office: 202-564-8847
Cell: 202-815-6408
fuld.john@epa.gov
Virescit vulnere virtus



Appointment

From: Gentry, Nathan [Gentry.Nathan@epa.gov]
Sent: 9/11/2018 6:42:05 PM
To: Rodan, Bruce [rodan.bruce@epa.gov]; Yamada, Richard (Yujiro) [yamada.richard@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Breen, Barry [Breen.Barry@epa.gov]; Bodine, Susan [bodine.susan@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Ross, Mary [Ross.Mary@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; McDonough, Owen [mcdonough.owen@epa.gov]; Wildeman, Anna [wildeman.anna@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [baptist.erik@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]
CC: Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Bartlett, Keith [Bartlett.Keith@epa.gov]; Emmerson, Caroline [Emmerson.Caroline@epa.gov]

Subject: GenX and PFBS Toxicity Values and roll-out plan
Attachments: Briefing for AAs on GenX Chemicals & PFBS Toxicity Assessment combined_FINAL.PDF
Location: DCRoomRRB41213/ORD; call-in: Ex. 6 Personal Privacy (PP)

Start: 9/13/2018 4:00:00 PM
End: 9/13/2018 5:00:00 PM
Show Time As: Tentative

Required Attendees: Rodan, Bruce; Yamada, Richard (Yujiro); Jones, Samantha; Bahadori, Tina; Lambert, Jason; Owens, Beth; Champlin, Anna; Mattas-Curry, Lahne; Gillespie, Andrew; Thayer, Kris; Grevatt, Peter; Behl, Betsy; Strong, Jamie; Breen, Barry; Bodine, Susan; Beck, Nancy; Ross, Mary; Ross, David P; Forsgren, Lee; McDonough, Owen; Wildeman, Anna; Nagle, Deborah; Jacobs, Brittany; Miller, Gregory; Flaherty, Colleen; Henry, Tala; Burneson, Eric; Holsinger, Hannah; Wadlington, Christina; Drinkard, Andrea; Bertrand, Charlotte; Baptist, Erik; Libelo, Laurence
Optional Attendees: Raffaele, Kathleen; Foster, Stiven; Bartlett, Keith; Emmerson, Caroline

Appointment

From: Crawford, Tiffany [Crawford.Tiffany@epa.gov]
Sent: 9/6/2018 5:54:09 PM
To: Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Crawford, Tiffany [Crawford.Tiffany@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]

Subject: Pre-brief GenX Toxicity Values (BRIEFING MATERIALS ATTACHED)
Attachments: GenX Pre-brief2018-08-08-154057.pdf; Briefing for AAs on GenX Chemicals Toxicity Assessment combined_draft 090618.pptx
Location: DCRoomWest5233B/DC-CCW-OST

Start: 9/6/2018 7:00:00 PM
End: 9/6/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Grevatt, Peter; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; flaherty. colleen (Flaherty.Colleen@epa.gov); Holsinger, Hannah; Burneson, Eric; Mclain, Jennifer; Henry, Tala; Wadlington, Christina; Lalley, Cara; Champlin, Anna; Jones, Samantha; Bahadori, Tina; Lambert, Jason; Owens, Beth
Optional Attendees: Crawford, Tiffany; Tiago, Joseph; Albert, Ryan

Adding call-in number 9/5/2018

Conference call: Ex. 6 Personal Privacy (PP)
Conference ID:

POC: Betsy Behl
Tele: 566-0788

Appointment

From: Mason, Paula [Mason.Paula@epa.gov]
Sent: 9/11/2018 12:31:20 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; resha.m.putzrath.civ@mail.mil; Sandra Howard [Sandra.Howard@HHS.GOV]; Suzanne_Fitzpatrick [Suzanne.Fitzpatrick@fda.hhs.gov]; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; Linda Birnbaum [birnbaumls@niehs.nih.gov]; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP)
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mfocazio@usgs.gov; Terra.irons@va.gov; Beth.moore@em.doe.gov; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Behrsing, Tracy; Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Moore, Alexa [moore.alexa@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Rodan, Bruce [rodan.bruce@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Gervais, Gregory [Gervais.Gregory@epa.gov]; Leonard, Paul [leonard.paul@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Lehman, Rachel [lehman.rachel@epa.gov]; Murphy, Elizabeth [Murphy.Elizabeth@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]
CC: Underwood, Patricia CIV (US) [patricia.underwood6.civ@mail.mil]

Subject: PFAS Toxicity Assessment Discussion-Federal
Attachments: PFBS_Public Comment Draft_REDLINE for Federal Agencies_9-10-18.pdf; PUBLIC COMMENT DRAFT Human Health Tox Values for GenX Chemicals_09_10_2018 REDLINE.pdf
Location: EPA WJC East 2123 - Call In Number: Ex. 6 Personal Privacy (PP)

Start: 9/13/2018 1:00:00 PM
End: 9/13/2018 2:30:00 PM
Show Time As: Tentative

Required Attendees: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; resha.m.putzrath.civ@mail.mil; Sandra.Howard@hhs.gov; Suzanne_Fitzpatrick; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; birnbaumls@niehs.nih.gov; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP)
Ex. 6 Personal Privacy (PP)
mfocazio@usgs.gov; Terra.irons@va.gov; Beth.moore@em.doe.gov; Mclain, Jennifer; Holsinger, Hannah; Wadlington, Christina; Tiago, Joseph; Burneson, Eric; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Donohue, Joyce; Miller, Gregory; Harper, Ashley; Drinkard, Andrea; Behrsing, Tracy; Babcock, Amy; Aubee, Catherine; Henry, Tala; Orme-Zavaleta, Jennifer; Gillespie, Andrew; Bahadori, Tina; Jones, Samantha; Lambert, Jason; Lavoie, Emma; Owens, Beth; Moore, Alexa; Champlin, Anna; Rodan, Bruce; Mattas-Curry, Lahne; Raffaele, Kathleen; Gervais, Gregory;

	Leonard, Paul; Foster, Stiven; Libelo, Laurence; Soares, Barbara; Lehman, Rachel; Murphy, Elizabeth; Lan, Alexis; Albert, Ryan
Optional Attendees:	Underwood, Patricia CIV (US)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/22/2019 11:26:56 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX chemicals comment triage
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 5/22/2019 3:00:00 PM
End: 5/22/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/22/2019 11:27:06 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX chemicals comment triage
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 5/22/2019 3:00:00 PM
End: 5/22/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 3/4/2019 12:41:53 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Gray, Earl [Gray.Earl@epa.gov]; Conley, Justin [Conley.Justin@epa.gov]

Subject: Chat about PPARalpha and the GenX chemicals public comments
Attachments: Klaunig Indiana Univ_1.pdf; Comments - Dr. James Klaunig - 2 15 19_2.pdf; Comments - Toxstrategies - 2 15 19.pdf
Location: DCRoomWest5231L/DC-CCW-OST

Start: 3/20/2019 5:00:00 PM
End: 3/20/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Soares, Barbara; Gray, Earl; Conley, Justin

3/14/19: Attaching the major comments we received on PPARalpha MOA. Looking forward to our discussion next week!

Hi Earl and Justin,

Thanks so much for being willing to chat with us about some of the public comments on the GenX chemicals assessment. I will collate the major comments we received regarding PPARalpha MOA and send that to you prior to the meeting.

Looking forward to chatting!

Join Skype Meeting

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Help

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/22/2019 3:01:54 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX chemicals comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/22/2019 3:00:00 PM
End: 5/22/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 11/13/2018 1:10:21 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: FW: Upcoming release of Draft Human Health Toxicity Assessments for GenX Chemicals and PFBS for public review and comment
Location: Conference: Ex. 6 Personal Privacy (PP)

Start: 11/13/2018 3:00:00 PM
End: 11/13/2018 4:00:00 PM
Show Time As: Free

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/23/2019 7:03:09 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX Chemicals comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 5/28/2019 12:00:00 PM
End: 5/28/2019 1:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha
Optional Attendees: Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/4/2019 7:05:02 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: Discuss PFBS and GenX comments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/5/2019 3:00:00 PM
End: 2/5/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Bahadori, Tina; Behl, Betsy; Miller, Gregory; Jacobs, Brittany; Owens, Beth; Lambert, Jason; Jones, Samantha

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 3/12/2019 5:39:37 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/13/2019 1:00:00 PM
End: 3/13/2019 2:00:00 PM
Show Time As: Free

Importance: High

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
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Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 4:00:00 AM
End: 6/19/2019 4:45:00 AM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Owscheduling [Owscheduling@epa.gov]
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Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal

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Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal

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Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal

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Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 4:00:00 AM
End: 6/19/2019 4:45:00 AM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

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Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: TO BE RESCHEDULE---Finalizing GenX and PFBS assessments: call in Z Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Busy

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Busy

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 8:45:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/18/2019 2:00:00 PM
End: 4/18/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 3:00:00 PM
End: 4/16/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 3:00:00 PM
End: 4/16/2019 4:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in 2 Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 4:25:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: options for GenX comment responses/revisions
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/16/2019 6:00:00 PM
End: 4/16/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/8/2019 12:25:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX RTC
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/14/2019 12:30:00 PM
End: 5/14/2019 3:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:04:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:00:39 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/13/2019 1:00:00 PM
End: 2/13/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2019 2:04:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Busy

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Busy

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:45:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 6/19/2019 7:00:00 PM
End: 6/19/2019 7:45:00 PM
Show Time As: Busy

Required Attendees: Owscheduling; Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 5/13/2019 7:08:41 PM
To: Owscheduling [Owscheduling@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]; Weyer, Erica [weyer.erica@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]; Ross, David P [ross.davidp@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Gen X Pathology Slides
Attachments: MR_DR-LF_JK_GenX Pathology Slides2019-04-24-151520.pdf
Location: 3233 WJCE

Start: 5/17/2019 2:00:00 PM
End: 5/17/2019 2:15:00 PM
Show Time As: Tentative

Required Attendees: Forsgren, Lee; Kramer, Jessica L.; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Neugeboren, Steven; Weyer, Erica; Penman, Crystal; Ross, David P
Optional Attendees: Flaherty, Colleen

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/5/2019 12:07:25 PM
To: Latham, John [Latham.John@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Sirmons, Chandler [Sirmons.Chandler@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Edelstein, Rebecca [Edelstein.Rebecca@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Reid, Danesha [Reid.Danesha@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Calderon, Wanda [Calderon.Wanda@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Haklar, James [Haklar.James@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Mears, Gilbert [Mears.Gilbert@epa.gov]
CC: Speir, Jeffrey [speir.jeffrey@epa.gov]; Everett, Adolph [Everett.Adolph@epa.gov]; Conetta, Benny [Conetta.Benny@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]

Subject: FW: Chemours/GenX FOIA 2018-004509 - OGC Meeting with Offices/Regions to Discuss Search Terms
Location: WJCN 6013 - Video Conference Using Tandberg or Participate Using Conference Line **Ex. 6 Personal Privacy (PP)**

Start: 4/11/2019 2:00:00 PM
End: 4/11/2019 3:00:00 PM
Show Time As: Tentative

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:30:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:30:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 6:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comment triage

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/8/2019 12:25:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX RTC
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/14/2019 12:30:00 PM
End: 5/14/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/8/2018 12:38:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: Internal Q and As GenX
Location: DCRoomWest5231L/DC-CCW-OST

Start: 11/8/2018 4:00:00 PM
End: 11/8/2018 5:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/7/2018 3:36:59 AM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lowit, Anna [Lowit.Anna@epa.gov]; Laessig, Susan [Laessig.Susan@epa.gov]; Hamernik, Karen [Hamernik.Karen@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Murphy, Deirdre [Murphy.Deirdre@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]; Hoyer, Marion [hoyer.marion@epa.gov]; Axelrad, Daniel [Axelrad.Daniel@epa.gov]; Dzubow, Rebecca [Dzubow.Rebecca@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flowers, Lynn [Flowers.Lynn@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Pollard, Solomon [Pollard.Solomon@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Mangino, Mario [mangino.mario@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Kissinger, Lon [Kissinger.Lon@epa.gov]; Maddaloni, Mark [Maddaloni.Mark@epa.gov]; rogers, rick [rogers.rick@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Morton, Michael [Morton.Michael@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Bahrman, Sarah [Bahrman.Sarah@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Anderson-Carnahan, Linda [Anderson-Carnahan.Linda@epa.gov]; Allen, Elizabeth [allen.elizabeth@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Radke-Farabaugh, Elizabeth [radke-farabaugh.elizabeth@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Foster, Stiven [Foster.Stiven@epa.gov]; Yaquian-Luna, Jose [yaquian-luna.josea@epa.gov]; Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Johnson, Ann [Johnson.Ann@epa.gov]; Birchfield, Norman [Birchfield.Norman@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Hines, Ronald [Hines.Ronald@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Hodes, Colette [Hodes.Colette@epa.gov]; Lowery, Brigid [Lowery.Brigid@epa.gov]; Gaines, Linda [Gaines.Linda@epa.gov]; Jankowski, Mark [jankowski.mark@epa.gov]; Repasky, Ted [repasky.ted@epa.gov]; O'Connor, Daniel [oconnor.daniel@epa.gov]; Weber, Robert [Weber.Robert@epa.gov]; Messinger, Lisa [Messinger.Lisa@epa.gov]; Kidwell, JessicaL [Kidwell.JessicaL@epa.gov]; Nicoski, Dan [Nicoski.Dan@epa.gov]; Jones, Aaryn [Jones.Aaryn@epa.gov]; Davis, Molly [Davis.Molly@epa.gov]; Shell, Karrie-Jo [Shell.Karrie-Jo@epa.gov]; Thomas, Brett [Thomas.Brett@epa.gov]; France, Danny [France.Danny@epa.gov]; Wellborn, Floyd [Wellborn.Floyd@epa.gov]; Mitchell, Ken [Mitchell.Ken@epa.gov]; Kemker, Carol [Kemker.Carol@epa.gov]; Hall, Renea [Hall.Renea@epa.gov]; Campbell-Dunbar, Shawneille [Campbell-Dunbar.Shawneille@epa.gov]; Smith, Brian [Smith.Brian@epa.gov]

Subject: HOLD for PFAS: GenX and PFBS overview of peer review comments - SLIDES ADDED
Location: Skype (Ex. 6 Personal Privacy (PP) Room in DC RRB 51161

Start: 8/20/2018 5:00:00 PM
End: 8/20/2018 6:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Lynn Flowers; Cassidy, Meghan; Olsen, Marian; Martin Gehlhaus; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Bob Benson; Kissinger, Lon; Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Allen, Elizabeth; Bachman, Brenda; Bahadori, Tina; Owens, Beth; Lambert, Jason; Champlin, Anna; Thayer, Kris; Radke-Farabaugh, Elizabeth; Kraft, Andrew; Behl, Betsy; Jamie Strong; Jacobs, Brittany
Optional Attendees: Foster, Stiven; Yaquian-Luna, Jose; Cooperstein, Sharon; Ann Johnson; Birchfield, Norman; Fitz-James, Schatzi; Libelo, Laurence; Cooke, Maryt; Hines, Ronald; Gillespie, Andrew; Hodes, Colette; Lowery, Brigid; Gaines, Linda; Jankowski, Mark; Repasky, Ted; O'Connor, Daniel; Weber, Rob; Messinger, Lisa; Kidwell, JessicaL; Nicoski, Dan; Jones, Aaryn; Davis, Molly; Shell, Karrie-Jo; Brett Thomas; Danny France; Wellborn, Floyd; Mitchell, Ken; Kemker, Carol; Hall, Renea; Campbell-Dunbar, Shawneille; Smith, Brian

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/6/2018 2:25:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: HOLD GenX
Location: DCRoomWest5231L/DC-CCW-OST

Start: 8/6/2018 5:30:00 PM
End: 8/6/2018 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/3/2018 5:06:51 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: HOLD GenX
Location: DCRoomWest5231M/DC-CCW-OST

Start: 8/6/2018 1:00:00 PM
End: 8/6/2018 4:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 6/19/2018 5:22:38 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]

Subject: GenX Check In
Location: Jamie's Office

Start: 6/19/2018 6:00:00 PM
End: 6/19/2018 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Strong, Jamie

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/9/2018 2:56:03 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 7/23/2018 1:30:00 PM
End: 7/23/2018 4:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Grevatt, Peter [Grevatt.Peter@epa.gov]
Sent: 6/19/2018 5:13:39 PM
To: Grevatt, Peter [Grevatt.Peter@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]
CC: Crawford, Tiffany [Crawford.Tiffany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]

Subject: Prep for GenX Peer Review
Location: 2203 EPA East. Teleconference Ex. 6 Personal Privacy (PP)

Start: 6/19/2018 8:30:00 PM
End: 6/19/2018 9:00:00 PM
Show Time As: Tentative

Required Attendees: Grevatt, Peter; Mclain, Jennifer; Nagle, Deborah; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Bahadori, Tina (Bahadori.Tina@epa.gov); Gillespie, Andrew; Lambert, Jason; Holsinger, Hannah
Optional Attendees: Crawford, Tiffany; Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2018 11:34:03 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX touch base

Start: 6/4/2018 12:00:00 PM
End: 6/4/2018 12:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 6/21/2018 1:00:17 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lowit, Anna [Lowit.Anna@epa.gov]; Laessig, Susan [Laessig.Susan@epa.gov]; Hamernik, Karen [Hamernik.Karen@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Murphy, Deirdre [Murphy.Deirdre@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]; Hoyer, Marion [hoyer.marion@epa.gov]; Axelrad, Daniel [Axelrad.Daniel@epa.gov]; Dzubow, Rebecca [Dzubow.Rebecca@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flowers, Lynn [Flowers.Lynn@epa.gov]; Doa, Maria [Doa.Maria@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Pollard, Solomon [Pollard.Solomon@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Mangino, Mario [mangino.mario@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Hiatt, Gerald [Hiatt.Gerald@epa.gov]; Kissinger, Lon [Kissinger.Lon@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Maddaloni, Mark [Maddaloni.Mark@epa.gov]; rogers, rick [rogers.rick@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Morton, Michael [Morton.Michael@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Bahrman, Sarah [Bahrman.Sarah@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Anderson-Carnahan, Linda [Anderson-Carnahan.Linda@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Weber, Robert [Weber.Robert@epa.gov]; Kidwell, JessicaL [Kidwell.JessicaL@epa.gov]; Bennett, James [bennett.james@epa.gov]; Reinhart, Roger [Reinhart.Roger@epa.gov]; Rowsey, Kevin [rowsey.kevin@epa.gov]; Konfirst, Matthew [konfirst.matthew@epa.gov]; Caporale, Cynthia [Caporale.Cynthia@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Gettle, Jeaneanne [Gettle.Jeaneanne@epa.gov]; Walker, Mary [walker.mary@epa.gov]; Jones, Aaryn [Jones.Aaryn@epa.gov]; Hall, Renea [Hall.Renea@epa.gov]; Shell, Karrie-Jo [Shell.Karrie-Jo@epa.gov]; Davis, Molly [Davis.Molly@epa.gov]; Mitchell, Ken [Mitchell.Ken@epa.gov]; Kemker, Carol [Kemker.Carol@epa.gov]; Jones-Johnson, Shea [Jones-Johnson.Shea@epa.gov]

Subject: Discussion of EPA intra-agency comments on GenX Chemicals Toxicity Value Assessment CALL-IN: (2 Ex. 6 Personal Privacy (PP) code: Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/28/2018 6:00:00 PM
End: 6/28/2018 7:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Flowers, Lynn; Doa, Maria; Cassidy, Meghan; Olsen, Marian; Gehlhaus, Martin; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Benson, Bob; Hiatt, Gerald; Kissinger, Lon; Strong, Jamie; Jacobs, Brittany
Optional Attendees: Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Bahadori, Tina; Jones, Samantha; Weber, Robert; Kidwell, JessicaL; Bennett, James; Reinhart, Roger; Rowsey, Kevin; Konfirst, Matthew; Caporale, Cynthia; Bachman, Brenda; Gettle, Jeaneanne; Walker, Mary; Jones, Aaryn; Hall, Renea; Shell, Karrie-Jo; Davis, Molly; Mitchell, Ken; Kemker, Carol; Jones-Johnson, Shea

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/1/2018 12:21:35 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/4/2018 4:30:00 PM
End: 6/4/2018 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 12:41:39 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: HOLD GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 5/29/2018 1:00:00 PM
End: 5/29/2018 4:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/11/2018 12:11:54 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX
Location: DCRoomWest5231M/DC-CCW-OST

Start: 9/11/2018 1:00:00 PM
End: 9/11/2018 2:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/5/2018 11:43:00 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: genx
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/5/2018 1:00:00 PM
End: 4/5/2018 2:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 4/4/2018 4:29:44 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]
CC: Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]

Subject: Discuss Lit flow diagrams for GenX Assessment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/5/2018 4:00:00 PM
End: 4/5/2018 4:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Lambert, Jason; Miller, Gregory; Benson, Amy
Optional Attendees: Babcock, Amy; Aubee, Catherine

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2018 2:39:01 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Laurie Waite [Laurie.Waite@erg.com]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]

Subject: GenX PFBS peer review discussion
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 4/5/2018 6:00:00 PM
End: 4/5/2018 7:00:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Lambert, Jason; Owens, Beth; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Laurie Waite
Optional Attendees: Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/15/2018 12:51:55 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]

Subject: GenX part 2
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 3/15/2018 3:00:00 PM
End: 3/15/2018 4:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Donohue, Joyce

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/13/2018 2:30:20 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]

Subject: GenX Study Discussion
Location: DCRoomWest5231M/DC-CCW-OST

Start: 3/15/2018 1:30:00 PM
End: 3/15/2018 3:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; Donohue, Joyce

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 3/15/2018 11:02:42 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: Skype meeting for GenX Study Discussion (screen sharing)
Location: Skype Meeting

Start: 3/15/2018 1:30:00 PM
End: 3/15/2018 3:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 4/24/2018 8:42:09 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lowit, Anna [Lowit.Anna@epa.gov]; Laessig, Susan [Laessig.Susan@epa.gov]; Hamernik, Karen [Hamernik.Karen@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Murphy, Deirdre [Murphy.Deirdre@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]; Hoyer, Marion [hoyer.marion@epa.gov]; Axelrad, Daniel [Axelrad.Daniel@epa.gov]; Dzubow, Rebecca [Dzubow.Rebecca@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Pollard, Solomon [Pollard.Solomon@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Mangino, Mario [mangino.mario@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Hiatt, Gerald [Hiatt.Gerald@epa.gov]; Kissinger, Lon [Kissinger.Lon@epa.gov]; Flowers, Lynn [Flowers.Lynn@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Maddaloni, Mark [Maddaloni.Mark@epa.gov]; rogers, rick [rogers.rick@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Morton, Michael [Morton.Michael@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Bahrman, Sarah [Bahrman.Sarah@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Anderson-Carnahan, Linda [Anderson-Carnahan.Linda@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]
CC: Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Johnson, Ann [Johnson.Ann@epa.gov]; Metz, Chloe [Metz.Chloe@epa.gov]; Braverman, Carole [braverman.carole@epa.gov]; Davison, Jenny [davison.jenny@epa.gov]; Maurice, Charles [maurice.charles@epa.gov]; Mendez, Thomas [mendez.thomas@epa.gov]; Moore, Tammy [moore.tammy@epa.gov]; Newman, Erin [newman.erin@epa.gov]; Poleck, Thomas [poleck.thomas@epa.gov]; Prendiville, Timothy [prendiville.timothy@epa.gov]; Seely, David [seely.david@epa.gov]; Shoven, Heather [shoven.heather@epa.gov]; Valberg, Amelia [valberg.amelia@epa.gov]; Wilson, Jennifer [wilson.jenniferA@epa.gov]; Suero, Maryann [suero.maryann@epa.gov]; Miller, Amy [Miller.Amy@epa.gov]; Li, Corine [Li.Corine@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; 'mmaddalo22@gmail.com' [mmaddalo22@gmail.com]; Allen, Elizabeth [allen.elizabeth@epa.gov]; Jankowski, Mark [jankowski.mark@epa.gov]; Repasky, Ted [repasky.ted@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Thomas, Lee [Thomas.Lee@epa.gov]; Speth, Thomas [Speth.Thomas@epa.gov]; brendabachman@msn.com

Subject: Overview of GenX and PFBS assessments - prior to internal review (NOTE: revised materials and Adobe Connect link added)
Location: AUDIO - Skype (link and # in body of invite); VIEWING OF SLIDES - Adobe Connect (link in body of invite)

Start: 5/1/2018 1:00:00 PM
End: 5/1/2018 2:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Cassidy, Meghan; Olsen, Marian; Gehlhaus, Martin; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Hiatt, Gerald; Kissinger, Lon; Lynn Flowers; Bob Benson; 'Jamie Strong'; Jacobs, Brittany; Behl, Betsy; Owens, Beth; Lambert, Jason; Bahadori, Tina; Lavoie, Emma; Harper, Ashley; Champlin, Anna; Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Gillespie, Andrew
Optional Attendees: Cooperstein, Sharon; Ann Johnson; Metz, Chloe; Braverman, Carole; Davison, Jenny; Maurice, Charles; Mendez, Thomas; Moore, Tammy; Newman, Erin; Poleck, Thomas; Prendiville, Timothy; Seely, David; Shoven, Heather; Valberg, Amelia; Wilson, Jennifer; Suero, Maryann; Miller, Amy; Li, Corine; Holsinger, Hannah; Grevatt, Peter; Mclain, Jennifer; Burneson, Eric; 'mmaddalo22@gmail.com'; Allen, Elizabeth; Jankowski, Mark; Repasky, Ted; Bachman, Brenda; Thomas, Lee; Speth, Thomas; brendabachman@msn.com

Appointment

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 2/8/2018 4:10:37 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX Assessment Check In
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest-5231AA/DC-CCW-OST

Start: 2/13/2018 7:00:00 PM
End: 2/13/2018 8:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Tuesday from 2:00 PM to 3:00 PM
Required Attendees: Donohue, Joyce; Strong, Jamie; Miller, Gregory

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/31/2018 8:27:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]

Subject: touch base on GenX assessment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/8/2018 3:00:00 PM
End: 2/8/2018 3:30:00 PM
Show Time As: Busy

Required Attendees: Donohue, Joyce; Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2019 1:26:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX schedule and comments

Start: 2/27/2019 7:30:00 PM
End: 2/27/2019 8:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 3/15/2018 11:02:47 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: Skype meeting for GenX Study Discussion (screen sharing)
Location: Skype Meeting

Start: 3/15/2018 1:30:00 PM
End: 3/15/2018 3:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Jacobs, Brittany

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 2/8/2018 5:06:15 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: Accepted: GenX Assessment Check In
Location: DCRoomWest-5231AA/DC-CCW-OST

Start: 2/13/2018 7:00:00 PM
End: 2/13/2018 8:00:00 PM
Show Time As: Busy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/12/2018 2:35:55 PM
To: Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: FW: CSS AOPDD Webinar - Conley - GenX effects in rats
Location: dial: Ex. 6 Personal Privacy (PP)

Start: 9/18/2018 7:00:00 PM
End: 9/18/2018 7:45:00 PM
Show Time As: Tentative

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 9/5/2018 12:25:50 PM
To: Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]
CC: Crawford, Tiffany [Crawford.Tiffany@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]

Subject: Pre-brief GenX Toxicity Values
Location: DCRoomWest5233B/DC-CCW-OST

Start: 9/6/2018 7:00:00 PM
End: 9/6/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Grevatt, Peter; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; flaherty. colleen (Flaherty.Colleen@epa.gov); Holsinger, Hannah; Burneson, Eric; Mclain, Jennifer; Henry, Tala; Wadlington, Christina; Lalley, Cara
Optional Attendees: Crawford, Tiffany; Tiago, Joseph

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/5/2018 11:43:00 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: genx
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/5/2018 1:00:00 PM
End: 4/5/2018 2:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/13/2018 4:08:55 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Lowit, Anna [Lowit.Anna@epa.gov]; Laessig, Susan [Laessig.Susan@epa.gov]; Hamernik, Karen [Hamernik.Karen@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Murphy, Deirdre [Murphy.Deirdre@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]; Hoyer, Marion [hoyer.marion@epa.gov]; Axelrad, Daniel [Axelrad.Daniel@epa.gov]; Dzubow, Rebecca [Dzubow.Rebecca@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flowers, Lynn [Flowers.Lynn@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Pollard, Solomon [Pollard.Solomon@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Mangino, Mario [mangino.mario@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Kissinger, Lon [Kissinger.Lon@epa.gov]; Maddaloni, Mark [Maddaloni.Mark@epa.gov]; rogers, rick [rogers.rick@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Morton, Michael [Morton.Michael@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Bahrman, Sarah [Bahrman.Sarah@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Anderson-Carnahan, Linda [Anderson-Carnahan.Linda@epa.gov]; Allen, Elizabeth [allen.elizabeth@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Radke-Farabaugh, Elizabeth [radke-farabaugh.elizabeth@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Foster, Stiven [Foster.Stiven@epa.gov]; Yaquian-Luna, Jose [yaquian-luna.josea@epa.gov]; Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Johnson, Ann [Johnson.Ann@epa.gov]; Birchfield, Norman [Birchfield.Norman@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Hines, Ronald [Hines.Ronald@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Hodes, Colette [Hodes.Colette@epa.gov]

Subject: HOLD for PFAS: GenX and PFBS overview of peer review comments
Location: Skype (Ex. 6 Personal Privacy (PP) ess code: Ex. 6 Personal Privacy (PP) RRB 51161

Start: 8/20/2018 5:00:00 PM
End: 8/20/2018 6:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Lynn Flowers; Cassidy, Meghan; Olsen, Marian; Martin Gehlhaus; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Bob Benson; Kissinger, Lon; Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Allen, Elizabeth; Bachman, Brenda; Bahadori, Tina; Owens, Beth; Lambert, Jason; Champlin, Anna; Thayer, Kris; Radke-Farabaugh, Elizabeth; Kraft, Andrew; Behl, Betsy; Jamie Strong; Jacobs, Brittany
Optional Attendees: Foster, Stiven; Yaquian-Luna, Jose; Cooperstein, Sharon; Ann Johnson; Birchfield, Norman; Fitz-James, Schatzi; Libelo, Laurence; Cooke, Maryt; Hines, Ronald; Gillespie, Andrew; Hodes, Colette

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:34:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/25/2019 5:00:00 PM
End: 4/25/2019 7:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 12:04:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/16/2019 2:30:00 PM
End: 4/16/2019 4:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in 2 Ex. 6 Personal Privacy (PP)
Attachments: Canceled: Finalizing GenX and PFBS assessments: c Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/8/2019 4:36:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX comment triage
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/30/2019 5:00:00 PM
End: 4/30/2019 6:00:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/14/2019 3:26:50 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX Chemicals comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 5/20/2019 1:00:00 PM
End: 5/20/2019 3:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/8/2019 12:25:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX RTC
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/14/2019 12:30:00 PM
End: 5/14/2019 3:00:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:32:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/8/2019 12:25:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX RTC
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/14/2019 2:00:00 PM
End: 5/14/2019 3:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/8/2019 12:25:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: GenX RTC
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/14/2019 2:00:00 PM
End: 5/14/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231L/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/14/2019 3:26:50 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: GenX Chemicals comment triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 5/20/2019 1:00:00 PM
End: 5/20/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany; DCRoomWest5231M/DC-CCW-OST

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:00:39 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/13/2019 1:00:00 PM
End: 2/13/2019 4:00:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Birnbaum, Linda (NIH/NIEHS) [E] [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Birnbaum, Linda (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 5:00:00 PM
End: 4/11/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Linda Birnbaum [birnbaumls@niehs.nih.gov]; Ohanian, Edward [Ohanian.Edward@epa.gov]; Elmore, Susan (NIH/NIEHS) [E] [elmore@niehs.nih.gov]; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]; Berridge, Brian (NIH/NIEHS) [E] [brian.berridge@nih.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/11/2019 6:00:00 PM
End: 4/11/2019 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231M/DC-CCW-OST
Optional Attendees: Behl, Betsy; Linda Birnbaum; Ohanian, Edward; Elmore, Susan (NIH/NIEHS) [E]; Devito, Michael (NIH/NIEHS) [E]; Berridge, Brian (NIH/NIEHS) [E]; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2018 4:32:53 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: Canceled: GenX

Start: 4/16/2018 6:00:00 PM
End: 4/16/2018 6:30:00 PM
Show Time As: Free

Importance: High

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Crawford, Tiffany [Crawford.Tiffany@epa.gov]
Sent: 9/6/2018 5:54:09 PM
To: Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Crawford, Tiffany [Crawford.Tiffany@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]

Subject: Pre-brief GenX Toxicity Values (BRIEFING MATERIALS ATTACHED)
Location: DCRoomWest5233B/DC-CCW-OST

Start: 9/6/2018 7:00:00 PM
End: 9/6/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Grevatt, Peter; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; flaherty. colleen (Flaherty.Colleen@epa.gov); Holsinger, Hannah; Burneson, Eric; Mclain, Jennifer; Henry, Tala; Wadlington, Christina; Lalley, Cara; Champlin, Anna; Jones, Samantha; Bahadori, Tina; Lambert, Jason; Owens, Beth
Optional Attendees: Crawford, Tiffany; Tiago, Joseph; Albert, Ryan

Appointment

From: Gentry, Nathan [Gentry.Nathan@epa.gov]
Sent: 9/11/2018 6:42:05 PM
To: Rodan, Bruce [rodan.bruce@epa.gov]; Yamada, Richard (Yujiro) [yamada.richard@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Breen, Barry [Breen.Barry@epa.gov]; Bodine, Susan [bodine.susan@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Ross, Mary [Ross.Mary@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Forsgren, Lee [Forsgren.Lee@epa.gov]; McDonough, Owen [mcdonough.owen@epa.gov]; Wildeman, Anna [wildeman.anna@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [baptist.erik@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]
CC: Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Bartlett, Keith [Bartlett.Keith@epa.gov]; Emmerson, Caroline [Emmerson.Caroline@epa.gov]

Subject: GenX and PFBS Toxicity Values and roll-out plan
Location: DCRoomRRB41213/ORD; call-in Ex. 6 Personal Privacy (PP)

Start: 9/13/2018 4:00:00 PM
End: 9/13/2018 5:00:00 PM
Show Time As: Tentative

Required Attendees: Rodan, Bruce; Yamada, Richard (Yujiro); Jones, Samantha; Bahadori, Tina; Lambert, Jason; Owens, Beth; Champlin, Anna; Mattas-Curry, Lahne; Gillespie, Andrew; Thayer, Kris; Grevatt, Peter; Behl, Betsy; Strong, Jamie; Breen, Barry; Bodine, Susan; Beck, Nancy; Ross, Mary; Ross, David P; Forsgren, Lee; McDonough, Owen; Wildeman, Anna; Nagle, Deborah; Jacobs, Brittany; Miller, Gregory; Flaherty, Colleen; Henry, Tala; Burneson, Eric; Holsinger, Hannah; Wadlington, Christina; Drinkard, Andrea; Bertrand, Charlotte; Baptist, Erik; Libelo, Laurence
Optional Attendees: Raffaele, Kathleen; Foster, Stiven; Bartlett, Keith; Emmerson, Caroline

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Calderon, Wanda [Calderon.Wanda@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Haklar, James [Haklar.James@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Chester, Amy [Chester.Amy@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Busy

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Calderon, Wanda; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Evangelista, Pat; Haklar, James; Garvey, Mark; Chester, Amy; Miller, Jesse A.; Gorman, John; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan

Appointment

From: Latham, John [Latham.John@epa.gov]
Sent: 4/16/2019 1:29:01 PM
To: Latham, John [Latham.John@epa.gov]; Pearce, Jennifer [Pearce.Jennifer@epa.gov]; Schwartz, Paul [Schwartz.Paul@epa.gov]; Tucker, Marlene [Tucker.Marlene@epa.gov]; Calderon, Wanda [Calderon.Wanda@epa.gov]; Tate, Rita [Tate.Rita@epa.gov]; Trulear, Brian [Trulear.Brian@epa.gov]; Cruz, Francisco [Cruz.Francisco@epa.gov]; Moncavage, Carissa [Moncavage.Carissa@epa.gov]; Evangelista, Pat [Evangelista.Pat@epa.gov]; Haklar, James [Haklar.James@epa.gov]; Garvey, Mark [Garvey.Mark@epa.gov]; Chester, Amy [Chester.Amy@epa.gov]; Miller, Jesse A. [Miller.JesseA@epa.gov]; Gorman, John [Gorman.John@epa.gov]; Buso, Roberto X [Buso.Roberto@epa.gov]; Calvo, Kathy [Calvo.Kathy@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Schweer, Greg [Schweer.Greg@epa.gov]; Ross, Adam [ross.adam@epa.gov]; McOliver, Cynthia [McOliver.Cynthia@epa.gov]; Davis, Lauren O. [Davis.LaurenO@epa.gov]; Zipf, Lynn [Zipf.Lynn@epa.gov]; Wilson, Dane [Wilson.Dane@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Vander Naald, Breanne [vandernaald.breanne@epa.gov]; Bhatt, Krishna [bhatt.krishna@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Thompson, Heather [Thompson.Heather@epa.gov]; Moumbleaux, Joan [moumbleaux.joan@epa.gov]; Taylor, Nathan [taylor.nathan@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Ides, Nan [Ides.Nan@epa.gov]

Subject: Discuss Search Terms; GenX FOIA EPA-HQ-2018-004509
Location: DCRoomEast4225/DC-EPA-EAST-OCSPP - Skype

Start: 4/25/2019 2:00:00 PM
End: 4/25/2019 3:00:00 PM
Show Time As: Tentative

Required Attendees: Pearce, Jennifer; Schwartz, Paul; Tucker, Marlene; Calderon, Wanda; Tate, Rita; Trulear, Brian; Cruz, Francisco; Moncavage, Carissa; Evangelista, Pat; Haklar, James; Garvey, Mark; Chester, Amy; Miller, Jesse A.; Gorman, John; Buso, Roberto X; Calvo, Kathy; Fehrenbacher, Cathy; Schweer, Greg; Ross, Adam; McOliver, Cynthia; Davis, Lauren O.; Zipf, Lynn; Wilson, Dane; Jacobs, Brittany; Miller, Gregory; Vander Naald, Breanne; Bhatt, Krishna; Barkas, Jessica; Thompson, Heather; Moumbleaux, Joan; Taylor, Nathan; Aubee, Catherine; Ides, Nan

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/20/2018 6:50:06 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Grevatt, Peter [Grevatt.Peter@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Albert, Ryan [Albert.Ryan@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]
CC: Ross, David P [ross.davidp@epa.gov]; Penman, Crystal [Penman.Crystal@epa.gov]

Subject: GenX chemicals and PFBS celebration
Location: Occidental Grill

Start: 12/12/2018 9:00:00 PM
End: 12/12/2018 11:30:00 PM
Show Time As: Busy

Required Attendees: Jones, Samantha; Lambert, Jason; Owens, Beth; Champlin, Anna; Bahadori, Tina; Jacobs, Brittany; Miller, Gregory; Behl, Betsy; Flaherty, Colleen; Lalley, Cara; Harper, Ashley; Drinkard, Andrea; Grevatt, Peter; Wadlington, Christina; Mattas-Curry, Lahne; Nagle, Deborah; Holsinger, Hannah; Brinkerhoff, Chris; Soares, Barbara; Benson, Amy; Burneson, Eric; Babcock, Amy; Henry, Tala; Albert, Ryan; Donohue, Joyce; Mclain, Jennifer
Optional Attendees: Penman, Crystal; Ross, David P

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 11/26/2018 1:06:26 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]

Subject: GenX Chems Public Comment Period Closes

Start: 1/22/2019 5:00:00 AM
End: 1/23/2019 5:00:00 AM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Strong, Jamie

Appointment

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 11/26/2018 1:06:20 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]

Subject: GenX Chems Public Comment Period Closes

Start: 1/22/2019 5:00:00 AM
End: 1/23/2019 5:00:00 AM
Show Time As: Free

Required Attendees: Jacobs, Brittany; Strong, Jamie

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 4:19:19 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Susan Lanberg [susan.lanberg@tetratech.com]

Subject: HOLD FSTRAC PFBS and GenX chemicals tox assessments
Location: DCRoomWest5231M/DC-CCW-OST

Start: 11/28/2018 6:00:00 PM
End: 11/28/2018 7:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Owens, Beth; Lambert, Jason; Jones, Samantha; Akhter, Shamima; Susan Lanberg

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in 20 Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments: c Ex. 6 Personal Privacy (PP) ntitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 10/2/2019 5:07:57 PM
To: Owscheduling [Owscheduling@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: 3233 WJCE

Start: 11/6/2019 8:00:00 PM
End: 11/6/2019 9:00:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie
Optional Attendees: Penman, Crystal

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 10/2/2019 5:07:57 PM
To: Owscheduling [Owscheduling@epa.gov]; Ross, David P [ross.davidp@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Kramer, Jessica L. [kramer.jessical@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: 3233 WJCE

Start: 11/6/2019 6:00:00 PM
End: 11/6/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie
Optional Attendees: Penman, Crystal

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Canceled--Finalizing GenX and PFBS assessments: call in 202-991-0477 code: 1239896
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

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CC: Penman, Crystal [Penman.Crystal@epa.gov]

Subject: National Toxicology Program (NTP) Pathology Working Group report for GenX Chemicals
Attachments: MR_Ross_National Toxicology Program-Gen X2019-09-30-124406.pdf
Location: DCRoomEast2369B/DC-ICC-OW-IO

Start: 11/6/2019 6:00:00 PM
End: 11/6/2019 7:00:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Nagle, Deborah; Behl, Betsy; Bertrand, Charlotte; Kramer, Jessica L.; Jacobs, Brittany; Miller, Gregory; Strong, Jamie
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End: 11/6/2019 6:45:00 PM
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Location: 3233 WJCE

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Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Canceled: Finalizing GenX and PFBS assessments: call in 2(Ex. 6 Personal Privacy (PP) ; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
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CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E]

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

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CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
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Location: DCRoomWest5231M/DC-CCW-OST

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Recurrence: Weekly
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Optional Attendees: Owens, Beth

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To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E]

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From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E]

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2019 12:31:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft
Attachments: PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_11 02 18_FINAL.docx

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From: Strong, Jamie
Sent: Monday, November 05, 2018 7:35 AM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Akhter, Shamima <Akhter.Shamima@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; Carlson, Krista <Krista.Carlson@tetratech.com>
Subject: RE: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft

Sue,
Unfortunately, we had a last minute change to the ES of the GenX assessment. It's in the first paragraph. We need to fix the 508 version. The new version is attached. I attached a clean and a version highlighted with the change so you can see where it is. PFBS will be coming soon but a lot is up in the air here…I will do my best to give you all a heads up and hopefully it won't be quick turn around.

Thanks,
Jamie

From: Lanberg, Susan [mailto:Susan.Lanberg@tetratech.com]
Sent: Tuesday, September 25, 2018 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Akhter, Shamima <Akhter.Shamima@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; Carlson, Krista <Krista.Carlson@tetratech.com>
Subject: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft

Jamie,

Attached please find the formatted, 508-compliant PDF versions of the GenX and PFBS RtC documents, as well as the GenX Public Comment Draft document. We have the formatted (non 508-compliant) Word versions of the files as well, in case you need those. Let us know if you have any questions.

We will wait for further direction before working on the PFBS Public Comment Draft document.

Thank you,

Sue

Susan Adair Lanberg | Environmental Scientist
Direct: (703) 385-1906, (703) 385-6000 ext.1906 | Fax: (703)385-6007
susan.lanberg@tetratech.com

Environmental Sciences
Innovative Solutions for Clean Water

Tetra Tech | Complex World, Clear Solutions
10306 Eaton Place, Suite 340 | Fairfax, VA 22030-2201 | www.tetratech.com

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Untitled Attachment; Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP); Untitled Attachment; Untitled Attachment; Untitled Attachment; Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) code: Ex. 6 Personal Privacy (PP) nalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) Untitled Attachment; Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP) code Ex. 6 Personal Privacy (PP) nalizing GenX and PFBS assessments: call in 202-991-0477 code: 1239896; Canceled: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: skype meeting

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Optional Attendees: Owens, Beth

Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

Toll number: Ex. 6 Personal Privacy (PP) -in Number) English (United States)
Find a local number

Conference ID: 1239896
Forgot your dial-in PIN? | Help

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
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Start: 6/5/2019 1:00:00 PM
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Toll number: Ex. 6 Personal Privacy (PP) mber) English (United States)
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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/6/2019 9:14:52 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Canceled: Finalizing GenX and PFBS assessments: call Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/20/2019 2:00:00 PM
End: 2/20/2019 3:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina
Optional Attendees: Owens, Beth

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

hington DC (Toll)

Ex. 6 Personal Privacy (PP)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/20/2019 5:16:11 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX chemicals comment triage
Location: DCRoomWest5233AA/DC-CCW-OST

Start: 5/22/2019 2:00:00 PM
End: 5/22/2019 3:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 5/21/2019 3:38:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/29/2019 1:00:00 PM
End: 5/29/2019 2:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 5/21/2019 3:02:21 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

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CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

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Local numbers | Reset PIN | Learn more about Teams | Meeting options

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Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 5/21/2019 2:58:49 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Tentative

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Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) Washington DC (Toll)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

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Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments
Location: Microsoft Teams Meeting

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Optional Attendees: Owens, Beth

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Ex. 6 Personal Privacy (PP) Washington DC (Toll)

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Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 5/21/2019 4:20:22 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231M/DC-CCW-OST

Start: 6/12/2019 1:00:00 PM
End: 6/12/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 8/19/2020 1:00:00 PM
End: 8/19/2020 2:00:00 PM
Show Time As: Busy

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

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CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment
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Optional Attendees: Owens, Beth

New Teams meeting

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Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 3/10/2021 6:00:00 PM
End: 3/10/2021 6:30:00 PM
Show Time As: Tentative

Recurrence: Weekly
every 2 week(s) on Wednesday from 1:00 PM to 1:30 PM
Required Attendees: Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

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Appointment

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To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment
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New Teams meeting

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) | Washington DC (Toll)

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Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment
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New Teams meeting

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Ex. 6 Personal Privacy (PP) hington DC (Toll)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

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To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment
Location: Microsoft Teams Meeting

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every 2 week(s) on Wednesday from 1:00 PM to 1:30 PM
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Optional Attendees: Owens, Beth

New Teams meeting

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Sent: 8/12/2020 5:08:50 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment
Location: Microsoft Teams Meeting

Start: 3/10/2021 6:00:00 PM
End: 3/10/2021 6:30:00 PM
Show Time As: Busy

Recurrence: Weekly
every 2 week(s) on Wednesday from 1:00 PM to 1:30 PM
Required Attendees: Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) gton DC (Toll)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

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To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments
Attachments: Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Untitled Attachment; Canceled: Finalizing GenX and PFBS assessments; Untitled Attachment; Untitled Attachment
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Start: 3/10/2021 6:00:00 PM
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Recurrence: Weekly
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Required Attendees: Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Optional Attendees: Owens, Beth

New Teams meeting

Join Microsoft Teams Meeting

h DC (Toll)

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Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2019 6:39:45 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: Skype Meeting

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov)

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Busy

Required Attendees: Miller, Gregory; Jacobs, Brittany

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 2:04:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: GenX comments triage
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/19/2019 6:00:00 PM
End: 2/19/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Jacobs, Brittany

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/18/2020 12:49:53 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Gallagher, Kathryn [Gallagher.Kathryn@epa.gov]
Subject: Fwd: PFAS CC: Aug 28th, Second Federal Information Exchange -Toxicology and Hazard Assessment
Attachments: FIE Announcemnt.2.Hypr-Lnk_7.fin[1] - Read-Only.pdf; ATT00001.htm

Focus again on human tox. Note GenX presentation.

Sent from my iPhone

Begin forwarded message:

> **From:** "Rose, Bob" <Rose.Bob@epa.gov>
> **Date:** August 18, 2020 at 8:34:55 AM EDT
> **To:** "Allenbach, Becky" <Allenbach.Becky@epa.gov>, "Cassidy, Meghan" <Cassidy.Meghan@epa.gov>, "Church, Zach" <Church.Zach@epa.gov>, "Cooperstein, Sharon" <Cooperstein.Sharon@epa.gov>, "Corr, Elizabeth" <Corr.Elizabeth@epa.gov>, "DAgostino, Daniel" <DAgostino.Daniel@epa.gov>, "Flaherty, Colleen" <Flaherty.Colleen@epa.gov>, "Grzegozewski, Nicholas" <Grzegozewski.Nicholas@epa.gov>, "Guilaran, Yu-Ting" <Guilaran.Yu-Ting@epa.gov>, "Heller, Emily" <heller.emily@epa.gov>, "Jacobs, Brittany" <jacobs.brittany@epa.gov>, "Klasen, Matthew" <Klasen.Matthew@epa.gov>, "Linkins, Samantha" <Linkins.Samantha@epa.gov>, "Linsk, Abigail (Abbey)" <Linsk.Abbey@epa.gov>, "Lowery, Brigid" <Lowery.Brigid@epa.gov>, "Mandolia, Michelle" <Mandolia.Michelle@epa.gov>, "OBrien, Kathy" <Obrien.Kathy@epa.gov>, "Ruf, Christine" <Ruf.Christine@epa.gov>, "Skane, Elizabeth" <Skane.Elizabeth@epa.gov>, "Srivastava, Ravi" <Srivastava.Ravi@epa.gov>, "Stalcup, Dana" <Stalcup.Dana@epa.gov>, "Steiner-Riley, Cara" <Steiner-Riley.Cara@epa.gov>, "Tiago, Joseph" <Tiago.Joseph@epa.gov>, "Behl, Betsy" <Behl.Betsy@epa.gov>, "Foster, Stiven" <Foster.Stiven@epa.gov>, "Holsinger, Hannah" <Holsinger.Hannah@epa.gov>, "Lan, Alexis" <lan.alexis@epa.gov>, "Lousberg, Macara" <Lousberg.Macara@epa.gov>, "Miller, Wynne" <Miller.Wynne@epa.gov>, "Opalski, Dan" <Opalski.Dan@epa.gov>, "Rose, Bob" <Rose.Bob@epa.gov>, "Sawyers, Andrew" <Sawyers.Andrew@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>, "Kramer, Jessica L." <kramer.jessical@epa.gov>, "Gervais, Gregory" <Gervais.Gregory@epa.gov>, "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Henry, Tala" <Henry.Tala@epa.gov>, "Kaiser, Sven-Erik" <Kaiser.Sven-Erik@epa.gov>, "Koerber, Mike" <Koerber.Mike@epa.gov>, "Levine, Carolyn" <Levine.Carolyn@epa.gov>, "Lewis, Jen" <Lewis.Jen@epa.gov>, "Mackey, Cyndy" <Mackey.Cyndy@epa.gov>, "McLain, Jennifer L." <Mclain.Jennifer@epa.gov>, "Messier, Dawn" <Messier.Dawn@epa.gov>, "Nagle, Deborah" <Nagle.Deborah@epa.gov>, "Nickerson, William" <Nickerson.William@epa.gov>, "Raffaele, Kathleen" <raffaele.kathleen@epa.gov>, "Subramanian, Hema" <Subramanian.Hema@epa.gov>, "Voyles, Travis" <Voyles.Travis@epa.gov>, "Wehling, Carrie" <Wehling.Carrie@epa.gov>, "Drinkard, Andrea" <Drinkard.Andrea@epa.gov>, "Hoverman, Taylor" <hoverman.taylor@epa.gov>, "Anderson-Carnahan, Linda" <Anderson-Carnahan.Linda@epa.gov>, "Ash, Christine" <Ash.Christine@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Esher, Diana" <Esher.Diana@epa.gov>, "Gray, David" <gray.david@epa.gov>, "Holst, Linda" <holst.linda@epa.gov>, "James, Duane" <James.Duane@epa.gov>, "Morton, Michael" <Morton.Michael@epa.gov>, "O'Connor, Darcy" <oconnor.darcy@epa.gov>, "Rasmussen, Russell" <rasmussen.russell@epa.gov>, "Robichaud, Jeffery" <Robichaud.Jeffery@epa.gov>, "Szaro, Deb" <Szaro.Deb@epa.gov>
> **Subject: PFAS CC: Aug 28th, Second Federal Information Exchange -Toxicology and Hazard Assessment**

> PFAS CC:

This is the flyer for the second Federal Information Exchange with registration link. Ex. 6 Personal Privacy (PP)

Bob

Robert J. Rose
US EPA, Office of Water
Policy Office
1200 Pennsylvania Avenue, N.W.
Mail Code 4101M
Washington, DC 20460
Email: rose.bob@epa.gov
Ph: 202-564-0322

From: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Sent: Tuesday, August 18, 2020 7:35 AM
To: Rose, Bob <Rose.Bob@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>
Subject: FW: Next cross-federal PFAS webinar - Aug 28, 2-4 pm, human tox, registration required

Hi Bob, Alex, please share with your respective PFAS networks. Best regards, Andy

Featuring two of our ORD colleagues, Grace Patlewicz and Kris Thayer.

See attachment for link to registration or try

Ex. 6 Personal Privacy (PP)

Please share widely.

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/CEMM
ORD Executive Lead for PFAS R&D

Office 919 541 3655 Mobile Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/29/2020 11:23:44 AM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Federal Government Human Health PFAS Research - Workshop

I don't think we have anything to present here.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, September 28, 2020 5:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Federal Government Human Health PFAS Research - Workshop

Deborah asked if we wanted to present. I told her since we can't talk about GenX publicly I don't know what we would present.

From: Lan, Alexis <lan.alexis@epa.gov>
Sent: Monday, September 28, 2020 5:05 PM
To: Lan, Alexis <lan.alexis@epa.gov>
Subject: FW: Federal Government Human Health PFAS Research - Workshop

Good afternoon EPA PFAS Network

Details on the upcoming 10/26-27 NASEM PFAS workshop on human health is available below. This is a virtual meeting and is open to the public.

All the best,

Alex Lan, MPH
Physical Scientist
Office of Ground Water and Drinking Water
Standards and Risk Management Division
U.S. Environmental Protection Agency
Washington, D.C.
Lan.Alexis@epa.gov
(Desk) 202.564.0841
(Mobile) 703.303.7791

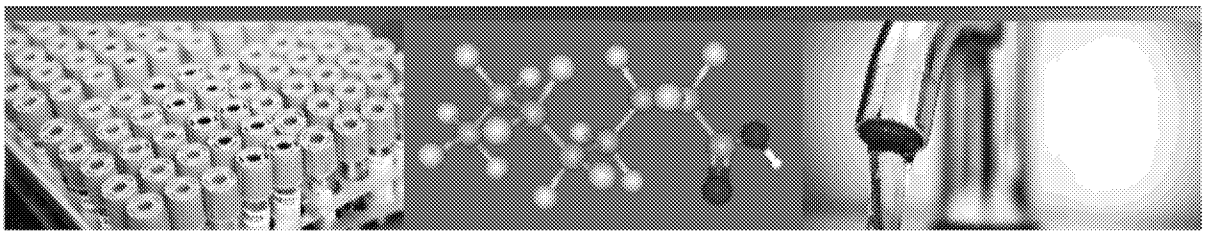
From: Johnson, Stephanie <SJohnson@nas.edu>
Sent: Monday, September 28, 2020 4:03 PM
Cc: Duke, Clifford <CDuke@nas.edu>; Segovia, Cesar Raymund <CSegovia@nas.edu>
Subject: Federal Government Human Health PFAS Research - Workshop

The National Academies of SCIENCES ENGINEERING MEDICINE

ENVIRONMENTAL STUDIES AND TOXICOLOGY

Federal Government Human Health PFAS Research:
A Virtual Workshop

October 26-27, 2020



2-Day Virtual Workshop via

Zoom and Webcast

Register Now

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are diverse fluorinated organic compounds used to make products that resist heat, stains, oil, and water. They are used in firefighting foams; a wide variety of consumer products, such as packaging, carpeting, and cookware; and in industries such as aerospace, automotive, and electronics. Their manufacture and use have led to widespread distribution and occurrence in the environment. PFAS can be highly mobile and persistent in the environment, and depending on chemical structure, PFAS can accumulate at different levels in human, animal, and plant tissue. The National Academies of Sciences, Engineering, and Medicine will be conducting a workshop to review federal government human health research on PFAS and to identify research and data gaps.

This 2-day virtual workshop will address the state of the science and ongoing federal research regarding:

- Human exposure to PFAS,
- Experimental toxicology studies to identify human risks from PFAS,
- Human health outcomes from PFAS exposures, and
- Cross cutting issues, such as mixtures and class-based approaches.

This event is free to attend via Zoom. Those who register will also have the opportunity to submit suggested research needs or data gaps for consideration as input to the workshop.

Share Tweet Forward

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Message

From: Benson, Amy [Benson.Amy@epa.gov]
Sent: 4/10/2018 12:46:44 PM
To: Aubee, Catherine [Aubee.Catherine@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]
CC: Libelo, Laurence [Libelo.Laurence@epa.gov]; Tobias, David [Tobias.David@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
Subject: RE: Lit Flow Diagram - GenX Acid and Salt - Draft

Note that when all studies and tags are entered into HERO I think the lit flow diagram will need a final QA. I have notes on different categories – it is a bit complicated to sort out all the categories.

From: Benson, Amy
Sent: Monday, April 09, 2018 6:03 PM
To: Aubee, Catherine <Aubee.Catherine@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Cc: Libelo, Laurence <Libelo.Laurence@epa.gov>; Tobias, David <Tobias.David@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: Lit Flow Diagram - GenX Acid and Salt - Draft

Hello,

Attached is a draft of the combined lit flow diagram (acid, salt, published lit, Chemours studies). A few comments and outstanding issues:

1) F

2) F

3) F

4) S

Ex. 5 Deliberative Process (DP)

Regards,

Amy Benson, M.S., DABT
Biologist, Assessment Branch 4
OCSPP/OPPT/RAD
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW

Washington, DC 20460
Mail Code 7403M
phone: 202-564-7624
fax: 202-564-7450

For Courier Deliveries:
WJ Clinton Building East, 7403M, Cube 6308WW
1201 Constitution Ave., N.W.
Washington, DC 20004

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/27/2018 12:38:18 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: inside EPA article on Horsham meeting and link to archived video

Youtube link for video streamed by PA: https://www.youtube.com/watch?v=Uf1XxuzYoS8

Mid-Atlantic States Press EPA To Take More Holistic Approach To PFAS

July 26, 2018

Officials from states in the mid-Atlantic region are urging EPA to take a more "holistic" approach to dealing with contamination from perfluorinated chemicals, telling the agency to address them as a class across a range of media and to set health protective standards that avoid the patchwork of state standards now emerging.

At a July 25 forum sponsored by EPA Region 3, Lisa Daniels, director of the safe drinking water bureau in Pennsylvania's Department of Environmental Protection, said the federal agency needs to take on a leadership role and work with other federal and state agencies to address per- and polyfluoroalkyl substances (PFAS) "in a holistic fashion," according to a livestream of the event by Pennsylvania state Rep. Todd Stephens (R).

Given that the PFAS class includes 3,500 to 4,500 compounds, "[w]e can't just deal with them one at a time." While regulators have some knowledge about the two most common compounds -- perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) -- "what about the rest of the contaminants?" she said, stressing that these need to be addressed as an entire class.

In addition, she called for EPA to address the chemicals comprehensively through regulation -- not just in drinking water, but also in in wastewater, waste and soil.

Daniels and other state officials from the mid-Atlantic region as well as community members and local government representatives spoke during EPA's second regional PFAS community engagement forum. It was held July 25 in Horsham, PA, near communities surrounding two military facilities identified as sources of PFAS contamination in drinking water.

EPA hosted the event weeks after former EPA Administrator Scott Pruitt announced a multi-media effort to address contamination from PFAS, the ubiquitous class of chemicals that are contaminating dozens of sites and water supplies across the country, though some planned actions are likely to take years to complete.

Addressing EPA's "National Leadership Summit" on PFAS May 22, Pruitt said the agency will "take the next step" to evaluate the need for a drinking water standard for PFOA and PFOS, a step that the Defense Department (DOD) and many states are seeking in order to provide a consistent national standard.

He also said the agency is taking steps to establish liability under the Superfund law for those two chemicals, while also currently developing a groundwater cleanup recommendation for sites contaminated with the two substances.

And he noted a fourth step is the agency's plan to develop a toxicity value for GenX, a newer perfluorinated chemical that has raised alarms in North Carolina, where it is contaminating the Cape Fear River.

But calls are growing in Congress and among state officials for EPA to take action more quickly than previously indicated and to adopt stricter standards than the agency has in the past, especially after the Agency for Toxic Substances and Disease Registry (ATSDR) recommended stricter risk values than EPA had adopted for PFOA and PFOS.

Regulatory Determinations

During the July 25 meeting, other state officials endorsed Daniels remarks, and added to requests of EPA to address growing public concerns states are facing in local communities where PFAS has been found contaminating drinking water sources.

State officials also called for EPA to expedite pending decisions on whether some PFAS should be regulated under the Safe Drinking Water Act (SDWA) and as "hazardous substances" under the Superfund law.

Todd Keyser, with the waste division within the Delaware Department of Natural Resources and Environmental Control, called for EPA to expedite its regulatory determination for PFOA and PFOS. Whether it is a drinking water maximum contaminant level or listing as hazardous substances, EPA needs to "give the states something more concrete to work with," he said.

Daniels also stressed the need for EPA to address the chemicals at the national level by developing additional health advisory levels -- which are unenforceable but nonetheless have been taken up by some states -- or federal MCLs. "I'm here to say states cannot do this work alone," she said. States lack the capability and if EPA fails to take these measures on, it will put public health at risk and lead to "a patchwork of different state-specific numbers," which will cause confusion and citizens to question the safety of their water, she said.

Keyser said states are looking to EPA to provide consistency on standards, and to lead the way on how to investigate and remediate these compounds.

And Keith Mensch, with the Delaware Department of Health, told EPA that the state health department believes it should be a priority for EPA to develop a national regulatory structure under SDWA for the chemicals. He also encouraged EPA to take any measures that can be expedited "outside the regulatory review process stemming from the" Unregulated Contaminant Monitoring Rule (UCMR) 3.

Another challenge for regulators and others is determining if PFAS releases are continuing through the production or disposal processes, Keyser said. He called for EPA to take steps through either regulatory or cooperative efforts with responsible parties to eliminate these releases.

Andy Gillespie, who is heading EPA's PFAS research efforts, also spoke at the event, noting the challenges of end-of-life disposal or materials management for PFAS-containing products, and that EPA is working on determining the best waste management technologies.

Due to the durability of PFAS chemicals, they often last longer than the product they were used in, he said. So PFAS may still be in the product that is ready to be disposed of, he said. He added that "there's a lack of knowledge regarding the end of life management practices, whether it's best to use landfills or incineration or some other means for PFAS-containing consumer and industrial products."

He said EPA is trying to characterize various end-of-life disposal streams, including municipal, industrial, and manufacturing, and is evaluating the efficacy of existing and advanced waste management technologies such as thermal treatment, composting and waste stabilization to manage PFAS and avoid further problems during disposal.

And DOD Deputy Assistant Secretary for Environment, Safety & Occupational Health Maureen Sullivan told the forum the disposal of PFAS-containing materials is a concern for the Defense Department.

Laboratory Capacity

Mensch cautioned EPA that before it finalizes any drinking water standards, laboratory capacity needs to be increased, noting that only a handful of labs exist that can analyze for these compounds. If the regulatory structure were implemented now, "the laboratories wouldn't be able to handle the volume of samples," he said.

He suggested additional funding and that EPA expedite lab certifications.

Further, he said EPA's current testing method -- method 537 -- includes 14 compounds, but Delaware would like to see a system that addresses the differences among the thousands of compounds in the class, which may include EPA revising its lab methods.

Daniels in her recommendations to EPA also said she effectively is asking on behalf of EPA that Congress provide additional funding to states and EPA to handle the PFAS challenge. "Current budgets are already stretched thin" with EPA and states trying to implement their programs, she said. And working on this issue is taking away resources from other drinking water efforts, she said, noting important work on pathogens, lead and disinfection byproducts.

In his remarks, John Grace with Maryland's Department of Environment, noted that this is not an easy class of chemicals, given they are complex, persistent and numerous, and questioned how regulators can develop a monitoring program. He suggested that the work on PFAS

research presents the opportunity to consider the concept of whole water toxicity. "Why can't we consider methods that consider whole water toxicity?" he said.

Scott Mandirola, with the West Virginia Department of Environmental Quality, said small communities in his state need the ability to quickly move forward to install treatment methods on polluted water but would like some reassurance that they will be reimbursed for the amount they pay for such treatments, provided they meet certain criteria.

Citizens representing local groups and with a national coalition of PFAS communities also spoke at the forum, asking that EPA set enforceable drinking water standards that are as protective as the risk levels that ATSDR cites in a recent toxicological profile for PFAS. In addition, Joanne Stanton, with the Buxmont Coalition for Safer Water, also called for EPA to classify PFAS as a Superfund hazardous substance -- something EPA has said it is pursuing -- and to regulate all PFAS as a class. She also called for federal agencies to continue to evaluate vulnerable water systems that were tested under EPA's UCMR testing. -- *Suzanne Yohannan* (syohannan@iwpnews.com)

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/13/2019 1:57:24 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Additivity info PFAS

From: Behl, Betsy
Sent: Monday, February 11, 2019 12:51 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Additivity info PFAS

Fyi closing the loop

From: Nagle, Deborah
Sent: Monday, February 11, 2019 12:47 PM
To: Wildeman, Anna <wildeman.anna@epa.gov>; Kramer, Jessica L. <kramer.jessical@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Additivity info PFAS

Anna and Jess,

Here is a write-up on the additivity of PFOA and PFOS and how we deal with Genx. I have bolded the key sound bite.

Let me know if you have any questions.

PFOA/PFOS

EPA has established the health advisory levels for both PFOA and PFAS at 70 parts per trillion. When both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should be compared with the 70 parts per trillion health advisory level.

Adverse effects observed following exposures to PFOA and PFOS are the same or similar and include effects on serum lipids, birth weight, and serum antibodies in humans. Among the animal studies, there are common effects on the liver, neonate development, and responses to immunological challenges. Both compounds also were associated with tumors in long-term animal studies.

The effects that serve as the basis for the RfDs for both PFOA and PFOS are developmental endpoints (reduced ossification and accelerated puberty in males for PFOA and decreased pup birth weight for PFOS (USEPA 2016a, 2016b). **Because the RfDs for both PFOA and PFOS are based on similar developmental effects and are numerically identical, where these two chemicals co-occur at the same time and location in a drinking water source, a conservative and health protective approach that EPA recommends would be to compare the sum of the concentrations ([PFOA] + [PFOS]) to the HA (0.07 µg/L).**

GenX Chemicals

Animal studies have shown health effects in the kidney, blood, immune system, developing fetus, and especially in the liver following oral exposure to GenX chemicals. Overall, the available studies show that the liver is the primary target of toxicity and this endpoint served as the basis for the derivation of the reference dose for GenX chemicals.

EPA recognizes that humans have the potential to be exposed to PFAS through drinking water and other exposure sources. As for the assessments for PFOA and PFOS, EPA's draft assessment for GenX chemicals focuses solely on the potential human health effects associated with oral exposure to these chemicals. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 6/4/2018 11:01:52 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: 4 PFAS actions from the summit

fyi

From: Holsinger, Hannah
Sent: Monday, June 04, 2018 1:19 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: 4 PFAS actions from the summit

Hi Betsy,
Following up on your voicemail (apologies in my delayed response, I was out the end of last week). I believe you may be referring to the 4 action items that the administrator gave that Peter reiterated:

- EPA will initiate steps to evaluate the need for a maximum contaminant level (MCL) for PFOA and PFOS. We will convene our federal partners and examine everything we know about PFOA and PFOS in drinking water.
- EPA is beginning the necessary steps to propose designating PFOA and PFOS as "hazardous substances" through one of the available statutory mechanisms, including potentially CERCLA Section 102.
- EPA is currently developing groundwater cleanup recommendations for PFOA and PFOS at contaminated sites and will complete this task by fall of this year.
- EPA is taking action in close collaboration with our federal and state partners to develop toxicity values for GenX and PFBS by this summer.

Please let me know if this isn't what you were thinking of.

Thanks!
Hannah

Hannah Holsinger, MPH

Physical Scientist
Office of Ground Water and Drinking Water
Standards and Risk Management Division
US Environmental Protection Agency (4607M)
1200 Pennsylvania Ave NW
Washington DC 20460

Phone: 202-564-0403
holsinger.hannah@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/15/2018 12:21:41 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFAS articles

It was on WTOP on the radio this morning too!

From: Miller, Gregory
Sent: Thursday, November 15, 2018 7:05 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: PFAS articles

Another:
https://news.bloombergenvironment.com/environment-and-energy/replacements-for-fluorinated-chemicals-are-less-toxic-epa-says

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From: Miller, Gregory
Sent: Thursday, November 15, 2018 6:41 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: PFAS articles

https://www.ewg.org/release/epa-genx-nearly-toxic-notorious-non-stick-chemicals-it-replaced

https://insideepa.com/daily-news/epa-floats-new-risk-values-two-pfas-continuing-regulatory-patchwork

AP article picked up by WashPost, NYtimes and Wilmington Star
https://www.washingtonpost.com/politics/epa-flags-new-fears-about-nonstick-coatings/2018/11/14/0bd87096-e860-11e8-8449-1ff263609a31_story.html

https://www.nytimes.com/aponline/2018/11/14/us/politics/ap-us-epa-nonstick-compound.html

https://www.starnewsonline.com/ZZ/news/20181114/draft-epa-study-finds-newer-nonstick-compound-may-be-harmful

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2018 12:53:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: NCSU briefing on GenX exposure study - MEETING HANDOUTS
Attachments: report300_2018-11-06.doc; hoppin 12229 bloodletter pfas FINAL.DOCX; hoppin 12229 faqs PFAST Report Back FIN.DOCX

From: Gillespie, Andrew
Sent: Thursday, November 08, 2018 2:39 PM
To: Rodan, Bruce <rodan.bruce@epa.gov>; Frithsen, Jeff <Frithsen.Jeff@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Allenbach, Becky <Allenbach.Becky@epa.gov>; Morris, Jeff <Morris.Jeff@epa.gov>; vanDrunick, Suzanne <vanDrunick.Suzanne@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Dunlap, David <dunlap.david@epa.gov>; Frederick, Tim <Frederick.Tim@epa.gov>; Adams, Glenn <Adams.Glenn@epa.gov>
Subject: NCSU briefing on GenX exposure study - MEETING HANDOUTS

Colleagues – The attached meeting handouts were received shortly prior to the meeting.... A set of FAQs, a sample of the letter sent this week to study participants, and a sample report that each recipient will receive.

The sample report shows the results for the entire sample set (light blue circles) for each PFAS, along with the median across all samples (yellow triangle). Units are ppb (ng/mL in blood).

hoppin 12229 faqs PFAST Report B... | hoppin 12229 bloodletter pfas ... | report300_2018-...

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/NERL
ORD Executive Lead for PFAS R&D

Office 919 541 3655 Cell Ex. 6 Personal Privacy (PP)

Message

From: Miller, GregoryG [Miller.Gregory@epa.gov]
Sent: 7/13/2021 2:32:58 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX Briefing Materials: GenX Chemicals DRAFT Toxicity Assessment Briefing - Update on revisions based on public comment and kick-off for internal review
Attachments: GenX Chems Slides for Agency Review_March 2021 v2 WITH NOTES.pptx

Here's what we used for the IntraAgency review. I presume it will need updating based on the Peer Review changes.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/19/2020 12:51:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "OPPT Review of OW GenX Document_10-02-2020" with you.

THANK YOU

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, October 19, 2020 8:00 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "OPPT Review of OW GenX Document_10-02-2020" with you.

I've added in main summary bullets for your consideration. I am still reading through the review by Bevin and Sue (Early life exposure to per- and polyfluoroalkyl substances (PFAS) and latent health outcomes: A review including the placenta as a target tissue and possible driver of peri- and postnatal effects) and will probably have more to add to the placental lesions bullet after I get through that. I did a lot of comparing back to other PFAS. Anyway, take a look.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, October 14, 2020 10:54 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Miller, Gregory shared "OPPT Review of OW GenX Document_10-02-2020" with you.

there were some errors in the pdf to word conversion. I'm trying to correct them as i find them.

This link only works for the direct recipients of this message.

OPPT Review of OW GenX Document_10-02-2020

Open

Microsoft OneDrive

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/26/2021 1:10:53 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Snowden, Belinda [snowden.belinda@epa.gov]
Subject: RE: Voice Mail (1 minute and 5 seconds)

I will ask Belinda to find us a half hour Thursday or Friday. Assuming your calendar is up to date.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Monday, July 26, 2021 9:08 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>
Subject: RE: Voice Mail (1 minute and 5 seconds)

Yes please count me in. If my schedule doesn't allow it, then don't worry about it.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, July 26, 2021 8:53 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>
Subject: FW: Voice Mail (1 minute and 5 seconds)

Anyone want to talk to Antonia Calafat about GenX finding or plans for monitoring by NHANES? I am going to ask Belinda to set up a half hour

---

From: Calafat, Antonia M. (CDC/DDNID/NCEH/DLS) <aic7@cdc.gov>
Sent: Monday, July 26, 2021 3:41 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: aic7@CDC.gov
Subject: RE: Voice Mail (1 minute and 5 seconds)

Dear Betsy,

So nice to hear from you. I hope you are well. I am on leave overseas and won't be back in the office until Thursday 7/29. Feel free to call me Thu-Fri this week or Mon-Tue next week (I will be out of the office on 8/4-8/6).

In the meantime, note that we did measure GenX for NHANES both in serum (https://www.cdc.gov/exposurereport/pfas_early_release.html) and urine (see attached paper). We hardly detected it in either matrix (our LOD was 0.1 ppm (100 ppt)).

Best regards,

Antonia

From: +1 202-251-4747 <+12022514747>
Sent: Friday, July 23, 2021 1:15 PM
To: Calafat, Antonia M. (CDC/DDNID/NCEH/DLS) <aic7@cdc.gov>
Subject: Voice Mail (1 minute and 5 seconds)

Greetings, Antonia vs Best CBL calling from EPS Office of water. We met a couple times and spoken about a different P fast chemicals and some of the work you are doing. I have a question for you about genex chemicals. I understand you've been there, but there's been some testing of genex chemicals in urine. I'm not so much sure about plasma and I'm not so sure how much testing and uhm, we are just complete pleading R toxicity assessment for these same compound. So I was hoping to get some information from you about occurrence. If there is any. My phone number is 2025660788. I'm calling just after 1:00 o'clock on Friday the 23rd at 225660788. Thank you very much. Look forward to speaking with you.

You received a voice mail from Ex. 6 Personal Privacy (PP)

Thank you for using Transcription! If you don't see a transcript above, it's because the audio quality was not clear enough to transcribe.

Set Up Voice Mail

Message

From: Miller, GregoryG [Miller.Gregory@epa.gov]
Sent: 8/9/2021 5:21:43 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review

I went back and looked. I don't think Deborah reviewed the Response to Public Comment doc. It was shared for IntraAgency review in the Spring while you were away. I don't recall getting any comments on it. It was not shared with the External Peer Review.

Greg

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, August 9, 2021 1:09 PM
To: Euling, Susan <Euling.Susan@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review

Hi Sue,

The response to public comment was completed and reviewed by Betsy ~ 1 year ago. It also underwent a tech edit, but I can't remember if it was reviewed by Deborah. We had to have the response to public comment completed before we engaged with the OW IO last summer, so it's possible she may have already reviewed it. I just need to review the doc and update it according to changes we made in the assessment. For example, I now have to update our response to the comments about the systematic review since we removed the OPPT systematic review from the doc. Shouldn't take me too long to make the necessary changes. Let me know if you have any questions.

Britt

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Monday, August 9, 2021 12:07 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review

This is fantastic news. Thank you Brittany and Greg for carefully going through the remaining comments. Wow, also good to hear that 80 pages were dropped due to change in SR methods.

Let me take a look and then send on to Colleen to send to Deborah.

Colleen said that Deborah will need to review the public comment responses since it is typical to provide RTC for the public comments as well. This does not need to go to Deborah right away though since she is fine receiving these docs separately. Grouping comments by categories is helpful. Is this something that Tetratech could help with?

Sue

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, August 9, 2021 10:59 AM
To: Euling, Susan <Euling.Susan@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>

Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review
Importance: High

Good Morning,

Attached are clean and track change versions of the assessment for Deborah's review. Sue, I incorporated your edits outlined below and had Greg look over our interpretation of the NTP definition of adverse. I've addressed Betsy's main concerns:

-
-
-

Ex. 5 Deliberative Process (DP)

It was so satisfying cleaning the document up and especially removing the OPPT systematic review protocol, which shaved ~80 pages or so off the document.

Let me know if there is anything else you need before sending to Deborah. Included below are the major changes to help focus her review:

-
-
-
-
-

Ex. 5 Deliberative Process (DP)

Thanks again for the edits and time spent going through the document. I will move on to the Response to Public Comment Document next. Does this also need to be sent to Deborah?

All the best,
Britt

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Friday, August 6, 2021 5:19 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review

Hi Brittany,

One thing that continues to impress me is the NTP PWG assessment of the liver lesions. It is an impressive effort and it makes the document so strong.

I checked on Sec. 8.8 and had a minor change (made in the SP doc) which was "prepare bottles" to "reconstitute formula." Your and Betsy's edits to that last paragraph look great!

While I was there, I noticed a couple of minor things and made some edits for clarity on the following pages: 45, 46, 49, 53, and 100 ("health-protective" RfD can be misinterpreted and taken out of context so I spelled it out).

Ex. 5 Deliberative Process (DP)

I didn't want to make the change in the document because you may have good reasons to keep it as-is. Whatever you decide on the language, please use the same language on p. 45 as well.

If you have any questions about these additional comments, please let me know.

I know that you are also adding in the NHANES data based on Betsy's request to include the biomonitoring information on limitations of those studies (e.g., blood limit of detection etc.).

Thanks,
Sue

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, August 6, 2021 11:41 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review
Importance: High

Great! Thanks to you both for your review and helpful edits. I have gone back through and addressed comments. Sue, look at the very last section of the assessment (8.8) for updates to susceptible populations based on our conversation this morning. If you both are satisfied with the responses/edits, I can get the documents cleaned up for Deborah's review. I would like to keep the comment bubbles specific for the Tech Edit so Deborah knows there is still some work to be done to make the documents pretty and doesn't spend time calling out formatting, etc issues. Let me know!

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, August 5, 2021 7:07 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: GenX Final Assessment and Response to Second Peer Review for your review

One small comment on the response to comments. Awesome. I will give you a call tomorrow to see if you had any questions , otherwise, lets get it to Deborah next week!

Congratulations. It was a pleasure to read the peer reviewer comments after all we went through.

B

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, July 30, 2021 9:43 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: GenX Final Assessment and Response to Second Peer Review for your review
Importance: High

Good Morning,

I'm extremely happy to send you the GenX final assessment and response to the second peer review for your review. I am attaching them as links since there are multiple reviewers. The assessment is in track changes so you can see what has changed since the second peer review. Note we will need a tech edit on these documents and I have call outs to Tetra Tech for the tech edit in comment bubbles.

Highlighted below are the sections where most of the editing was done in the assessment if you want to focus your review:

- Ex. 5 Deliberative Process (DP)

There weren't too many responses needed in the response to peer review comments, but the comments needing responses were pretty meaty. I realized that I need to double check the response to public comment document and update according to the changes I made in the assessment. For example, I know the response to the comments on the systematic review need to change. I will do that once I get your comments back on these documents.

Let me know if you have any questions. I look forward to your edits and feedback!

All the best,
Brittany

Message

From: Akhter, Shamima [Akhter.Shamima@epa.gov]
Sent: 9/14/2021 10:37:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Euling, Susan [Euling.Susan@epa.gov]
Subject: FW: Quick Question about Acronyms and Abbreviations Format for GenX Document
Attachments: Acronyms and Abbreviations.docx

Please see the question below from TT and let me know at your earliest convenience. Thanks.

Hi Shamima,

Our Publishing team put the acronyms and abbreviations into a 4 column format but we notice that it looks a little busy for the reader. Please let us know if you'd like us to go ahead and use this in the document or if we should keep the 2 column version.

Thank you,

Sue

Message

From: Akhter, Shamima [Akhter.Shamima@epa.gov]
Sent: 9/15/2021 11:40:21 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Euling, Susan [Euling.Susan@epa.gov]
Subject: RE: Quick Question about Acronyms and Abbreviations Format for GenX Document

Okay – go for 4 column. Thanks.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, September 15, 2021 6:39 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Quick Question about Acronyms and Abbreviations Format for GenX Document

Hi Shamima,

Yes, this is how I would like the acronyms and abbreviations list. Thanks so much!

Britt

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Tuesday, September 14, 2021 6:38 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>
Subject: FW: Quick Question about Acronyms and Abbreviations Format for GenX Document

Please see the question below from TT and let me know at your earliest convenience. Thanks.

Hi Shamima,

Our Publishing team put the acronyms and abbreviations into a 4 column format but we notice that it looks a little busy for the reader. Please let us know if you'd like us to go ahead and use this in the document or if we should keep the 2 column version.

Thank you,

Sue

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 10/5/2021 4:49:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: closing the loop: GenX Response to public comments

Getting there. Thanks all

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, October 5, 2021 10:04 AM
To: Euling, Susan <Euling.Susan@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: closing the loop: GenX Response to public comments

Hi Sue,

Thanks for pinging us on these outstanding items and incorporating Tala's responses in this updated version. Here is the doc number for the GenX assessment: 822R21010. I think the other two items are for Betsy. Thanks again for your help with this document.

Britt

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Tuesday, October 5, 2021 9:52 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: FW: closing the loop: GenX Response to public comments
Importance: High

Hi Brittany and Betsy,

I am waiting to hear back from you on 3 items below – see yellow highlight.

Happy to make the changes if you let me know the info.

Thanks,
Sue

From: Euling, Susan
Sent: Thursday, September 30, 2021 11:43 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: closing the loop: GenX Response to public comments
Importance: High

Hello Betsy, Brittany, and Greg,

The changes that were discussed (email chain below) have been made (clean and tracked changes 093021 vers attached).

Outstanding changes to make:

1)
2)
3)
4)

Ex. 5 Deliberative Process (DP)

(For Tech Edit, please let TT know whether you want to remove or keep header (with date) and footer (draft…) – What is OST format?)

Happy Oct. 1st and with no shutdown. Thank God!

Sue

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, September 29, 2021 1:56 PM
To: Euling, Susan <Euling.Susan@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: closing the loop: GenX Response to public comments

See below

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, September 29, 2021 12:49 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: closing the loop: GenX Response to public comments

I can make the changes.

Thank you Brittany for your comments, reminders below (that I already had the review back from Ryan!), and the doc number. Great.

Ex. 5 Deliberative Process (DP)

Thanks!
Sue

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, September 29, 2021 12:40 PM
To: Euling, Susan <Euling.Susan@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: closing the loop: GenX Response to public comments
Importance: High

Hi Sue,

Perfect timing, I was just about to turn my attention to this document. See below for my comments in green. If you have time to make these edits that will definitely be a huge help. Then I can move this document and the response to the 2nd peer review to a tech edit.

Thanks!
Britt

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, September 29, 2021 12:18 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: closing the loop: GenX Response to public comments
Importance: High

Hi Betsy,

I'm circling back about the response to public comments doc. Now that my computer problems have been fixed, I can make the updates but first am checking where you are with things. Attached is the post-tech edit version that Deborah reviewed.

Here is the list of things to address (not addressed in attached 090821 ver):

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

I have the time to make these edits this week (by tomorrow at latest). I will need input from Brittany for 4-6 and Betsy for 3 and 8.

Let me know if you have already done this or what remains to be done.

Thanks,
Sue

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, September 9, 2021 1:55 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Subject: For Deborah's review: GenX Response to public comments
Importance: High

Deborah,

This is the final document for your review supporting GenX. It is the response to public comments which changed from a previous version as the assessment changed. There are a few things we still need to clean up (some noted with comment bubbles) which you don't need to pay attention to:

- add EPA doc numbers;
- remove reference to PFAS Action Plan and replace with PFAS Roadmap, when available
- add in OGWDW responses (currently waiting to hear back)
- add in any corrections that OPPT or OLEM provide (email sent) on 4 comments pertaining to their programs
- add a statement about the outreach that was done (that we are about to launch; we are meeting tomorrow to strategize about the outreach.

Thanks for your review. And congratulations to Brittany, Greg and Sue for competing this document. It's almost over!

Please let me know if you want to see the track changes version of this.

Betsy

Message

From: Akhter, Shamima [Akhter.Shamima@epa.gov]
Sent: 10/14/2021 2:07:22 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: Word docs_508-Compliant Versions of the GenX Response to Public Comments and Response to Peer Reviewer Comments Documents

TT just uploaded the **508-compliant PDF version** of the GenX toxicity assessment to the Teams site that Sue set up for this project. Please let me know if you have any questions. Thanks.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Thursday, October 14, 2021 9:34 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Word docs_508-Compliant Versions of the GenX Response to Public Comments and Response to Peer Reviewer Comments Documents

Yes, thank you Shamima! You do so much for the branch by managing the TT contract so well.

Sue

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 14, 2021 9:33 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Word docs_508-Compliant Versions of the GenX Response to Public Comments and Response to Peer Reviewer Comments Documents

Wonderful, thanks so much for your help in getting these documents finalized ☺

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Thursday, October 14, 2021 8:34 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: FW: Word docs_508-Compliant Versions of the GenX Response to Public Comments and Response to Peer Reviewer Comments Documents

TT just uploaded the tech edited "clean" version of the GenX toxicity assessment to the Teams site that Sue E set up for this project.

From: Akhter, Shamima
Sent: Thursday, October 14, 2021 8:30 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: FW: Word docs_508-Compliant Versions of the GenX Response to Public Comments and Response to Peer Reviewer Comments Documents

From TT:

'Attached please find the final Word documents for the GenX response to public comments and response to peer review comments documents. I'll upload the final Word version of the GenX toxicity assessment document to EPA's Teams site next and let you know when it's available.'

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 10/20/2021 2:27:01 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: GenX Tox assessment Release - Delayed until Monday, 25 OCT

10:45 with WDD and 3 pm with ASDWA.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, October 20, 2021 10:26 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: GenX Tox assessment Release - Delayed until Monday, 25 OCT

Thanks for the minute by minute update. That is disappointing but I was wondering how tomorrow was possible without a press release in hand.

You have a meeting today with NAWQA?

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, October 20, 2021 10:23 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: GenX Tox assessment Release - Delayed until Monday, 25 OCT

Extremely disappointing. But the pressure to reach out isn't letting up

---

From: Nagle, Deborah <Nagle.Deborah@epa.gov>
Sent: Wednesday, October 20, 2021 10:18 AM
To: Schafer, Zach <Schafer.Zach@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Risley, David <Risley.David@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX Tox assessment Release - Delayed until Monday, 25 OCT

Zach,

I had a conversation with John Lucy, and based on that conversation **GenX is now going to be released on Monday, 25 OCT**. The delay is to accommodate the desire to connect with congressional members prior to the release. John assured me that the 25 OCT date is a firm date.

If you have questions, let me know.

-Deborah

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460

Office: (202) 564-1185
Mobile: Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/30/2020 11:21:48 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX uncertainty write up
Attachments: DRAFT FINAL GenX Chemicals Toxicity Assessment_Tech Edit_7.27.20_sjj_ak_jad.docx

we should chat about this

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Tuesday, September 29, 2020 4:45 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Davis, Allen <Davis.Allen@epa.gov>; Taylor, MicheleM <taylor.michelem@epa.gov>; Thayer, Kris <thayer.kris@epa.gov>; Soto, Vicki <Soto.Vicki@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>
Subject: RE: GenX uncertainty write up

Hi,

Thank you for your patience as we delved into the uncertainty factor write up following our discussion on the PFBA assessment database UF. Some overarching comments here and more specific comments in the attached. Let us know if you have any questions or want to discuss.

Ex. 5 Deliberative Process (DP)

Thanks,

Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Kraft, Andrew <Kraft.Andrew@epa.gov>
Sent: Thursday, September 24, 2020 8:18 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Davis, Allen <Davis.Allen@epa.gov>; Taylor, MicheleM <taylor.michelem@epa.gov>; Thayer, Kris <thayer.kris@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Soto, Vicki <Soto.Vicki@epa.gov>
Subject: PFBA UFD writeup

Hi Greg, Jamie, and Brittany,

Attached, please find the current writeup for the PFBA UFD decision. We are happy to discuss this with you.

In addition, we are still looking at the GenX chemicals UFD writeup (we are a bit laser focused on getting through today's Interagency meeting first). We are open to discussions on how we might make a few tweaks to each writeup to harmonize/avoid confusion across our two assessments. One preliminary thought we have is to subtly increase the

Ex. 5 Deliberative Process (DP)

Talk to you soon,
Andrew, Allen, and Michele

Andrew Kraft, PhD | Senior Science Advisor
Chemical and Pollutant Assessment Division | Center for Public Health and Environmental Assessment | U.S. EPA
1200 Pennsylvania Avenue, N.W. | Mail Code 8623R | Washington, DC 20460
Office: (202)564-0286 | Cell: (Ex. 6 Personal Privacy (PP)

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 10/21/2020 2:05:36 PM
To: Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: RE: GenX
Attachments: DRAFT FINAL GenX Chemicals Toxicity Assessment_Tech Edit_7.27.20.docx

Here you go. Close hold on this one obviously. Thanks!

Greg Miller, Senior Environmental Health Scientist
Team Lead, Human Health Risk Assessment Branch
Office of Science and Technology, Health and Ecological Criteria Division
US Environmental Protection Agency, Office of Water
1200 Pennsylvania Ave, NW (MC 4304T)
Washington, DC 20460

phone: (202) 566-2310

From: Lambert, Jason <Lambert.Jason@epa.gov>
Sent: Wednesday, October 21, 2020 9:54 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX

Hi. I just finished walking through the memo from Todd/Tala. There is definitely a lot to unpack in the UFd rationale(s). I want to dive into this more closely; as such, can you send me the current draft of the GenX assessment? I want compare notes between the assessment and Todd's summary. I will keep everything under wraps of course.

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/27/2020 12:40:00 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: thyroid questions from OW

Let me know when you are free to talk and I will set up.

From: Gilbert, Mary E. <Gilbert.Mary@epa.gov>
Sent: Tuesday, October 27, 2020 8:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Stoker, Tammy <Stoker.Tammy@epa.gov>
Subject: RE: thyroid questions from OW

Hi Jamie!
Sorry for non-reply. Happy to talk. I have mtgs today and tomorrow but could check in at the end of the day or perhaps during the lunch break. When works for you.

M

Mary E. Gilbert, PhD
US Environmental Protection Agency
Center for Public Health and Environmental Assessment
Public Health and Integrated Toxicology Division
Research Triangle Park, NC USA
Gilbert.mary@epa.gov
919 541-4394 (office)
Ex. 6 Personal Privacy (PP) cell)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, October 27, 2020 8:04 AM
To: Gilbert, Mary E. <Gilbert.Mary@epa.gov>; Stoker, Tammy <Stoker.Tammy@epa.gov>
Subject: RE: thyroid questions from OW

Mary and Tammy,
Just reaching out again to see if we can chat briefly about our issue with thyroid? Essentially its questions about a new paper on GenX and whether the assays in mice are appropriate and effects are adverse. Should not take too much of your time.

Thanks,
Jamie

From: Strong, Jamie
Sent: Thursday, October 22, 2020 2:57 PM
To: Gilbert, Mary E. <Gilbert.Mary@epa.gov>; Stoker, Tammy <Stoker.Tammy@epa.gov>
Subject: thyroid questions from OW

Tammy and Mary,
Anna Lowitt gave me your names as ORD experts in thyroid. We are working on an assessment of a PFAS (GenX) and have new data that indicates thyroid hormones are affected in mice. Anna thought that you two may be able to provide

insight into the assays used and effects observed. If you are amenable and available to a quick chat we would really appreciate it. Please let me know.

Best,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/14/2019 12:41:54 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GENX CHEMICALS TRIAGE

Leaving this one for Monday here too...I can talk for 30 min but then Ex. 6 Personal Privacy (PP)

-----Original Appointment-----
From: Strong, Jamie
Sent: Monday, October 28, 2019 10:05 AM
To: Strong, Jamie; Miller, Gregory; Jacobs, Brittany
Subject: GENX CHEMICALS TRIAGE
When: Monday, November 18, 2019 9:00 AM-11:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST;

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/26/2019 1:37:28 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX

Ex. 5 Deliberative Process (DP)

-----Original Message-----
From: Behl, Betsy
Sent: Friday, July 26, 2019 9:35 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX

Tala, sorry for the confusion. If this is an offer to assist us in responding to comments I suggest we should meet with you and Chris to discuss how he can help with the GenX assessment we are leading. I was

Ex. 6 Personal Privacy (PP)

best, Betsy

-----Original Message-----
From: Henry, Tala
Sent: Friday, July 26, 2019 9:22 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Re: GenX

Ex. 5 Deliberative Process (DP)

Sent from my iPhone

> On Jul 26, 2019, at 9:17 AM, Behl, Betsy <Behl.Betsy@epa.gov> wrote:
>

Ex. 5 Deliberative Process (DP)

>
> If Chris has time, maybe he can help us with some responses to comments on GenX?
>
> Betsy
>
> -----Original Message-----
> From: Henry, Tala
> Sent: Thursday, July 25, 2019 6:44 AM
> To: Behl, Betsy <Behl.Betsy@epa.gov>
> Subject: GenX
>
>

Ex. 5 Deliberative Process (DP)

i
>
> Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/1/2019 11:56:20 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: EU listing HFPO-DA as a substance of very high concern...

FYI

From: Gillespie, Andrew
Sent: Monday, July 01, 2019 7:56 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: EU listing HFPO-DA as a substance of very high concern...

https://echa.europa.eu/-/msc-unanimously-agrees-that-hfpo-da-is-a-substance-of-very-high-concern

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/NERL
ORD Executive Lead for PFAS R&D

Office 919 541 3655 Cell Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/6/2020 12:33:12 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "GenX Update 11 5 20" with you.

Yup perfect! Thanks for circling back around to flesh this out. Will help BB get up to speed quickly. Side note, Colleen pushed back on Deborah about meeting with Charlotte. She said that she thought we should wait until Betsy gets back on Monday to figure out next steps. Thankful for that.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, November 06, 2020 7:25 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "GenX Update 11 5 20" with you.

Took a quick look. I think Greg's edits look good and I just added in a few additions. I can look again at 10am or Monday morning.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, November 05, 2020 4:11 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "GenX Update 11 5 20" with you.

I made edits. Hope it's better. I'm off tomorrow.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, November 5, 2020 1:50 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "GenX Update 11 5 20" with you.

Lots of comments. Given Charlottes ask to meet on this, we really need to flesh this out and provide more summary of each discussion.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, November 05, 2020 1:37 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Miller, Gregory shared "GenX Update 11 5 20" with you.

Let us know if you have any edits.

This link only works for the direct recipients of this message.

GenX Update 11 5 20

Open

Microsoft OneDrive

Sender will be notified when you open this link for the first time.

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 11/5/2020 6:00:44 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: RE: GenX Chemicals follow up items

Thanks. I'll send this to Deborah.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 5, 2020 12:55 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: GenX Chemicals follow up items

That should be 2 mg/kg/day, thanks for catching!

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Thursday, November 05, 2020 12:48 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: GenX Chemicals follow up items

Looks good. Just one question. Should the highlighted bit be 2 or 0.2?

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, November 5, 2020 12:16 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX Chemicals follow up items
Importance: High

Colleen,
I wanted to update you on where we are with the follow up items Deborah asked we attend to for GenX.

1. OPP comments from Anna Lowitt

- Ex. 5 Deliberative Process (DP)

2. Outreach to thyroid experts

Ex. 5 Deliberative Process (DP)

Please let me know if you have any questions.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 11/14/2019 12:21:09 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: draft revised schedule
Attachments: Schedule for GenX-PFBS toxicity assessments 111319.docx

Feedback please

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/22/2019 5:43:01 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: schedule genx
Attachments: Proposed schedule_GenX-PFBS_07 22 19.docx

Okay so don't freak, but look at this and honestly tell me what you think...what if we get report in September?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/13/2020 5:30:41 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Your EHP Paper: EHP6233R3 - [EMID:b62ff5e5dc36fb11]

-----Original Message-----
From: Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>
Sent: Thursday, February 13, 2020 12:29 PM
To: birnbaum.tox@outlook.com; Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>; Lenox, Kelly (NIH/NIEHS) [E] <kelly.lenox@nih.gov>; wolfe@niehs.nih.gov; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Your EHP Paper: EHP6233R3 - [EMID:b62ff5e5dc36fb11]

-----Original Message-----
From: em.ehp.1c.694607.b267c7fb@editorialmanager.com <em.ehp.1c.694607.b267c7fb@editorialmanager.com> On Behalf Of Erin Dooley
Sent: Thursday, February 13, 2020 12:17 PM
To: Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>
Subject: Your EHP Paper: EHP6233R3 - [EMID:b62ff5e5dc36fb11]

CC: "Bevin E. Blake" bevin.blake@nih.gov, "Harlie A. Cope" harlie.cope@bcm.edu, "Samantha M. Hall" sam.hall@duke.edu, "Robert D. Keys" robert.keys@nih.gov, "Beth W. Mahler" mahler1@niehs.nih.gov, "James McCord" mccord.james@epa.gov, "Brittany Scott" brittany.scott@nih.gov, "Heather M. Stapleton" heather.stapleton@duke.edu, "Mark J. Strynar" strynar.mark@epa.gov, "Susan A. Elmore" susan.elmore@nih.gov

Ref.: Ms. No. EHP6233R3
Evaluation of maternal, embryo, and placental effects in CD-1 mice following gestational exposure to perfluorooctanoic acid (PFOA) or hexafluoropropylene oxide dimer acid (HFPO-DA or GenX) Environmental Health Perspectives

Dear Dr. Fenton,

Your paper "Evaluation of maternal, embryo, and placental effects in CD-1 mice following gestational exposure to perfluorooctanoic acid (PFOA) or hexafluoropropylene oxide dimer acid (HFPO-DA or GenX)" is now available on the Environmental Health Perspectives website at https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fehp.niehs.nih.gov%2Fdoi%2F10.1289%2FEHP6233&data=02%7C01%7CMiller.Gregory%40epa.gov%7C8e9480165c38400cb47408d7b0aa7317%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637172118425649828&sdata=oZMQnbewLPbfUHcqAT%2ByNyPYHtrxSt2oQBt8TVLirj0%3D&reserved=0. Please note it will take approximately 48 hours for your paper to appear in PubMed and for its DOI to be activated by CrossRef.

Best regards,

Erin Dooley
Writer/Editor, Environmental Health Perspectives National Institute of Environmental Health Sciences
National Institutes of Health U.S. Department of Health and Human Services
https://gcc01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.ehponline.org%2F&data=02%7C01%7CMiller.Gregory%40epa.gov%7C8e9480165c38400cb47408d7b0aa7317%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637172118425649828&sdata=zBHpiOENkoXcSi865urBHSyKfLEOykX5cfWQB%2Bj%2F5WI%3D&reserved=0

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.editorialmanager.com%2Fehp%2Flogin.asp%3Fa%3Dr&data=02%7C01%7CMiller.Gregory%40epa.gov%7C8e9480165c38400cb47408d7b0aa7317%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637172118425659781&sdata=uvC%2BXeP1SpGMe41MfPthtmBW8OQTznSztramU8kYWzw%3D&reserved=0). Please contact the publication office if you have any questions.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/20/2020 6:25:04 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Conley 2019 write up and thoughts about GenX

I went through Conley and Li. Had some edits and comments. I blocked all Wednesday next week. I would really like to start digging into the to do list. We can do edits in real time or get together to discuss issues and then break.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 19, 2020 2:15 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

Hi,

I just finished with the Conley paper. There are sections in 2.3.3 distribution in gestation and lactation, 4.5 repro and developmental and 4.6.2 mechanistic studies. I am a little torn on whether we should separate out the mechanistic section from the repro/developmental writeup. At first I thought we should, but we don't do that for any of the other studies. There is just a lot of mechanistic data in the Conley study. Anyway, see what you think. On to the Blake paper!

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, February 18, 2020 2:52 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

This looks good. I will send to Barbara.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, February 18, 2020 2:38 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

Hello,

Attached is a TD to get ICF going on summarizing the systematic review work they've done and to summarize some studies for us. Edit as you see fit. I tried to include examples of what we want instead of spending the time writing out all of the specific details. Let me know if you want edits. I've attached the full text articles they will need for the study summaries and the draft GenX chemicals assessment for reference.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, February 18, 2020 7:06 AM

To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

Sounds good.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, February 18, 2020 4:05 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

Under WA 3-16, we ask ICF to assist us with conducting systematic reviews on "unregulated and emerging chemicals of concern identified as needed" TD-4 was used to conduct the systematic review for GenX. I think this is just the next step of the systematic review process for that TD. Additionally, we have a general project support task (Task 5) that this could fall under. I could write up a TD for ICF to write up the systematic review work they did under TD-4 and ask them to provide summaries of these studies and any other studies we may identify with the update literature search. Let me know your thoughts.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 13, 2020 9:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Conley 2019 write up and thoughts about GenX

Okay I need to figure out what WA this would fall under and whether its within scope and a TD to do this.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 12, 2020 5:22 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Conley 2019 write up and thoughts about GenX

Hello,

I think I am finished with the developmental/reproductive write-up for the Conley et al 2019 paper if someone wants to read it over and see if it makes any sense. I still need to work on the mechanistic section for this paper but want to come up with a strategy. There is also serum data in the Conley paper, so that needs to be added to the toxicokinetic section.

Once I get finished with the Conley paper, I think the next thing I'll do is work on summarizing the Blake paper.

There are three more mechanistic papers to be summarized, maybe this is something ICF can do? I've attached the papers to this email. Maybe they can also provide some input on the adversity of gestational weight gain.

I hope everyone has a good long weekend. As a reminder I'm teleworking on Tuesday. I've forwarded my desk phone to my cell, but you can just call my cell too Ex. 6 Personal Privacy (PP)

See you Wednesday!
Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/2/2020 2:50:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GWG

Go ahead and look at the DB UF write up, I am sure I got it wrong.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 02, 2020 6:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 12:30 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, February 27, 2020 12:29 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: GWG

Hey,

Ex. 5 Deliberative Process (DP)

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 11:48 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, February 27, 2020 11:48 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 11:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie
Sent: Thursday, February 27, 2020 11:46 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GWG

So not feeling great about this again. Was reading Blake again and found this:

In contrast, a decrease in mean maternal weight gain was reported in a recent study of gestational exposure to GenX in rats exposed to 250 or 500mg/kg/d500mg/kg/d (**Conley et al. 2019**). Although these findings are not consistent with the higher GWG reported here, it is possible that statistical methods (absolute change in maternal weight vs. relative change in weight analyzed using repeated measures models), differing windows of exposure (5 d during mid- to late gestation vs. exposure throughout gestation), and interspecies differences in preliminary PFAS elimination rates [GenX elimination half-life in rats: ~5h~5h vs. ~20h~20h in mice, (**Gannon et al. 2016**)] could explain these disparate results.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/2/2020 3:25:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GWG

Lets talk at 1030, this wasn't my understanding of this data. I thought 1037 was the only study we saw this.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 02, 2020 10:15 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, March 02, 2020 9:57 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, March 02, 2020 6:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 12:30 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, February 27, 2020 12:29 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: GWG

Hey,

Ex. 5 Deliberative Process (DP)

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 11:48 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, February 27, 2020 11:48 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, February 27, 2020 11:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GWG

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie
Sent: Thursday, February 27, 2020 11:46 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GWG

So not feeling great about this again. Was reading Blake again and found this:

In contrast, a decrease in mean maternal weight gain was reported in a recent study of gestational exposure to GenX in rats exposed to 250 or 500mg/kg/d500mg/kg/d (**Conley et al. 2019**). Although these findings are not consistent with the higher GWG reported here, it is possible that statistical methods (absolute change in maternal weight vs. relative change in weight analyzed using repeated measures models), differing windows of exposure (5 d during mid- to late gestation vs. exposure throughout gestation), and interspecies differences in preliminary PFAS

elimination rates [GenX elimination half-life in rats: ~5h~5h vs. ~20h~20h in mice, (**Gannon et al. 2016**)] could explain these disparate results.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 3/9/2020 4:35:31 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX discuss study/effect selection - Section 6
Attachments: Public Comment Draft_ Human Health Toxicity Values for GenX chemicals Section 6.pdf; GenX Section 6_ Edit Copy 3_9_20 .pdf

Attached the old version from the public comment and the newest work-in-progress version as of 12:30pm today.

Greg

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/23/2020 12:15:10 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]

Subject: talk about what's left to do for GenX
Location: Skype Meeting

Start: 3/23/2020 1:00:00 PM
End: 3/23/2020 1:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory

Join Skype Meeting

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Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/15/2019 12:31:35 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft
Attachments: PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_11 02 18_FINAL.docx

---

From: Strong, Jamie
Sent: Monday, November 05, 2018 7:35 AM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Akhter, Shamima <Akhter.Shamima@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; Carlson, Krista <Krista.Carlson@tetratech.com>
Subject: RE: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft

Sue,
Unfortunately, we had a last minute change to the ES of the GenX assessment. It's in the first paragraph. We need to fix the 508 version. The new version is attached. I attached a clean and a version highlighted with the change so you can see where it is. PFBS will be coming soon but a lot is up in the air here…I will do my best to give you all a heads up and hopefully it won't be quick turn around.

Thanks,
Jamie

From: Lanberg, Susan [mailto:Susan.Lanberg@tetratech.com]
Sent: Tuesday, September 25, 2018 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Akhter, Shamima <Akhter.Shamima@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; Carlson, Krista <Krista.Carlson@tetratech.com>
Subject: 508-Compliant Versions of GenX and PFBS RtC Documents, and 508-Compliant Version of the GenX Public Comment Draft

Jamie,

Attached please find the formatted, 508-compliant PDF versions of the GenX and PFBS RtC documents, as well as the GenX Public Comment Draft document. We have the formatted (non 508-compliant) Word versions of the files as well, in case you need those. Let us know if you have any questions.

We will wait for further direction before working on the PFBS Public Comment Draft document.

Thank you,

Sue

Susan Adair Lanberg | Environmental Scientist
Direct: (703) 385-1906, (703) 385-6000 ext.1906 | Fax: (703)385-6007
susan.lanberg@tetratech.com

Environmental Sciences
Innovative Solutions for Clean Water

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10306 Eaton Place, Suite 340 | Fairfax, VA 22030-2201 | www.tetratech.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/23/2020 6:30:18 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: week of 03/23/20 status update GenX chemicals

Can you guys look at this and add? I have to bring this up at the biweekly with Deborah tomorrow to try to convince her that other things are taking time away from this effort.

Betsy,
Here is your weekly update on where we are with the revisions of the GenX chemicals assessment. I have added updates in blue to the to do list. Number 5 is where we need to focus our attention but competing priorities (Greg currently has a 125 page perchlorate response to comment to review and Jamie has not been able to devote time to review due to the increase in online meetings, HHENS work).

Our list of to dos continues to grow, it includes the following:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.

Ex. 5 Deliberative Process (DP)

Please let me know if you have any questions.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/1/2020 11:39:05 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx

WOW, awesome! I will look at haz summary.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 01, 2020 7:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

Good Morning,

Ex. 5 Deliberative Process (DP)

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, March 27, 2020 7:38 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

I can look at this today.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, March 26, 2020 4:22 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: genx

I updated the Hazard summary for hepatic effects if someone has time to review. Working on updating the reproductive and developmental effects hazard summary now.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, March 25, 2020 11:18 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx

Yeah, BMD appendix still needs eyes but I defer to Britt. I haven't been in the document all week.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, March 25, 2020 11:17 AM

To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: genx

Where should I focus on next? Greg, BMD appendix?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/3/2020 12:29:54 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx

okay.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, April 03, 2020 7:06 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 02, 2020 2:42 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

AWESOME!!!!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 02, 2020 2:41 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

It looks like the reproductive/developmental hazard summary needs review in section 5. I'm trying to get through 6 this afternoon/early tomorrow morning, so hopefully that'll be ready for review tomorrow too.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 02, 2020 2:39 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx

let me know where to jump in next. tomorrow i only have two meetings and want to split the time between genx and tsca.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/6/2020 11:26:26 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx

This is fantastic. I will take a look.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 06, 2020 6:16 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

I've gotten through 6. There is still more work to be done on the DB UF write-up which I can work on today, but I think the rest of 6 is ready for review.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, April 03, 2020 12:43 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

I reviewed the repro dev summary section, minor comments.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, April 03, 2020 7:06 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 02, 2020 2:42 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Sent: Thursday, April 02, 2020 2:41 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

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Sent: Thursday, April 02, 2020 2:39 PM

To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx

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1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/28/2020 11:19:55 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Updates

okay let me try to read before we talk.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, April 28, 2020 7:18 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

Yes, I sent out an email last night when I logged on around 9pm that your comments had shown up. I didn't want to text at 9pm lol. Seems like that happens sometimes. There were new comments through the first paragraph in 3.3.2.2. Not sure if you had comments on the last two paragraphs of that section.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 7:15 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

my comments were there?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, April 28, 2020 5:09 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

I updated section 3 to respond to Jamie's comments and to try to make things a little more clear.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 7:36 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

Thanks…but before EPR we will have to go through the IO and to OMB. We also need to finalize the RTC, Betsy will want to see that too.

Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 27, 2020 3:48 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

Greg and I chatted and came up with the following list. I tried to separate the tasks into what needs to be done before Betsy sees (or what we can get done before Friday) and what needs to be done before releasing it for external review. Edit or move around as you see fit.

Before Betsy's Review (Friday 5/1/2020)

Review section 3.3

Clear the comments and accept redline (?), if we can't do all of the comments, then:

- Review updates to the chronic study summary 4.4
- Review the DMSO paragraph in section 4.6.2
- Review LOAEL/NOAEL determination for the Conley study into table 11
- Review Thompson study rationale in section 5.1.

Revisit the executive summary (?)

Before Releasing for External Review

Tech edit

Clear the comments and accept redline

Add new references to the reference section and clean up the references section

Recheck the BW3/4 and RfD calculations again

Incorporate Bevin and Sue's edits on their study, the MOA discussion and database UF (unless we get them before Friday)

Incorporate ORD's edits on the UF and MOA (unless we get them before Friday)

Incorporate Betsy's edits

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 2:51 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

During my PARs Betsy asked to see it by Friday. Lets chat about the list below tomorrow early if possible.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 27, 2020 12:33 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

Sure!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 12:20 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates

okay, I don't know that I can get to this today. Britt and Greg look at 6 and then I will go through it all. Also, can you come up with a list of what else needs to be done before we can give to Betsy?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, April 27, 2020 10:08 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Updates

I updated section 3.3, inserted the Conley study into table 11 (there is a comment there for you both), and added in a blurb about the Thompson study in section 5.1. Edit as you see fit and let me know your thoughts.

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/28/2020 11:35:57 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Updates

ITS PERFECT!!!!!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, April 28, 2020 7:18 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Tech edit

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Subject: RE: GenX Updates

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Sent: Monday, April 27, 2020 10:08 AM
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Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 12:56:38 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: cleaned up GenX

yes

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 29, 2020 8:56 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: cleaned up GenX

Can we go with reproductive/developmental tox instead of reproduction/developmental tox?

The title of our guidelines is "Guidelines for Reproductive Toxicity Risk Assessment", not guidelines for reproduction tox.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 29, 2020 8:24 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 8:13 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 8:03 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

but don't we do that for other studies too (think hall criteria)…just seems like we are calling attention here and I am not sure why.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 29, 2020 7:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 7:41 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

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From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 29, 2020 7:30 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: cleaned up GenX

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany
Sent: Wednesday, April 29, 2020 7:29 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
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From: Miller, Gregory <Miller.Gregory@epa.gov>
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To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: cleaned up GenX

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 7:07 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Hi there. I don't know enough about thyroid., what did we say yesterday? I will take a look at the write up.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 29, 2020 6:27 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Hi Good Morning,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 2:56 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: cleaned up GenX

just told greg, I just got through the whole doc and accepted most changes and deleted most comments. there are still a few…take a sweep through and see if you can resolve, if not we can chat.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 12:57:01 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: cleaned up GenX

but you will need to search and replace because that is not how we write 1037 title.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 29, 2020 8:56 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
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Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
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Sent: Wednesday, April 29, 2020 7:30 AM
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Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany
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From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 29, 2020 7:09 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
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Ex. 5 Deliberative Process (DP)

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To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Sent: Wednesday, April 29, 2020 6:27 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: cleaned up GenX

Hi Good Morning,

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 2:56 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: cleaned up GenX

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Jamie B. Strong | Chief, Human Health Risk Assessment Branch
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1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 4:21:21 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Materials for Bevin/Sue to review

FYI

From: Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>
Sent: Wednesday, April 29, 2020 12:18 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Materials for Bevin/Sue to review

Jamie, with all of the other stuff on our plates, Bevin and I are planning to get comments on all three documents to you on Monday 5/4 as early in the day as possible. I have two deadlines between now and Friday and she has one…

We both have comments for you and your team.

Sue

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, April 27, 2020 1:28 PM
To: Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>
Subject: RE: Materials for Bevin/Sue to review

Just checking in and making sure you don't have any questions related to what sent?

From: Strong, Jamie
Sent: Monday, April 20, 2020 7:59 AM
To: Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) <suzanne.fenton@nih.gov>
Subject: Materials for Bevin/Sue to review

Good Morning Sue,

Hope you are doing well and staying healthy!

Attached are few sections of the updated GenX chemicals toxicity assessment for your review.

Ex. 5 Deliberative Process (DP)

Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions. Thank you again, we really appreciate this!

All the best,

Jamie

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 12/10/2020 6:45:22 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX UF section

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, December 10, 2020 1:41 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: FW: GenX UF section

I thought you might be interested to see some feedback from ORD on the GenX database uncertainty factor. We reviewed PFBS and they reviewed GenX, as we coordinated on this work. The requirement from Charlotte and Dave to include a database factor of 1X is really appalling. It is number-shopping at the worst. And coercive, as we were told explicitly not to allow other scientists in EPA to provide their input. There is no new science or assessment since the first peer review that recommended a 3x that would provide a rationale for the agency to remove this uncertainty factor (1x).

I do not know if the external peer reviewers will come to same conclusion as this scientist. They could well recommend the 3x. We are not wedded to using a 10x, but we think that there is a strong argument to be made. There is, however, no new information to argue to reduce the certainty factor to a 1x.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, Office of Science and Technology
Office of Water, EPA

From: Lambert, Jason <Lambert.Jason@epa.gov>
Sent: Wednesday, September 16, 2020 12:33 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: GenX UF section

Hello again. I read sections of the GenX draft assessment again. I really like how you all handle the liver issue (e.g., constellation of lesions/effects). Specifically in regards to the application of UFs, I think it is really good. The rationales are all clear to me. I am not sure why anyone has a problem with the UFd as I think the text on pp. 87-89 (of the July 27 version) is very compelling. With all of the unknowns you all lay out for the database, I don't know how anyone could propose/support anything less than a 10.

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/30/2020 2:09:46 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX Updates 4/30

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 10:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

I didn't change the PODs. I changed the candidate RfDs in the right column of Tables 13 and 14. Those tracked changes on the PODs are from the last time we talked.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 9:56 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

okay but you changed the PODs again? the only thing I was saying is one sig fig is final RfD. Right?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 8:37 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX Updates 4/30

Done. I changed the candidate RfDs to 1 sig fig too.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 8:28 AM
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Sent: Thursday, April 30, 2020 8:20 AM

To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

Ex. 5 Deliberative Process (DP)

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ok

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Sent: Thursday, April 30, 2020 7:36 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Greg can you do that while I look at doc?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
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Jamie

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To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Hi and Good Morning,

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Ex. 5 Deliberative Process (DP)

Let me know if you want to chat about any of this. Outside of incorporating comments from ORD and Bevin and Sue, I think we are pretty much done with the assessment!

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/30/2020 7:29:37 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX Updates 4/30

okay I will go into the doc now. I have a briefing with Dave Ross at 4 and then Sophie's thing so I may not finish until tomorrow morning.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 3:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX Updates 4/30

I've been through the RTC and Draft and cleaned up where I could. Please check/edit my update of the UFd in the RTC.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 3:02 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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I've gotten through the comments

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/30/2020 3:46:18 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX Updates 4/30

I can talk now. I am booked 1230 through the rest of the day.

From: Strong, Jamie
Sent: Thursday, April 30, 2020 10:28 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: GenX Updates 4/30

I get that you are frustrated, sorry. I have GAO stuff I have to do right now, I am on call now.

Can you and Brittany please touch base first and try to figure this out.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 10:25 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

Ex. 5 Deliberative Process (DP)

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Sent: Thursday, April 30, 2020 9:56 AM
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Let me know if you want to chat about any of this. Outside of incorporating comments from ORD and Bevin and Sue, I think we are pretty much done with the assessment!

Britt

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/30/2020 2:24:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX Updates 4/30
Attachments: GenX RfD w BW3_4 & UF _ RfD v4_28_20 UFd 10 - last check v1.xlsx

Ex. 5 Deliberative Process (DP)

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c **Ex. 5 Deliberative Process (DP)**

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Let me know if you want to chat about any of this. Outside of incorporating comments from ORD and Bevin and Sue, I think we are pretty much done with the assessment!

Britt

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 5/1/2020 11:24:24 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Updates 4/30

Okay ☺

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, May 01, 2020 7:23 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

nope its fine, I am telling her she will get it next week. enjoy your weekend don't do this!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, May 01, 2020 7:22 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

Yes, still have more to do. I'll work on it today when I can and tomorrow morning. I might need some more time on Monday though. I'll keep you updated.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, May 01, 2020 7:12 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

Okay so Britt is still in the RTC?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 3:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
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Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/20/2020 5:47:15 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: schedule steps
Attachments: GenX final schedule v2.docx

thanks…take a look

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 20, 2020 12:52 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: schedule steps

Some minor tweaks to consider.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 20, 2020 10:07 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: schedule steps

Okay so like BB said she is going to talk to Deborah about strategy related to process. I have outlined what I think are the steps, stealing from what PFBS went through/is going through. Its hard to tell the time frames for some of the interagency steps based on what Jason sent. Let me know if you think I have every step here then I can worry about time. I tried to be as granular as possible. Its real rough but you might see something I am missing.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/20/2020 2:06:55 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: schedule steps
Attachments: GenX final schedule.docx

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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/20/2020 6:44:18 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: schedule steps
Attachments: GenX final schedule v3.docx

take a look…I just threw out timeframes.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 20, 2020 2:10 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: schedule steps

Ok. Yeah, the dates are going to be a mess if we have to back it in from November. But I think we need to be clear (at least in the 1st draft) that these are all the hoops we have to jump through to get this done.

Ugh. Agency Partners = IntraAgency review? Then we also need to add a row for their review/comment submission and our edits. PFBS is doing the IntraAgency review concurrently with the TWG review (see Sam's email).

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 20, 2020 1:54 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: schedule steps

I thought it meant agency folks. I need to put time frames down, I can take the first cut but I need your honest input here. Sam is right, November is horse you know what.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, May 20, 2020 1:52 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: schedule steps

Looks good. Do you think we'll need to take any action after we brief EPA partners? I'm assuming EPA partners = states and water NGOs, right?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 20, 2020 1:47 PM
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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/2/2020 11:32:00 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX schedule
Attachments: GenX final schedule 06 02 2020.docx

Importance: High

What I sent her was a draft, I said that. A starting point. Now that she has the doc she is taking things and running with them. It is overwhelming. I tried to edit. Look at this and be honest given the situation we are all three under at home and tell me if these dates are workable. Lots to talk about today.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, June 01, 2020 6:22 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX schedule

I filled in some dates. Should we go over this (highlights) with Deborah tomorrow?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 20, 2020 3:42 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: GenX schedule

Betsy,
Attached is a very rough draft schedule for wrapping up GenX. I am mainly trying to lay out process steps in some granular detail here. I am not sure about timing for some steps like reviews (i.e., how long our IO will take or what the interagency timeframes are…I cant tell from what Jason sent). This is mainly to start a discussion with you. Let me know if you want to set up time to talk, like I said its really rough. One thing that is apparent is that November is probably not possible.

Jamie

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To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX schedule

Importance: High

FYI

From: Strong, Jamie
Sent: Tuesday, June 02, 2020 7:06 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: GenX schedule
Importance: High

No, we would like to speak to you first. This is not ready to put in front of Deborah.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, June 01, 2020 6:22 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX schedule

I filled in some dates. Should we go over this (highlights) with Deborah tomorrow?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, May 20, 2020 3:42 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: GenX schedule

Betsy,
Attached is a very rough draft schedule for wrapping up GenX. I am mainly trying to lay out process steps in some granular detail here. I am not sure about timing for some steps like reviews (i.e., how long our IO will take or what the interagency timeframes are…I cant tell from what Jason sent). This is mainly to start a discussion with you. Let me know if you want to set up time to talk, like I said its really rough. One thing that is apparent is that November is probably not possible.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/5/2021 4:03:12 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Strong, Jamie shared "GenX Chemicals Factsheet_05.15.18" with you.

Can we update this to reflect current TPs and status and next steps? By 1/15?

This link only works for the direct recipients of this message.

GenX Chemicals Factsheet_05.15.18

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Message

From: Resek, Elizabeth [Resek.Elizabeth@epa.gov]
Sent: 6/4/2020 2:19:00 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
Subject: RE: List of Gen X chemicals

Thanks

Elizabeth Resek, Biosolids Lead
Health and Ecological Criteria Division
Office of Science and Technology
EPA/Office of Water
202-566-1228
resek.elizabeth@epa.gov

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, June 04, 2020 10:19 AM
To: Resek, Elizabeth <Resek.Elizabeth@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Subject: RE: List of Gen X chemicals

Here are the CAS numbers if you need them too:

Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3)

From: Resek, Elizabeth <Resek.Elizabeth@epa.gov>
Sent: Thursday, June 4, 2020 10:17 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: List of Gen X chemicals

Hi,
This is fine. I just want to be sure that what your group has been working on is included in the method.
Thanks for your help
Liz

Elizabeth Resek, Biosolids Lead
Health and Ecological Criteria Division
Office of Science and Technology
EPA/Office of Water
202-566-1228
resek.elizabeth@epa.gov

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, June 04, 2020 10:15 AM
To: Soares, Barbara <soares.barbara@epa.gov>; Resek, Elizabeth <Resek.Elizabeth@epa.gov>

Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: List of Gen X chemicals

Hi Liz,

There are multiple chemicals used in the GenX processing technology. As Barbara mentioned below, our OW assessment for GenX chemicals deals with hexafluoropropylene oxide dimer acid and its ammonium salt because OPPT reported that these are the two major chemicals used in this technology. We don't have the information on all of the chemicals involved in the process.

Let me know if you have additional questions,
Brittany

From: Soares, Barbara <soares.barbara@epa.gov>
Sent: Thursday, June 04, 2020 10:11 AM
To: Resek, Elizabeth <Resek.Elizabeth@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: List of Gen X chemicals

Liz,

Gen X chemicals may refer to hexafluoropropylene oxide dimer acid and its ammonium salt. I am cc'ing Greg Miller and Brittany for confirmation and/or further input just in case. Hope this helps.

Barbara

From: Resek, Elizabeth <Resek.Elizabeth@epa.gov>
Sent: Thursday, June 4, 2020 10:02 AM
To: Soares, Barbara <soares.barbara@epa.gov>
Subject: List of Gen X chemicals

Hi – hope you and your family are well.

Can you provide me with a list of the Gen x chemicals? They are referred to all the time but I don't know what they actually are.
Thanks
Liz

Elizabeth Resek, Biosolids Lead
Health and Ecological Criteria Division
Office of Science and Technology
EPA/Office of Water
202-566-1228
resek.elizabeth@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2020 6:57:07 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: struggle bus

thanks to you both!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, June 04, 2020 2:56 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: struggle bus

Looks good, some edits in green. Did we want to point out the systematic review section? I don't really want their review on it (because what we did is what we did) but I think they are going to be interested in it and I don't want it to look like we were trying to sneak it by. I've added a sentence about it in green, but delete if you don't think it is necessary.

Tala

Ex. 5 Deliberative Process (DP)

We appreciate OPPT's support!

Thanks,

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, June 04, 2020 1:47 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: struggle bus

Edits in blue.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, June 4, 2020 1:13 PM
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: struggle bus

I don't know why but I am struggling with this…can you guys take a look and edit as you see fit? Sorry, didn't want to bother you but I am having trouble.

Tala,

Ex. 5 Deliberative Process (DP)

We appreciate OPPT's support!

Thanks,

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/11/2020 1:50:42 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFBS MW conversions - applicable to GenX?

but I thought we discussed and decided not to do this at the beginning. we need to retrace steps here.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, June 11, 2020 9:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: PFBS MW conversions - applicable to GenX?

Ex. 5 Deliberative Process (DP)

Greg

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/11/2020 2:23:56 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFBS MW conversions - applicable to GenX?

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, June 11, 2020 10:14 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBS MW conversions - applicable to GenX?

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, June 11, 2020 9:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: PFBS MW conversions - applicable to GenX?

Ex. 5 Deliberative Process (DP)

Greg

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/14/2020 10:30:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx

Okay just went through it. Cleaned up a little more.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, June 12, 2020 4:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx

Sounds good. I got up to 7.2 in terms of cleaning up but there are some things that I need to finish/still look into. For example, I need to finish writing up the Galloway paper in the occurrence section and go back to the dev/repro study to look into GWG changes. You will see as you work through what I have left to do. I hope I can finish that Monday morning.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, June 12, 2020 2:27 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: genx

my plan is to go over start to finish this weekend...so just let me know how far you get. I can pick up clean up where you leave off. sound good?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/15/2020 4:27:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: BB is asking me to brief Deborah at biweekly on GenX

Yeah I think we have to be ready to send to Tala by end of the week.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, June 15, 2020 12:20 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: BB is asking me to brief Deborah at biweekly on GenX

This looks good to me. Sort of relatedly, I think we can be done with the draft by the end of the week. I've completed everything I said I would do in the draft based off of our discussions last week and am working on Betsy's comments in the last section (Section 8). Bevin just emailed me with some citations to incorporate into the MOA section so I should also be done that by the end of the day today/tomorrow morning.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, June 15, 2020 12:04 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: BB is asking me to brief Deborah at biweekly on GenX
Importance: High

Hey, she is forcing me to present a schedule. Can you look at this and let me know what you think?

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/16/2020 4:40:33 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX talking pts for biweekly with Deborah
Attachments: GenX Chemicals schedule 06 16 20.docx

please take a quick look

From: Strong, Jamie
Sent: Tuesday, June 16, 2020 12:26 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: GenX talking pts for biweekly with Deborah

So Betsy wants the schedule to send to Deborah. Deborah did say we should push back on TWG timelines and that she wants to know how Reg Det will impact GenX. She wants to make argument to Dave that we have resources issues.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, June 15, 2020 3:57 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX talking pts for biweekly with Deborah

Your talking points look good.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, June 15, 2020 12:35 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX talking pts for biweekly with Deborah
Importance: High

Betsy,
We should be finished with the draft by the end of this week. We need you to look through the comments were we haven't made changes but responded. That shouldn't take you too long. After that we can send to Tala.

Here are some bullets for the biweekly with Deborah as requested. This is what I feel comfortable saying, but we need to caveat this with the fact that this is based on the team is working exclusively (well not me) on this and that these dates are subject to change when things like Reg Det comments come up (which is imminent). Additionally, we have the

Ex. 6 Personal Privacy (PP)

-Received comments on MOA and UFs from ORD (Samantha Jones, Jason Lambert, Beth Owens), NIEHS (Sue Fenton and Bevin Blake) and are incorporating edits.
-Received comments from Betsy on document and response to comments, revising documents per these comments.
-Plan is to send the doc to OPPT (Tala Henry) and ask her to focus on UFs, systematic review, and changes to the derivation of the RfD based on the NTP PWG results (hopefully by end of this week)
-We have scheduled a briefing for you on 7/6, we will provide a draft for your review at this time (note tech edit will happen post your review, unless you prefer to wait)
-Brief OW IO beginning of August

Prior to peer review, will need to take charge to TWG. PFBS went through this process previously, the interagency group was given the charge and the document. They were asked to only comment on the charge. This process took 3 weeks. Anticipate briefing TWG by 8/31.
-Contract for additional peer review is already in place, we still need to engage contractor to start to put panel in place and talk about when we expect to be ready (based on TWG review this should be early to mid-September. Peer review will take 4 weeks. Following peer review, team will need to time revise (anticipate 4 weeks).
- Prior to posting we need to submit to TWG for a final interagency review (PFBS is currently in this process right now). We anticipate this will occur in November/December 2019. The timeline for the interagency review will need to be negotiated with the TWG. Following TWG review, final revisions will need to be completed before posting.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/17/2020 7:14:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Strong, Jamie shared "Briefing-draft GenX chemicals tox assessment June 2020" with you.

Sharing this now, just to share. I tried to pare down background but think we need to keep a lot of this. I am having such a hard time with this, not sure why.

This link only works for the direct recipients of this message.

Briefing-draft GenX chemicals tox assessment June 2020

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/18/2020 11:57:39 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

I will look now.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, June 18, 2020 7:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

I looked it over. No more comments from me.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 17, 2020 4:40 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

No not tough at all. Most of her responses were "good" or "excellent." Where she was okay with the edits I accepted those edits. I also added in any edits or suggestions she had for us. She made a few edits as well which I left in redline so you can see if you agree with the edit as well. I left all of her comments so you can see what she said.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, June 17, 2020 3:59 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

I just took a quick look and will dig in tomorrow if there's anything left to do. Doesn't look too tough. ☺

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 17, 2020 3:56 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

Ill take a first pass through this now/early tomorrow morning so we can wrap it up asap and get it to Tala. I'll send a link out shortly for it.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, June 17, 2020 3:42 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revisions to GenX assessment

Looks good. only a couple of suggested edits

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 17, 2020 9:07 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Reiley, Mary <Reiley.Mary@epa.gov>
Subject: FOR YOUR REVIEW-Revisions to GenX assessment
Importance: High

Betsy,
Attached is the revised GenX assessment. We have accepted edits where we have agreed with your changes and resolved those comments. For some comments, we offer alternative text or respond to your comment. We have left those edits in track changes and the comment bubbles are still visible. It would be great if you could go through these and let us know what you think. Once you have done so, I can clean up and we can send it to Tala.

We are still working on the RTC, this is a larger effort and may require some contractor support to combine/reorganize comments. The RTC will not be done this week. The team is meeting tomorrow to discuss how to approach some of the bigger issues/reorganization. I will have a better sense of when we can wrap this up after I talk to Greg and Britt tomorrow.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/19/2020 11:34:36 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Strong, Jamie is inviting you to collaborate on Briefing-draft GenX chemicals tox assessment June 18 2020

That sounds good.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, June 19, 2020 6:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Strong, Jamie is inviting you to collaborate on Briefing-draft GenX chemicals tox assessment June 18 2020

I went through and filled in the DB UF, MOA and systematic review tables. Something I feel like is missing is what the commenters said for the changes outside of the selection of critical effect. Maybe at the top of each table we can provide a brief summary of what the commenters said about the topic? Like for systematic review we say something like, the majority of comments received asked us to use ORD's systematic review process. This might help provide some context for why we did what we did. Thoughts?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, June 18, 2020 1:58 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Strong, Jamie is inviting you to collaborate on Briefing-draft GenX chemicals tox assessment June 18 2020

updated, will need help filling in the major changes. see if you like format.

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Briefing-draft GenX chemicals tox assessment June 18 2020

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/12/2021 2:31:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: fact sheet genx-need help with dates asap
Attachments: GenX Chemicals Factsheet_01122021 JBS clean.docx; GenX Chemicals Factsheet_01122021 JBS.docx

Importance: High

take a look

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/12/2021 7:36:50 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: fact sheet genx-need help with dates asap

I cant open the link, can you resend?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, January 12, 2021 2:34 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: fact sheet genx-need help with dates asap

Okay I went through it. I may have added in too much detail in some places so feel free to remove.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, January 12, 2021 1:01 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: fact sheet genx-need help with dates asap

Thanks, can you guys take a few to look at this today? Just talked to BB we can fill in with specifics and dates regarding what has happened since August. I need to get this to Colleen ASAPish.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, January 12, 2021 10:16 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: fact sheet genx-need help with dates asap

Work off this version. I'm trying to track down the dates.

Greg Miller, Senior Environmental Health Scientist
Team Lead, Human Health Risk Assessment Branch
Office of Science and Technology, Health and Ecological Criteria Division
US Environmental Protection Agency, Office of Water
1200 Pennsylvania Ave, NW (MC 4304T)
Washington, DC 20460

phone: (202) 566-2310

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, January 12, 2021 9:32 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: fact sheet genx-need help with dates asap
Importance: High

take a look

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460

☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/8/2020 11:15:32 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

okay will look.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 08, 2020 6:03 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Okay I went through. Betsy suggested some new language could be incorporated into 2.1.a so I tried. I'm not sure I like it or wanted to take the suggestion so please edit or delete as you see fit. She also asks about the ATSDR MOU, but I don't know the details of that. Think it is ready for Jamie now.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, July 07, 2020 1:58 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Britt should look first when she gets a chance.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, July 7, 2020 1:57 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

okay do I need to look at it?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, July 07, 2020 1:27 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

RTC is almost clean. Not much left to do. Edits are in the new sharepoint document I shared this morning.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, July 7, 2020 8:24 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

yes

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, July 07, 2020 8:18 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Sure. Should I delete out the comments/edits that have been resolved or accepted and leave only the items that still need action?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, July 7, 2020 8:05 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Greg can you do a sweep here?

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, July 06, 2020 5:54 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Only one or two suggestions. You have addressed my comments. On to the next thing! Very nice job on this.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 01, 2020 8:05 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Betsy,
Have you heard back from Tala? Can you ping her before you leave?

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
Attached is a draft of the GenX chemicals assessment. It has not yet been through a tech edit and has not been shared with our Office Director or the OW IO, so we ask that you not distribute this document. We would like your opinion on a

few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

To use your time most efficiently, we would like to request that you please focus your input on Section 6. The main topic areas where we would like OPPT's review are:

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2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/8/2020 12:36:25 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

I have one comment on the lang Britt added about the RfD and protecting babies.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 8:29 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 8:20 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

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Sent: Wednesday, July 08, 2020 7:45 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

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Sent: Wednesday, July 8, 2020 7:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

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Sent: Wednesday, July 08, 2020 7:15 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>

Subject: FW: Request for your review of revised GenX assessment
Importance: High

well well well

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1)

2)

Ex. 5 Deliberative Process (DP)

3)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Tala, would it be helpful to set up a meeting for you on this? any idea of when you will be done with your review?

From: Behl, Betsy
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Jamie Strong (Strong.Jamie@epa.gov) <Strong.Jamie@epa.gov>

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Importance: High

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3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/8/2020 12:54:49 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

Okay sounds good, let's do that. Thanks!! BB is gone two weeks hopefully they can do in that time frame.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 08, 2020 8:53 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

I'm good with sending both. I'll need to edit the TD, there are a few more things we wanted done for the assessment. I can get this done a little bit later this morning (**Ex. 6 Personal Privacy (PP)**

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 8:45 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Okay so we should talk more...since Tala didn't have comments should we send both the docs for tech edit? sorry I know we said no yesterday but now it's a diff story.

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Sent: Wednesday, July 08, 2020 8:43 AM
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Also good, here is the latest version

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Subject: FW: Request for your review of revised GenX assessment
Importance: High

well well well

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Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1) Ex. 5 Deliberative Process (DP)

2)

3) **Ex. 5 Deliberative Process (DP)**

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

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To: Henry, Tala <Henry.Tala@epa.gov>
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As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/8/2020 12:43:14 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Request for your review of revised GenX assessment
Attachments: TD for Technical Edit on EPA's Response to Public Comments GenX_7.2020.docx

Also good, here is the latest version

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Sent: Wednesday, July 08, 2020 8:27 AM
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Subject: RE: Request for your review of revised GenX assessment

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Subject: FW: Request for your review of revised GenX assessment
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Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1)

2)

Ex. 5 Deliberative Process (DP)

3)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM

To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Tala, would it be helpful to set up a meeting for you on this? any idea of when you will be done with your review?

From: Behl, Betsy
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Jamie Strong (Strong.Jamie@epa.gov) <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
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Thanks,

Betsy

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/8/2020 2:40:16 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

<!--[if lte mso 15 || CheckWebRef]-->

Jacobs, Brittany has shared a OneDrive for Business file with you. To view it, click the link below.

TD for Technical Edit on EPA's Response to Public Comments GenX_7.2020.docx

<!--[endif]-->

Okay the TD is updated. Link provided if you want to make any edits or additions.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 8:45 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Importance: High

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Office of Pollution Prevention & Toxics

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Sent: 7/8/2020 4:50:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

can someone send me the draft link?

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Sent: Wednesday, July 08, 2020 10:40 AM
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Sent: Wednesday, July 08, 2020 7:45 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 8, 2020 7:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 7:15 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

well well well

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1) **Ex. 5 Deliberative Process (DP)**

2)

3) **Ex. 5 Deliberative Process (DP)**

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Tala, would it be helpful to set up a meeting for you on this? any idea of when you will be done with your review?

From: Behl, Betsy
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Jamie Strong (Strong.Jamie@epa.gov) <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
Attached is a draft of the GenX chemicals assessment. It has not yet been through a tech edit and has not been shared with our Office Director or the OW IO, so we ask that you not distribute this document. We would like your opinion on a few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

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2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/8/2020 4:58:11 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

That's exciting!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 12:54 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Awesome!! Thanks I will send along.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 08, 2020 12:52 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Okay I saved new versions of the RTC and assessment specifically for tech edit in my files. I deleted out comments we need to talk to Betsy about (like the ATSDR MOU comment in the RTC doc). All that is left are comment bubbles for TT to address in the tech edit. TD is also attached.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 12:08 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

okay let me know when the docs are ready.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 08, 2020 10:40 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Okay the TD is updated. Link provided if you want to make any edits or additions.

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To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Okay so we should talk more…since Tala didn't have comments should we send both the docs for tech edit? sorry I know we said no yesterday but now it's a diff story.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 08, 2020 8:43 AM

To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Also good, here is the latest version

From: Miller, Gregory <Miller.Gregory@epa.gov>
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To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
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Sent: Wednesday, July 8, 2020 8:23 AM
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Subject: RE: Request for your review of revised GenX assessment

and are we good with the TD?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 8:22 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

I sent a new link. Will resend.

From: Strong, Jamie <Strong.Jamie@epa.gov>
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To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
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well well well

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Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1)

2)

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Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
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As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 7/8/2020 4:51:48 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment
Attachments: GenX Assessment Resp to Public Comments_Tech Edit_7.8.2020.docx; DRAFT FINAL GenX Chemicals Toxicity Assessment_Tech Edit_7.8.2020.docx; TD for Technical Edit on EPA's Response to Public Comments GenX_7.2020.docx

Importance: High

Okay I saved new versions of the RTC and assessment specifically for tech edit in my files. I deleted out comments we need to talk to Betsy about (like the ATSDR MOU comment in the RTC doc). All that is left are comment bubbles for TT to address in the tech edit. TD is also attached.

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Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
Importance: High

Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1)

2)

Ex. 5 Deliberative Process (DP)

3)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

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Cc: Jamie Strong (Strong.Jamie@epa.gov) <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
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few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

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3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Akhter, Shamima [Akhter.Shamima@epa.gov]
Sent: 7/8/2020 6:21:28 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Technical Direction for TT

Thanks. I was able to open the file and looks fine, just forwarded to Sue.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 8, 2020 2:10 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Technical Direction for TT

Let me know if this doesn't work. Thanks!

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Wednesday, July 08, 2020 2:01 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Technical Direction for TT

Hi Greg and Brittany,

Please resend the DRAFT FINAL GenX Chemicals Toxicity Assessment_Tech Edit_7.8.2020 file.

Thanks,
Shamima

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Wednesday, July 8, 2020 1:58 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Technical Direction for TT

Hi Shamima,

I was able to open two out of the three files but for some reason, it looks like the DRAFT FINAL GenX Chemicals Toxicity Assessment_Tech Edit_7.8.2020 file is a blank page when I open it. Could you re-send that particular file when you have a chance?

Thank you,

Sue

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Wednesday, July 08, 2020 1:24 PM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>

Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Technical Direction for TT
Importance: High

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Hi Sue,

Please see Jamie's email below and the attached files for the tech edit of the GenX assessment and response to comment doc. Let us know if you have any questions.

Thanks,
Shamima

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 1:06 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Technical Direction for TT
Importance: High

Shamima,
Please send the attached TD to TT. This is for the tech edit of the GenX assessment and response to comment document (also attached). I am requesting a two week turn around of this work. Please let me know if there are any questions or concerns related to the timing.

Thanks,
Jamie

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/9/2020 12:19:10 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: TO DOs GenX

Anything else? So why we are having the tech edit done we should focus on the following:

1. charge to peer reviewers-I edited but it needs a lot of work.
2. extra expertise for peer review panel-lets chat, I still don't have a sense of whether the schedule works after meeting with Deborah and when we can tell them we will have it to them, this is an important piece
3. update briefing-I believe Britt started this
4. schedule dave ross briefing-wait until BB returns
5. tech edit docs-ongoing
6. docs to Deborah-after tech edit

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/14/2020 8:44:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

I agree. I think it an important aspect of science to recognize the things you do not know and to try to take those uncertainties into account. I would hope that for new chemicals we realize there is a balance between getting new and safer products into the market and applying appropriate cautions before licensing exposure for chemicals we really do not fully understand. I think the public thinks we are taking these uncertainties into consideration.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 8:26 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Betsy,
We will take care of 1 and 2. As for 3, I tend to disagree with Tala's statement that "this DB UF is not science-based". If anything OPPT's policy NOT to apply the DB UF absent any guidance or rationale seems not based in science.

Thanks,
Jamie

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
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1)

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Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
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As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/14/2020 8:38:20 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]
CC: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

You are right about the extensive review time, given the 3-4 phases of OMB review. It is worth thinking generically about what it means to have the MOU in place with ATSDR. Lets deal with GenX separately. So don't worry about my comment.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 8:38 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Betsy,
I think we need to talk about your comment about ATSDR and the MOU. If we add an additional review step, this increases the timeline to get this done. ATSDR is part of the TWG. They did not provide their PFAS docs to us before going to the TWG, we commented during that process. Happy to talk more.

Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, July 06, 2020 5:54 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Only one or two suggestions. You have addressed my comments. On to the next thing! Very nice job on this.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 01, 2020 8:05 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Betsy,
Have you heard back from Tala? Can you ping her before you leave?

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>

Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
Attached is a draft of the GenX chemicals assessment. It has not yet been through a tech edit and has not been shared with our Office Director or the OW IO, so we ask that you not distribute this document. We would like your opinion on a few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

To use your time most efficiently, we would like to request that you please focus your input on Section 6. The main topic areas where we would like OPPT's review are:

1. the selection of the critical study and effect (section 6.1; the critical study is still the DuPont repro/dev study, but endpoint has changed to a constellation of liver lesions in females based on the NTP PWG conclusions).
2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/20/2020 11:35:18 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Technical Direction for TT

okay I am off for a couple hours this morning. back around 10.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, July 20, 2020 7:25 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Technical Direction for TT

I'm looking at this now and will have responses in a little bit. Greg, there are citations for Blake, Conley, and Thompson in this document that you can use for the charge.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, July 17, 2020 11:14 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Technical Direction for TT

Can you two take a look?

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Friday, July 17, 2020 11:11 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>
Subject: RE: Technical Direction for TT

Hi Shamima,

We are making good progress with the technical editing of the GenX documents. We've compiled our questions to-date for all of you in the attached document. Most of the questions are about the references for the GenX Human Health Toxicity Values document, and we also have some overall format questions about the GenX Response to Comments document.

Thank you,

Sue

From: Lanberg, Susan
Sent: Wednesday, July 08, 2020 1:28 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Hochheimer, John <John.Hochheimer@tetratech.com>
Subject: RE: Technical Direction for TT

Hi Shamima,

Thanks for sending us this TD. We'll get started on it right away. We'll let you know if we have any questions as we review the files.

Sue

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Wednesday, July 08, 2020 1:24 PM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Technical Direction for TT
Importance: High

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Hi Sue,

Please see Jamie's email below and the attached files for the tech edit of the GenX assessment and response to comment doc. Let us know if you have any questions.

Thanks,
Shamima

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 1:06 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Technical Direction for TT
Importance: High

Shamima,
Please send the attached TD to TT. This is for the tech edit of the GenX assessment and response to comment document (also attached). I am requesting a two week turn around of this work. Please let me know if there are any questions or concerns related to the timing.

Thanks,
Jamie

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/27/2020 5:47:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Technical Direction for TT

Thanks. Ash knows how to do the EPA number thing.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, July 27, 2020 1:42 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Technical Direction for TT

It looks good, I downloaded the documents and cleared all comments so you can pass on to Betsy. The two comments were more of an fyi. One thing they pointed out is I think we will need to request new EPA document numbers for the final assessment and the response to public comment doc. I will put this on my to-do list. I think it was a relatively easy thing to do for the draft.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, July 27, 2020 12:52 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Technical Direction for TT

Go ahead and take a look. I told Betsy this was coming, she was like you gave yourself a week do you actually need it? She wants to send to Deborah ASAP. She is getting all squirrely about schedule. She wants to cut our review times. I pushed back. Just FYI.

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Monday, July 27, 2020 12:46 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; jessica.frank1@tetratech.com; Ebers, Anna <Anna.Ebers@tetratech.com>
Subject: RE: Technical Direction for TT

Hi Jamie,

We went through the comments that Brittany added and addressed them. We've uploaded today's clean versions of the tech edited GenX documents to the OneDrive folder link below in the Tech Edited Documents_07.27.20 subfolder. The assessment document doesn't have any comments in it now. We have two very minor comments left in the response to comments document.

Ex. 6 Personal Privacy (PP)

Please let us know if you have any questions or need anything else.

Thank you,

Sue

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, July 27, 2020 9:31 AM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>; Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Hochheimer, John <John.Hochheimer@tetratech.com>; Frank, Jessica1 <JESSICA.FRANK1@tetratech.com>; Ebers, Anna <Anna.Ebers@tetratech.com>
Subject: RE: Technical Direction for TT

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

See Brittany's responses in Sharepoint. Thanks!

Jamie

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Wednesday, July 22, 2020 5:55 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; John Hochheimer <john.hochheimer@tetratech.com>; jessica.frank1@tetratech.com; Ebers, Anna <Anna.Ebers@tetratech.com>
Subject: RE: Technical Direction for TT

Hi, all,

We've upload the tech edited GenX documents to the OneDrive folder link below. Note that we have some questions and comments for you in the files.

Ex. 6 Personal Privacy (PP)

Please let us know if you have any questions.

Thank you,

Sue

Susan Adair Lanberg | Environmental Scientist
Direct: (703) 385-1906, (703) 385-6000 ext.1906 | Fax: (703)385-6007
susan.lanberg@tetratech.com

Environmental Sciences
Innovative Solutions for Clean Water

Tetra Tech | Complex World, Clear Solutions
10306 Eaton Place, Suite 340 | Fairfax, VA 22030-2201 | www.tetratech.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/3/2020 2:53:16 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: genx schedule
Attachments: Briefing-draft GenX chemicals tox assessment July 6 2020.docx

need to discuss this and add to briefing ASAP. I will look for a time.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, July 28, 2020 4:44 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: genx schedule

We can use this as a conversation starter with Deborah tomorrow. We have a plan a and a plan b, we may need a plan c☺ I asked Ashley to work up some gantt charts. Maybe after we get feedback from Deborah.

b

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/3/2020 5:12:03 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx ?

thank you

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, August 03, 2020 1:08 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx ?

I'm not sure how Hannah did it, but my recollection was that it was through ECOS who selected 5 or so states as representatives. All of the presentations we made for the state interactions are labeled with "ECOS". I went back and looked at the attendees list for these meetings and folks from ASDWA were also invited. We did separate calls for NC.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, August 03, 2020 10:51 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx ?

did we engage the states in the interagency process through ecos or asdwa? I know Hannah handled that but do you know?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/18/2020 2:35:16 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Request for your review of revised GenX assessment
Attachments: DRAFT FINAL GenX Chemicals Toxicity Assessment 6_18_20.docx

Importance: High

and there we go...

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
Attached is a draft of the GenX chemicals assessment. It has not yet been through a tech edit and has not been shared with our Office Director or the OW IO, so we ask that you not distribute this document. We would like your opinion on a few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

To use your time most efficiently, we would like to request that you please focus your input on Section 6. The main topic areas where we would like OPPT's review are:

1. the selection of the critical study and effect (section 6.1; the critical study is still the DuPont repro/dev study, but endpoint has changed to a constellation of liver lesions in females based on the NTP PWG conclusions).
2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/2/2020 2:42:39 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: 2nd PFAS Federal Information Exchange this Friday 8/28/20

can you summarize the new data so I can send to Betsy? I will touch base with Sue.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, September 02, 2020 10:32 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: 2nd PFAS Federal Information Exchange this Friday 8/28/20

Bevin's presentation is attached. It's too big to share as a copy. There are new data from around slide 14 on with a study looking at effects of GenX at lower doses. I asked Bevin if there are timelines for publishing the data, but it might be good to reach out to Sue also since Bevin moved on to a new postdoc.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, September 02, 2020 7:49 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: 2nd PFAS Federal Information Exchange this Friday 8/28/20

Yup. I literally laughed at Betsy and was like yeah that's not new its WHAT WE USE AS OUR JUSTIFICATION.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, September 02, 2020 7:49 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: 2nd PFAS Federal Information Exchange this Friday 8/28/20

Sure, I can ask her for her slides. Based on the name of her talk I don't think she presented anything new. Haha, we only cited Blake about 5 times in the DB UF write up.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, September 02, 2020 7:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: 2nd PFAS Federal Information Exchange this Friday 8/28/20

Betsy is mad at me that I didn't attend this (I forgot). Can you ask Bevin for her slides? She was like Ed said someone named Blake spoke and that would support our UFs. LOL.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, August 26, 2020 12:39 PM
To: Hisel-Mccoy, Sara <Hisel-McCoy.Sara@epa.gov>; Wood, Robert <Wood.Robert@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>
Subject: 2nd PFAS Federal Information Exchange this Friday 8/28/20

Making sure you all have the necessary information to sign up for the webinar, if you are interested

From: Lan, Alexis <lan.alexis@epa.gov>
Sent: Tuesday, August 18, 2020 4:29 PM
To: Lan, Alexis <lan.alexis@epa.gov>
Subject: August 2th - 2nd PFAS Federal Information Exchange

Apologies for cross-posting

EPA PFAS Network,

Please see the attached details for the next Federal Information Exchange. The registration link can be found here:
Ex. 6 Personal Privacy (PP)

Regards,

Alex Lan, MPH
Physical Scientist
Office of Ground Water and Drinking Water
Standards and Risk Management Division
U.S. Environmental Protection Agency
Washington, D.C.
Lan.Alexis@epa.gov
(Desk) 202.564.0841
(Mobile) 703.303.7791

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/7/2018 4:15:35 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Re: oppt meeting today topics

I don't think we can get into the weeds on UFs today. Tell them it coming and we have questions on sc to c and db.

From: Miller, Gregory
Sent: Wednesday, March 7, 2018 11:14 AM
To: Strong, Jamie; Jacobs, Brittany
Subject: RE: oppt meeting today topics

Here's what I came up with as a starting point on the GenX UFs. They are very draft, and I'd like to get your input before we share these with OPPT. But you might want to read them before our 12:30 meeting w/ OPPT since they will inform some of our discussion topics.

Greg

From: Strong, Jamie
Sent: Wednesday, March 7, 2018 9:20 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: oppt meeting today topics

Yup forgot that one.

From: Jacobs, Brittany
Sent: Wednesday, March 7, 2018 9:19 AM
To: Strong, Jamie; Miller, Gregory
Subject: RE: oppt meeting today topics

I think we should ask them about the status of the study review write up and the physical chemical properties/fate write up

---

From: Strong, Jamie
Sent: Wednesday, March 07, 2018 9:18 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: oppt meeting today topics

Make sure we bring up using their SRC mission contract and whether we can use it to do a lit flow diagram. I have money to transfer to them.

UF subchronic and UF DB write ups coming for discussion

Slides for ECOS and fed fam to them

anything else?

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/25/2020 6:28:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: new issue-Ed

So Ed is questioning the progression argument for SC to C UF for GenX. Betsy asked that I set up a call with him to talk. Britt, I will try to find time tomorrow…any time better for you?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/13/2020 5:30:32 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: talk about GenX

do you all see the Teams link in invite? I am having issues, if not use my call in Ex. 6 Personal Privacy (PP)

-----Original Appointment-----
From: Strong, Jamie
Sent: Thursday, August 13, 2020 7:30 AM
To: Strong, Jamie; Behl, Betsy; Jacobs, Brittany; Miller, Gregory
Subject: talk about GenX
When: Thursday, August 13, 2020 1:30 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

We will see if this works, having issues with Teams today.

Join Microsoft Teams Meeting

+ Ex. 6 Personal Privacy (PP) nited States, Washington DC (Toll)

Conference Ex. 6 Personal Privacy (PP)

Local numbers | Reset PIN | Learn more about Teams | Meeting options

By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 3/7/2018 4:14:30 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: oppt meeting today topics
Attachments: GenX Uncertainty Factors 3 7 18.docx

Here's what I came up with as a starting point on the GenX UFs. They are very draft, and I'd like to get your input before we share these with OPPT. But you might want to read them before our 12:30 meeting w/ OPPT since they will inform some of our discussion topics.

Greg

From: Strong, Jamie
Sent: Wednesday, March 7, 2018 9:20 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: oppt meeting today topics

Yup forgot that one.

From: Jacobs, Brittany
Sent: Wednesday, March 7, 2018 9:19 AM
To: Strong, Jamie; Miller, Gregory
Subject: RE: oppt meeting today topics

I think we should ask them about the status of the study review write up and the physical chemical properties/fate write up

---

From: Strong, Jamie
Sent: Wednesday, March 07, 2018 9:18 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: oppt meeting today topics

Make sure we bring up using their SRC mission contract and whether we can use it to do a lit flow diagram. I have money to transfer to them.

UF subchronic and UF DB write ups coming for discussion

Slides for ECOS and fed fam to them

anything else?

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/18/2020 4:21:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: meeting request with Charlotte Bertrand

FYI, this is the meeting with Charlotte. Short notice I know.

From: Snowden, Belinda <snowden.belinda@epa.gov>
Sent: Tuesday, August 18, 2020 11:49 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: meeting request with Charlotte Bertrand

Meeting has been requested for the 24th or 25th of next week. Due to scheduling conflicts.
Thanks

~~Belinda~th~

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, August 17, 2020 5:03 PM
To: Snowden, Belinda <snowden.belinda@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: meeting request with Charlotte Bertrand

Topic: GenX follow up questions
Who: Charlotte Bertrand, Deborah Nagle, Betsy Behl, Jamie Strong, Brittany Jacobs, Greg Miller
When: asap.

- Note Brittany must be there and she is out next Thursday and Friday (8/27-28).
- Note that Jamie has other commitments after 3:30 pm every day, so it must be before that.
- Note that Betsy has a Dr appt on Wednesday afternoon.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/27/2021 1:15:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX DB UF reorg

Okay will take a look today.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, January 27, 2021 7:02 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX DB UF reorg

I've updated according to our discussion yesterday. I think it's ready for review.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, January 25, 2021 2:24 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX DB UF reorg

My comments/edits should be there. We can chat tomorrow, but we should be aiming for end of the week to have a draft and the charge to send to Betsy.

Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, January 25, 2021 7:20 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX DB UF reorg
Importance: High

Good Morning,

Ex. 5 Deliberative Process (DP)

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/6/2018 2:29:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: side by side workplan genx PFBS
Attachments: detailed workplan comparison GenX PFBS 2.26.18etl.docx; ATT00001.htm

---

From: Gillespie, Andrew
Sent: Tuesday, March 06, 2018 9:27 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Subject: Fwd: side by side workplan genx PFBS

Andrew JR Gillespie, PhD
Associate Director USEPA/ORD/NERL
ORD Executive Lead for PFAS R&D

Office 9195413655. Mobile Ex. 6 Personal Privacy (PP)

Begin forwarded message:

> **From:** "Lavoie, Emma" <Lavoie.Emma@epa.gov>
> **Date:** February 26, 2018 at 5:28:23 PM EST
> **To:** "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Bahadori, Tina" <Bahadori.Tina@epa.gov>
> **Cc:** "Owens, Beth" <Owens.Beth@epa.gov>, "Lambert, Jason" <Lambert.Jason@epa.gov>, "Champlin, Anna" <Champlin.Anna@epa.gov>
> **Subject: side by side workplan genx PFBS**
>
> For discussion at 9 on Tuesday as needed.
> Please see attached resulting from discussion between me and Beth just now.
>
> Do note yellow and blue highlights on the items that don't align. We note that OW has 4 weeks for revisions post peer review. Maybe they could just delay the start of their peer review by 1 week to same time as ours?
> Also a comment on the second Fed Agency update – seems rather soon.
>
> -Emma
>
> ---
>
> Emma T. Lavoie, PhD
> Tel: 202.564.7091

Message

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Subject: FW: perfluorooctanoate OR "perfluorooctanoic acid" OR - PubMed Literature search

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Sent: Tuesday, March 06, 2018 6:47 PM
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Hi Joyce,

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Jenn

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PubMed Results

Items 1 - 52 of 52 (Display the 52 citations in PubMed)

1. Chemosphere. 2018 Feb 10;200:124-132. doi: 10.1016/j.chemosphere.2018.02.065. [Epub ahead of print]

Anaerobic biodegradation of 8:2 fluorotelomer alcohol in anaerobic activated sludge: Metabolic products and pathways.

Li F[1], Su Q[1], Zhou Z[1], Liao X[1], Zou J[1], Yuan B[2], Sun W[3].

Author information:

1 Xiamen Engineering & Technology Research Center for Urban Water Environment Planning and Remediation, College of Civil Engineering, Huaqiao University, Xiamen, 361021, China.

2 Xiamen Engineering & Technology Research Center for Urban Water Environment Planning and Remediation, College of Civil Engineering, Huaqiao University, Xiamen, 361021, China. Electronic address: blyuan@hqu.edu.cn.

3 Department of Civil and Environmental Engineering, Southern Methodist University, Dallas, TX, 75275, USA. Electronic address: wsun@smu.edu.

Abstract

The anaerobic biodegradability and metabolic pathways of 8:2 fluorotelomer alcohol (8:2 FTOH) were investigated in anaerobic activated sludge. The biodegradation was well described by a double exponential decay model. 8:2 FTOH was biodegraded to poly- and perfluorinated metabolites with the release of fluoride ion. All polyfluorinated metabolites were intermediate metabolic products and could be further transformed to other metabolites, while perfluorinated metabolites were terminal products. 2H-perfluoro-2-decenoic acid (8:2 FTUA) and perfluorooctanoic acid (PFOA) were verified as the most abundant poly- and perfluorinated metabolites, respectively. Two shorter-chain perfluorinated metabolites, perfluoropentanoic acid (PFPeA) and perfluorobutyric acid (PFBA), were first reported in the biodegradation of 8:2 FTOH. However, the total molar recovery of 8:2 FTOH decreased with increasing incubation time, indicating that there might be some unknown metabolites. Thus, the anaerobic biodegradation pathways were proposed as follows: 8:2 FTOH was oxidized to 8:2 FTUA and 2-perfluorooctyl ethanoic acid (8:2 FTCA) via 2-perfluorooctyl acetaldehyde

(8:2 FTAL), and then 8:2 FTUA and 8:2 FTCA were further transformed to 1-perfluoroheptyl ethanol (7:2 sFTOH) via 3-perfluoroheptyl propionic acid (7:3 acid) or/and 3-perfluoroheptyl acrylic acid (7:3 Uacid), and eventually 7:2 sFTOH was further biodegraded to PFOA and other perfluorocarboxylates containing less than eight carbons.

PMID: 29476957

Similar articles

2. Mar Pollut Bull. 2018 Feb;127:285-288. doi: 10.1016/j.marpolbul.2017.12.020. Epub 2017 Dec 21.

Occurrence and distribution of perfluoroalkyl substances (PFASs) in sediments of the Dalian Bay, China.

Ding G[1], Xue H[2], Zhang J[3], Cui F[4], He X[5].

Author information:

1 College of Environmental Science and Engineering, Dalian Maritime University, Linghai Road 1, Dalian 116026, PR China. Electronic address: guanghuiding@dlmu.edu.cn.

2 College of Environmental Science and Engineering, Dalian Maritime University, Linghai Road 1, Dalian 116026, PR China.

3 College of Environment and Chemical Technology, Dalian University, Dalian 116622, PR China. Electronic address: zhangjing@dlu.edu.cn.

4 College of Environment and Chemical Technology, Dalian University, Dalian 116622, PR China.

5 Key Laboratory of Industrial Ecology and Environmental Engineering (Ministry of Education), School of Environmental Science and Technology, Dalian University of Technology, Dalian 116024, PR China.

Abstract

In the present study, the spatial distributions and vertical variations of PFASs in the sediments of the Dalian Bay were investigated. The total concentrations of PFASs (∑PFASs) in surface sediments of Dalian Bay ranged from 1.49 to 2.66ngg^{-1} dw. The predominant PFASs in surface sediments were PFOA, PFBS and PFBA with the concentration ranges of 0.50 to 0.95, 0.21 to 0.94, and 0.035 to 0.32ngg^{-1} dw, respectively. For the two sediment cores, ∑PFASs ranged from 1.20 to 2.00 and from 1.37 to 2.06ngg^{-1} dw, respectively. There was a maximum ∑PFASs concentration value near the surface. In general, ∑PFASs gradually decreased with increasing sampling depth after reaching the maximum. PFOA, PFBS and PFBA were also the predominant PFASs in the two sediment cores. It is recommended that the monitoring and risk assessment of short-chain PFAS should be taken into consideration, and further researches are needed to understand the transportation and fate of these chemicals in the aquatic environment.

PMID: 29475664
Similar articles

3. Mar Pollut Bull. 2018 Feb;127:207-210. doi: 10.1016/j.marpolbul.2017.11.058. Epub 2017 Dec 21.

First observations of perfluorooctane sulfonate occurrence and depuration from Sydney Rock Oysters, Saccostrea glomerata, in Port Stephens NSW Australia.

O'Connor WA[1], Zammit A[2], Dove MC[3], Stevenson G[4], Taylor MD[3].

Author information:

1 Department of Primary Industries - Fisheries, Port Stephens Fisheries Institute, Research Rd, Taylors Beach, NSW 2316, Australia. Electronic address: wayne.o'connor@dpi.nsw.gov.au.

2 Department of Primary Industries - Food Authority, 6 Avenue of the Americas, Newington, NSW 2127, Australia.

3 Department of Primary Industries - Fisheries, Port Stephens Fisheries Institute, Research Rd, Taylors Beach, NSW 2316, Australia.

4 National Measurement Institute, Department of Industry and Science, PO Box 138, North Ryde, NSW 1670, Australia.

Abstract

Following the discovery of potential chronic perfluoroalkyl substances (PFAS) contamination of Tilligerry Creek, Port Stephens (New South Wales Australia), sampling was undertaken to confirm the presence, extent and levels of contamination in commercial oyster crops of Sydney Rock Oyster (Saccostrea glomerata) and Pacific Oyster (Crassostrea gigas) grown within the estuary. Among a range of PFAS tested, only perfluorooctane sulfonate (PFOS) was detected. Concentrations of PFOS in oyster tissues for S. glomerata ranged from 1.6μgkg^{-1} ww (wet weight) to below the limit of reporting of 0.3μgkg^{-1} ww, with concentrations generally decreasing toward the lower reaches of the estuary. The sample of C. gigas tested had a PFOS concentration of 0.71μgkg^{-1} ww that was consistent with concentrations observed in nearby S. glomerata. For harvest size (50-60g) S. glomerata, both holding contaminated oysters in a depuration system, and relocation to a non-contaminated area, saw significant reductions in the tissue PFOS concentrations. For oysters held in a depuration system, PFOS depurated at a rate of 0.008h^{-1} (0.004-0.019h^{-1}; 90% CI), which corresponded with a depuration half-life of 87h (35-155h; 90%). A more conservative model (fitted to data that assumed concentrations<LOR were equal 0.5·LOR) predicted a depuration half-life of 131h. PFOS concentrations had fallen to below detectable limits within 162h. Similar decreases were observed in relocated oysters.
PMID: 29475655

Similar articles

4. Chemosphere. 2018 Feb 12;199:453-458. doi: 10.1016/j.chemosphere.2018.02.074. [Epub ahead of print]

Selection criteria for oxidation method in total organic carbon measurement.

Yoon G[1], Park SM[1], Yang H[1], Tsang DCW[2], Alessi DS[3], Baek K[4].

Author information:

1 Department of Environmental Engineering and Soil Environment Research Center, Chonbuk National University, 567 Baekje-daero, Deokjin, Jeonju, Jeollabukdo 561-756, Republic of Korea.

2 Civil and Environmental Engineering, Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China.

3 Department of Earth and Atmospheric Sciences, University of Alberta, 1-26 Earth Sciences Building, University of Alberta, Edmonton, AB T6G 2E3, Canada.

4 Department of Environmental Engineering and Soil Environment Research Center, Chonbuk National University, 567 Baekje-daero, Deokjin, Jeonju, Jeollabukdo 561-756, Republic of Korea. Electronic address: kbaek@jbnu.ac.kr.

Abstract

During the measurement of total organic carbon (TOC), dissolved organic carbon is converted into CO_2 by using high temperature combustion (HTC) or wet chemical oxidation (WCO). However, the criteria for selecting the oxidation methods are not clear. In this study, the chemical structures of organic material were considered as a key factor to select the oxidation method used. Most non-degradable organic compounds showed a similar oxidation efficiency in both methods, including natural organic compounds, dyes, and pharmaceuticals, and thus both methods are appropriate to measure TOC in waters containing these compounds. However, only a fraction of the carbon in the halogenated compounds (perfluorooctanoic acid and trifluoroacetic acid) were oxidized using WCO, resulting in measured TOC values that are considerably lower than those determined by HTC. This result is likely due to the electronegativity of halogen elements which inhibits the approach of electron-rich sulfate radicals in the WCO, and the higher bond strength of carbon-halogen pairs as compared to carbon-hydrogen bonds, which results in a lower degree of oxidation of the compounds. Our results indicate that WCO could be used to oxidize most organic compounds, but may not be appropriate to quantify TOC in organic carbon pools that contain certain halogenated compounds.

PMID: 29453072

Similar articles

5. Sci Total Environ. 2018 Feb 10;628-629:226-232. doi: 10.1016/j.scitotenv.2018.02.050. [Epub ahead of print]

The serum concentrations of perfluoroalkyl compounds were inversely associated with growth parameters in 2-year old children.

Lee YA[1], Kim JH[2], Jung HW[3], Lim YH[4], Bae S[5], Kho Y[6], Hong YC[7], Shin CH[8], Yang SW[1].

Author information:

1 Department of Pediatrics, Seoul National University Children's Hospital, Seoul National University College of Medicine, Seoul, Republic of Korea.

2 Department of Integrative Bioscience & Biotechnology, Sejong University, Seoul, Republic of Korea.

3 Department of Pediatrics, Kyunghee University Kyunghee Medical Center, Seoul, Republic of Korea.

4 Environmental Health Center, Seoul National University College of Medicine, Seoul, Republic of Korea; Institute of Environmental Medicine, Seoul National University Medical Research Center, Seoul, Republic of Korea.

5 Department of Preventive Medicine, College of Medicine, Dankook University, Cheonan, Republic of Korea.

6 Department of Health, Environment & Safety, Eulji University, Sungnam, Republic of Korea.

7 Environmental Health Center, Seoul National University College of Medicine, Seoul, Republic of Korea; Institute of Environmental Medicine, Seoul National University Medical Research Center, Seoul, Republic of Korea; Department of Preventive Medicine, Seoul National University College of Medicine, Seoul, Republic of Korea.

8 Department of Pediatrics, Seoul National University Children's Hospital, Seoul National University College of Medicine, Seoul, Republic of Korea. Electronic address: chshinpd@snu.ac.kr.

Abstract

The relationship between the serum concentrations of perfluoroalkyl compounds (PFCs) and growth parameters was investigated in 2-year-old Korean children. The study included 361 children aged 2years (192 boys and 169 girls; 22-27months), born at term appropriate-for-gestational-age, who visited between 2012 and 2013. Growth parameters of height and weight, and serum samples were collected from 2-year-old children. Four PFCs (perfluorohexane sulfonic acid [PFHxS], perfluorooctane sulfonic acid [PFOS], perfluorooctanoic acid [PFOA], and perfluorononanoic acid [PFNA]), perfluorodecanoic acid (PFDA), perfluoroundecanoic acid (PFUnDA), and perfluoroheptanoic acid (PFHpA) were detected in >99, 93.4, 89.8, and 74.2% of the serum samples, respectively. The duration of breastfeeding was positively associated with the serum concentrations of ln-transformed PFHxS, PFOS, PFHpA, PFOA, PFNA, PFDA, and PFUnDA (all P<0.001). Height at 2years of age was inversely related to PFHxS, PFOS, PFOA, PFNA, and

PFDA concentrations (adjusted β per ln unit [95% confidence interval, CI]: -0.84 [-1.26, -0.42], -0.77 [-1.27, -0.15], -0.91 [-1.36, -0.47], -0.48 [-1.40, -0.51], and -0.44 [-0.77, -0.10] cm, respectively), after adjusting for age, sex, and midparental height. Weight at 2years of age was inversely associated with PFNA (adjusted β per ln unit [95% CI]: -0.32 [-0.48, -0.15] kg), after adjusting for age, sex, and parental BMI. In conclusion, the serum concentrations of PFCs were inversely associated with growth parameters in 2-year-old children.

PMID: 29438932

Similar articles

6. PLoS Med. 2018 Feb 13;15(2):e1002502. doi: 10.1371/journal.pmed.1002502. eCollection 2018 Feb.

Perfluoroalkyl substances and changes in body weight and resting metabolic rate in response to weight-loss diets: A prospective study.

Liu G[1], Dhana K[1], Furtado JD[1], Rood J[2], Zong G[1], Liang L[3,4], Qi L[5], Bray GA[2], DeJonge L[2], Coull B[4,6], Grandjean P[6,7], Sun Q[1,8].

Author information:

1 Department of Nutrition, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States of America.

2 Pennington Biomedical Research Center, Louisiana State University, Baton Rouge, Louisiana, United States of America.

3 Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States of America.

4 Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States of America.

5 Department of Epidemiology, School of Public Health and Tropical Medicine, Tulane University, New Orleans, Louisiana, United States of America.

6 Department of Environmental Health, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States of America.

7 Institute of Public Health, University of Southern Denmark, Odense, Denmark.

8 Channing Division of Network Medicine, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts, United States of America.

Abstract

BACKGROUND:

The potential endocrine-disrupting effects of perfluoroalkyl substances (PFASs) have been demonstrated in animal studies, but whether PFASs may interfere with body weight regulation in humans is largely unknown. This study aimed to examine the associations of PFAS exposure with changes in body weight and resting metabolic rate (RMR) in a diet-induced weight-loss setting.

METHODS AND FINDINGS:

In the 2-year POUNDS Lost randomized clinical trial based in Boston, Massachusetts, and Baton Rouge, Louisiana, that examined the effects of energy-restricted diets on weight changes, baseline plasma concentrations of major PFASs were measured among 621 overweight and obese participants aged 30-70 years. Body weight was measured at baseline and 6, 12, 18, and 24 months. RMR and other metabolic parameters, including glucose, lipids, thyroid hormones, and leptin, were measured at baseline and 6 and 24 months. Participants lost an average of 6.4 kg of body weight during the first 6 months (weight-loss period) and subsequently regained an average of 2.7 kg of body weight during the period of 6-24 months (weight regain period). After multivariate adjustment, baseline PFAS concentrations were not significantly associated with concurrent body weight or weight loss during the first 6 months. In contrast, higher baseline levels of PFASs were significantly associated with a greater weight regain, primarily in women. In women, comparing the highest to the lowest tertiles of PFAS concentrations, the multivariate-adjusted mean weight regain (SE) was 4.0 (0.8) versus 2.1 (0.9) kg for perfluorooctanesulfonic acid (PFOS) (Ptrend = 0.01); 4.3 (0.9) versus 2.2 (0.8) kg for perfluorooctanoic acid (PFOA) (Ptrend = 0.007); 4.7 (0.9) versus 2.5 (0.9) kg for perfluorononanoic acid (PFNA) (Ptrend = 0.006); 4.9 (0.9) versus 2.7 (0.8) kg for perfluorohexanesulfonic acid (PFHxS) (Ptrend = 0.009); and 4.2 (0.8) versus 2.5 (0.9) kg for perfluorodecanoic acid (PFDA) (Ptrend = 0.03). When further adjusted for changes in body weight or thyroid hormones during the first 6 months, results remained similar. Moreover, higher baseline plasma PFAS concentrations, especially for PFOS and PFNA, were significantly associated with greater decline in RMR during the weight-loss period and less increase in RMR during the weight regain period in both men and women. Limitations of the study include the possibility of unmeasured or residual confounding by socioeconomic and psychosocial factors, as well as possible relapse to the usual diet prior to randomization, which could have been rich in foods contaminated by PFASs through food packaging and also dense in energy.

CONCLUSIONS:

In this diet-induced weight-loss trial, higher baseline plasma PFAS concentrations were associated with a greater weight regain, especially in women, possibly explained by a slower regression of RMR levels. These data illustrate a potential novel pathway through which PFASs interfere with human body weight regulation and metabolism. The possible impact of environmental chemicals on the obesity epidemic therefore deserves attention.

TRIAL REGISTRATION:

ClinicalTrials.gov NCT00072995.

PMCID: PMC5810983 Free PMC Article
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7. Sci Total Environ. 2018 Feb 8;628-629:110-120. doi: 10.1016/j.scitotenv.2018.01.167. [Epub ahead of print]

A critical analysis of published data to discern the role of soil and sediment properties in determining sorption of per and polyfluoroalkyl substances (PFASs).

Li Y[1], Oliver DP[2], Kookana RS[3].

Author information:

1 CSIRO Land and Water, Locked Bag 2, Glen Osmond, 5064, South Australia, Australia. Electronic address: liyasong712@cags.ac.cn.

2 CSIRO Land and Water, Locked Bag 2, Glen Osmond, 5064, South Australia, Australia. Electronic address: Danni.Oliver@csiro.au.

3 CSIRO Land and Water, Locked Bag 2, Glen Osmond, 5064, South Australia, Australia; University of Adelaide, Glen Osmond, 5064, South Australia, Australia. Electronic address: rai.kookana@csiro.au.

Abstract

Widespread usage of per- and polyfluoroalkyl substances (PFASs) has caused major environmental contamination globally. The hydrophilic and hydrophobic properties of PFASs affect the sorption behaviour and suggest organic carbon may not be the only factor affecting sorption. We reviewed the quality of all data published in peer-reviewed literature on sorption of PFASs to critically evaluate the role organic carbon (OC) and other properties have in sorption of PFASs in soils or sediments. The largest data sets available were for perfluorooctanoic acid (PFOA, n = 147) and perfluorooctane sulfonic acid (PFOS, n = 178), and these analyses showed very weak correlations between sorption coefficient (K_d) and OC alone ($R^2 = 0.05$-0.07). When only laboratory-derived K_d values of PFASs and OC were analysed, the R^2 values increased for PFOA ($R^2 = 0.24$, n = 42), PFOS ($R^2 = 0.38$, n = 69), perfluorononanoic acid (PFNA, $R^2 = 0.77$ n = 12), and perfluorodecanoic acid (PFDA, $R^2 = 0.78$, n = 13). However, the relationships were heavily skewed by one or two high OC values. Similarly there was no significant relationship between K_d values and pH for PFOS ($R^2 = 0.06$) and PFOA ($R^2 = 0.07$), across a range of environmental pH values. Our analyses showed sorption behaviour of a range of PFASs could not be explained by a single soil or sediment property. Multiple regression models better explained the sorption behaviour of a number of PFASs. Regressions of OC and pH together explained a significant proportion of the variation in K_d values for 9 out of 14 PFASs and 8 of these regressions had ≥10 data points. This review highlighted that at least OC, pH and clay content are properties having significant effect on sorption. There is a clear need for more data and studies with thorough characterisation of soils or sediments to better understand their role in PFASs sorption. Current assessments based on OC alone are likely to be erroneous.

PMID: 29428853

Similar articles

8. Water Res. 2018 May 1;134:226-233. doi: 10.1016/j.watres.2018.01.066. Epub 2018 Feb 3.

Fate of perfluoroalkyl substances within a small stream food web affected by sewage effluent.

Cerveny D[1], Grabic R[2], Fedorova G[2], Grabicova K[2], Turek J[2], Zlabek V[2], Randak T[2].

Author information:

1 University of South Bohemia in Ceske Budejovice, Faculty of Fisheries and Protection of Waters, South Bohemian Research Center of Aquaculture and Biodiversity of Hydrocenoses, Zatisi 728/II, 389 25, Vodnany, Czech Republic; Department of Chemistry, Umea University, Umea, Sweden. Electronic address: cerveny@frov.jcu.cz.

2 University of South Bohemia in Ceske Budejovice, Faculty of Fisheries and Protection of Waters, South Bohemian Research Center of Aquaculture and Biodiversity of Hydrocenoses, Zatisi 728/II, 389 25, Vodnany, Czech Republic.

Abstract

The fate of fourteen target perfluoroalkyl substances (PFASs) are described within a small stream affected by a sewage treatment plant (STP) effluent. Concentrations of target PFASs in samples of water, benthic macroinvertebrates and brown trout (Salmo trutta) are presented. Two hundred brown trout individuals originating from clean sites within the same stream were tagged and stocked into an experimental site affected by the STP's effluent. As a passive sampling approach, polar organic chemical integrative samplers (POCIS) were deployed in the water to reveal the water-macroinvertebrates-fish biotransformation processes of PFASs. Bioconcentration/bioaccumulation of target compounds was monitored one, three, and six months after stocking. Twelve of the fourteen target PFASs were found in concentration above the LOQ in at least one of the studied matrices. The compound pattern varied significantly between both the studied species and water samples. Concerning the accumulation of PFASs in fish, the highest concentrations were found in the liver of individuals sampled after three months of exposure. These concentrations rapidly decreased after six months although the water concentrations were slightly increasing during experiment.

PMID: 29427964

Similar articles

9. Environ Pollut. 2018 Feb 7;236:505-513. doi: 10.1016/j.envpol.2018.01.066. [Epub ahead of print]

Evaluation of a national data set for insights into sources, composition, and concentrations of per-

and polyfluoroalkyl substances (PFASs) in U.S. drinking water.

Guelfo JL[1], Adamson DT[2].

Author information:

1 School of Engineering, Brown University, Providence, RI, USA. Electronic address: jennifer_guelfo@brown.edu.

2 GSI Environmental Inc., Houston, TX, USA.

Abstract

The United States Environmental Protection Agency (USEPA) completed nationwide screening of six perfluoroalkyl substances in U.S. drinking water from 2013 to 2015 under the Third Unregulated Contaminant Monitoring Rule (UCMR3). UCMR3 efforts yielded a dataset of 36,139 samples containing analytical results from >5000 public water systems (PWSs). This study used UCMR3 data to investigate three aspects of per- and polyfluoroalkyl substances (PFASs) in drinking water: the occurrence of PFAS and co-contaminant mixtures, trends in PFAS detections relative to PWS characteristics and potential release types, and temporal trends in PFAS occurrence. This was achieved through bivariate and multivariate analyses including categorical analysis, concentration ratios, and hierarchical cluster analysis. Approximately 50% of samples with PFAS detections contained ≥2 PFASs, and 72% of detections occurred in groundwater. Large PWSs (>10,000 customers) were 5.6 times more likely than small PWSs (≤10,000 customers) to exhibit PFAS detections; however, when detected, median total PFAS concentrations were higher in small PWSs (0.12 μg/L) than in large (0.053 μg/L). Bivariate and multivariate analyses of PFAS composition suggested PWSs reflect impacts due to firefighting foam use and WWTP effluent as compared to other source types for which data were available. Mann-Kendall analysis of quarterly total PFAS detection rates indicated an increasing trend over time ($p = 0.03$). UCMR3 data provide a foundation for tiered design of targeted sampling and analysis plans to address remaining knowledge gaps in the sources, composition, and concentrations of PFASs in U.S. drinking water.

PMID: 29427949

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10. Chemosphere. 2018 May;198:442-449. doi: 10.1016/j.chemosphere.2018.01.152. Epub 2018 Feb 3.

Interactions of perfluorooctanoic acid and perfluorooctanesulfonic acid with serum albumins by native mass spectrometry, fluorescence and molecular docking.

Chi Q[1], Li Z[1], Huang J[1], Ma J[1], Wang X[2].

Author information:

1 Key Laboratory of Analytical Chemistry of State Ethnic Affairs Commission, College of Chemistry and Materials Science, South-Central University for Nationalities, Wuhan 430074, PR China.

2 Key Laboratory of Analytical Chemistry of State Ethnic Affairs Commission, College of Chemistry and Materials Science, South-Central University for Nationalities, Wuhan 430074, PR China. Electronic address: xwang27@mail.scuec.edu.cn.

Abstract

The binding information of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) with bovine and human serum albumins was investigated and characterized in details by using a combination method of electrospray ionization mass spectrometry (ESI-MS), fluorescence, circular dichroism (CD) and molecular docking (MD). The ESI-MS analysis revealed that maximally eight PFOA or PFOS molecules could bind to serum albumins at high mole ratios of PFOA/PFOS. Association constants were measured by ESI-MS and suggested that PFOS had a better binding affinity than PFOA. PFOA and PFOS were likely to bind with serum albumins in more than one pocket. The CD data demonstrated that binding of PFOA and PFOS could change the conformation of serum albumins with decreasing α-helix content, which may affect the protein physiological function. The phenomenon of protein fluorescence quenching by the binding of PFOA and PFOS indicated that the hydrophobic pocket proximate to Trp 214 in human serum albumin might be one of the dominated binding sites. This assumption was further confirmed by MD simulation. Consistent to ESI-MS observation, MD results also displayed a stronger binding affinity of PFOS than PFOA according to the calculated binding free energy, which is probably ascribed to one more hydrogen bond formed in the PFOS-bound protein complexes.

PMID: 29425944

Similar articles

11. Integr Environ Assess Manag. 2018 Feb 9. doi: 10.1002/ieam.4035. [Epub ahead of print]

A Critical Review of the Application of Polymer of Low Concern and Regulatory Criteria to Fluoropolymers.

Henry BJ[1], Carlin JP[1], Hammerschmidt JA[1], Buck RC[2], Buxton LW[2], Fiedler H[3], Seed J[4], Hernandez O[5].

Author information:

1 W.L. Gore & Associates, Inc., Elkton, MD, 21921, USA.

2 The Chemours Company, 1007 Market Street, Wilmington, Delaware, 19899, USA.

3
MTM Research Centre School of Science and Technology, Örebro University, Örebro, Sweden.
4
Risk Assessment Consultant, Alexandria, VA, 22301-1603, USA.
5
Bergeson & Campbell, Washington, DC 20037, USA.

Abstract

Per- and poly-fluoroalkyl substances (PFAS) are a group of fluorinated substances that are in the focus of researchers and regulators due to widespread presence in the environment and biota, including humans, of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Fluoropolymers, high molecular weight polymers within the PFAS group, have unique properties that constitute a distinct class within the PFAS group. Fluoropolymers have thermal, chemical, photochemical, hydrolytic, oxidative and biological stability. They have negligible residual monomer and oligomer content and low to no leachables. Fluoropolymers are practically insoluble in water and not subject to long-range transport. With a molecular weight well over 100,000 Da, fluoropolymers cannot cross the cell membrane. Fluoropolymers are not bioavailable or bioaccumulative, as evidenced by toxicology studies on PTFE: acute and subchronic systemic toxicity, irritation, sensitization, local toxicity on implantation, cytotoxicity, in vitro and in vivo genotoxicity, hemolysis, complement activation, and thrombogenicity. Clinical studies of patients receiving permanently implanted PTFE cardiovascular medical devices demonstrate no chronic toxicity or carcinogenicity, reproductive or developmental or endocrine toxicity. This paper brings together fluoropolymer toxicity data, human clinical data, and physical-chemical-thermal-biological data for review and assessment to show that fluoropolymers satisfy widely accepted assessment criteria to be considered as "Polymers of Low Concern". This review concludes that fluoropolymers are distinctly different from other polymeric and non-polymeric per- and poly-fluoroalkyl substances and should be separated from them for hazard assessment or regulatory purposes. Grouping fluoropolymers with all classes of PFAS for "read across" or structure activity relationship assessment is not scientifically appropriate.
PMID: 29424474
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12. Chemosphere. 2018 May;198:311-319. doi: 10.1016/j.chemosphere.2018.01.132. Epub 2018 Feb 3.

Enhanced generation of perfluoroalkyl carboxylic acids (PFCAs) from fluorotelomer alcohols (FTOHs) via ammonia-oxidation process.

Yu X[1], Nishimura F[2], Hidaka T[2].

Author information:

1
Department of Environmental Engineering, Graduate School of Engineering, Kyoto University, C1, Kyoto daigaku-Katsura, Kyoto 615-8540, Japan. Electronic address: yu.xiaolong.76c@kyoto-u.ac.jp.

2

Department of Environmental Engineering, Graduate School of Engineering, Kyoto University, C1, Kyoto daigaku-Katsura, Kyoto 615-8540, Japan.

Abstract

With the phase-out of persistent, bioaccumalative, and toxic perfluoroalkyl carboxylic acids (PFCAs), it is needed to explore the potential release of PFCAs from precursors being emitted into the environment. Biotransformation of fluorotelomer alcohols (FTOHs) via biological processes in wastewater treatment plants (WWTPs) leads to discharge of PFCAs into receiving waters. However, the commonly existed microbial activity that can impact on FTOHs biodegradation in WWTPs remains unclear. The objective of present research was to explore the relationship between ammonia-oxidation process and the enhanced PFCAs generation from FTOHs biodegradation under aerobic activated sludge. The obtained results indicate that the cometabolism process performed by nitrifying microorganisms (NMs) was responsible for enhanced PFCAs generation. Among NMs, the ammonia-oxidation bacteria that can express non-specific enzyme of ammonia monooxygenases resulted in the enhanced PFCAs generation from FTOHs. Meanwhile, the different addition amount of ammonia contributed to different defluorination efficiency of FTOHs. The present study further correlated the enhanced PFCAs generation from FTOHs biodegradation with ammonia-oxidation process, which can provide practical information on effective management of PFCAs generation in WWTPs.

PMID: 29421745

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13. Bull Environ Contam Toxicol. 2018 Feb 7. doi: 10.1007/s00128-018-2282-z. [Epub ahead of print]

Bioaccumulation Patterns of Perfluoroalkyl Acids in an Estuary of the Ariake Sea, Japan.

Kobayashi J[1], Maeda Y[2], Imuta Y[2], Ishihara F[2], Nakashima N[2], Komorita T[3], Sakurai T[4].

Author information:

1

Faculty of Environmental and Symbiotic Sciences, Prefectural University of Kumamoto, 3-1-100, Tsukide, Kumamoto, Kumamoto, 862-8502, Japan. jkobayashi@pu-kumamoto.ac.jp.

2

Graduate School of Environmental and Symbiotic Sciences, Prefectural University of Kumamoto, 3-1-100 Tsukide, Kumamoto, Kumamoto, 862-8502, Japan.

3

Faculty of Environmental and Symbiotic Sciences, Prefectural University of Kumamoto, 3-1-100, Tsukide, Kumamoto, Kumamoto, 862-8502, Japan.

4

National Institute for Environmental Studies, 16-2 Onogawa, Tsukuba, Ibaraki, 305-8506, Japan.

Abstract

To evaluate the bioaccumulation potential of perfluoroalkyl acids (PFAAs) in an aquatic food web, we measured the concentrations of nine PFAAs in the water and aquatic organisms from an estuary of the Omuta River, Japan. Average log bioaccumulation factors for all PFAAs ranged from 2.0 to 2.8. There was no positive correlation observed between PFAA carbon chain length and there was no evidence of trophic magnification demonstrated among the sample types collected. These results differed from the findings of previous studies in enclosed bodies of water, perhaps because river mouth-estuarine ecotones are more variable spatially and temporally and include some fish that are highly migratory. Further investigations of bioaccumulation factors will be needed to elucidate the tendency of amphiphilic chemicals to bioaccumulate in these river mouth-estuarine ecotones.

PMID: 29417160

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14. Environ Pollut. 2018 Feb 3;236:373-381. doi: 10.1016/j.envpol.2018.01.065. [Epub ahead of print]

Current and historical concentrations of poly and perfluorinated compounds in sediments of the northern Great Lakes - Superior, Huron, and Michigan.

Codling G[1], Hosseini S[2], Corcoran MB[3], Bonina S[2], Lin T[4], Li A[5], Sturchio NC[3], Rockne KJ[2], Ji K[6], Peng H[6], Giesy JP[7].

Author information:

1 Toxicology Centre, University of Saskatchewan, Saskatoon, SK, S7N 5B3, Canada; Research Centre for Contaminants in the Environment, Pavilion 29 Masaryk University, Brno, Czech Republic. Electronic address: garrycodling@yahoo.co.uk.

2 Department of Civil and Materials Engineering (MC 246), University of Illinois at Chicago 842 West Taylor Street, Chicago, IL 60607-7023, USA.

3 Department of Earth and Environmental Sciences (MC 186), University of Illinois at Chicago 845 W. Taylor Street, Chicago, IL 60607, USA.

4 Environmental and Occupational Health Sciences, School of Public Health, University of Illinois at Chicago, 2121 West Taylor St., Chicago, IL 60612, USA; State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, China.

5 Environmental and Occupational Health Sciences, School of Public Health, University of Illinois at Chicago, 2121 West Taylor St., Chicago, IL 60612, USA.

6 Toxicology Centre, University of Saskatchewan, Saskatoon, SK, S7N 5B3, Canada.

7

Toxicology Centre, University of Saskatchewan, Saskatoon, SK, S7N 5B3, Canada; Dept. Veterinary Biomedical Sciences, University of Saskatchewan, 44 Campus Drive, Saskatoon SK S7N 5B3, Canada; Department of Biology & Chemistry and State Key Laboratory in Marine Pollution, City University of Hong Kong, Kowloon, Hong Kong, SAR, China; Department of Zoology, and Center for Integrative Toxicology, Michigan State University, East Lansing, MI, 48824, USA; School of Biological Sciences, University of Hong Kong, Hong Kong, SAR, China.

Abstract

Current and historical concentrations of 22 poly- and perfluorinated compounds (PFASs) in sediment collected from Lake Superior and northern Lake Michigan in 2011 and Lake Huron in 2012 are reported. The sampling was performed in two ways, Ponar grabs of surface sediments for current spatial distribution across the lake and dated cores for multi-decadal temporal trends. Mean concentrations of the sum of PFASs (∑PFASs) were 1.5, 4.6 and 3.1 ng g^{-1} dry mas (dm) in surface sediments for Lakes Superior, Michigan and Huron, respectively. Of the five Laurentian Lakes, the watersheds of Superior and Huron are the less densely populated by humans, and concentrations observed were typically less and from more diffuse sources, due to lesser urbanization and industrialization. However, some regions of greater concentrations were observed and might indicate more local, point sources. In core samples concentrations ranged from <LOQ to 46.6 ng g^{-1} dm among the three lakes with concentrations typically increasing with time. Distributions of PFASs within dated cores largely corresponded with increase in use of PFASs, but with physiochemical characteristics also affecting distribution. Perfluoroalkyl sulfonates (PFSAs) with chain lengths >7 that include perfluoro-n-octane sulfonate (PFOS) bind more strongly to sediment, which resulted in more accurate analyses of temporal trends. Shorter-chain PFASs, such as perfluoro-n-butanoic acid which is the primary replacement for C8 PFASs that have been phased out, are more soluble and were identified in some core layers at depths corresponding to pre-production periods. Thus, analyses of temporal trends of these more soluble compounds in cores of sediments were less accurate. Total elemental fluorine (TF) and extractable organic fluorine (EOF) indicated that identified PFASs were not a significant fraction of fluorine containing compounds in sediment (<0.01% in EOF).

PMID: 29414360

Similar articles

15. Environ Toxicol Chem. 2018 Feb 5. doi: 10.1002/etc.4060. [Epub ahead of print]

Immunotoxicity in green mussels under perfluoroalkyl substance (PFAS) exposure: Reversible response and response model development.

Liu C[1], Gin KY[1,2].

Author information:

1 NUS Environmental Research Institute, National University of Singapore, Singapore.

2
Department of Civil and Environmental Engineering, National University of Singapore, Singapore.

Abstract

The immunotoxicity of 4 commonly detected perfluoroalkyl substances (PFASs), namely, perfluorooctanesulfonate (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorodecanoic acid (PFDA) was investigated by measuring biomarkers of the immune profile of green mussels, Perna viridis. The biomarkers included neutral red retention, phagocytosis, and spontaneous cytotoxicity, all of which were tested on mussel hemocytes. Hemocytes are an important component of the invertebrate immune system. We found that exposure to PFASs could lead to reduced hemocyte cell viability and suppress immune function by up to 50% of normal performance within the experimental exposure range. The results indicate that PFASs have an immunotoxic potential and thus could pose severe health risks to aquatic organisms. The reported immunotoxicity is likely to result from the compounds' direct and indirect interactions with the hemocyte membrane, and therefore likely to affect the functionality of these cells. The immunotoxic response was found to be related to the organism's burden of PFASs, and was reversible when the compounds were removed from the test organisms. Based on this relationship, models using an organism's PFAS concentration and bioaccumulation factor (BAF) as the independent variables were established to quantify PFAS-induced immunotoxicity. The models help us to gain a better understanding of the toxic mechanism of PFASs, and provide a tool to evaluate adverse effects for the whole group of compounds with one mathematical equation. Environ Toxicol Chem 2018;9999:1-8.

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PMID: 29405365
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16. Environ Sci Pollut Res Int. 2018 Feb 5. doi: 10.1007/s11356-018-1406-7. [Epub ahead of print]

The effect of dietary selenium addition on the concentrations of heavy metals in the tissues of fallow deer (Dama dama L.) in Croatia.

Vukšić N[1], Šperanda M[2], Lončarić Z[3], Đidara M[3], Ludek E[4], Budor I[1].

Author information:

1
Croatian Hunting Association, Vladimira Nazora 63, 10 000, Zagreb, Croatia.
2
J.J. Strossmayer University from Osijek Faculty of Agriculture in Osijek, Vladimira Preloga 1, 31 000, Osijek, Croatia. marcela.speranda@pfos.hr.
3
J.J. Strossmayer University from Osijek Faculty of Agriculture in Osijek, Vladimira Preloga 1, 31 000, Osijek, Croatia.
4

Veterinary Research Institute, Hudcova 296/70, 621 00, Brno, Czech Republic.

Abstract

The aim of this research was to determine the concentrations of cadmium, lead, mercury, and arsenic and the essential elements iron and selenium in the tissues (muscle, kidney, liver, spleen, and fat) of fallow deer (Dama dama L.) without and with supplemental selenium addition. Another aim was to determine the effect of selenium addition on the indicators of oxidative stress, namely, the levels of superoxide dismutase, glutathione peroxidase, glutathione, and vitamin E. The research was carried out with 40 fallow deer during two research periods. Supplemental feed without selenium addition was provided during the first research period, and supplemental feed with added selenium (3 mg/kg) was provided for 60 days during the second research period. The concentration of selenium in tissues was higher in the second research period than in the first research period (in kidney tissue, 0.957 vs. 0.688 mg/kg, $P < 0.05$). The dietary addition of selenium decreased ($P < 0.05$) the concentrations of some heavy metals (lead in the spleen = 0.06 vs. 0.27 mg/kg and in the fatty tissue = 0.17 vs. 0.69 mg/kg; arsenic in the muscle tissue = 0.005 vs. 0.014 mg/kg, liver = 0.003 vs. 0.009 mg/kg, spleen = 0.004 vs. 0.013 mg/kg, and fat = 0.008 vs. 0.016 mg/kg). The activity of glutathione peroxidase was significantly higher ($P < 0.05$) in the second research period than in the first research period (1375.36 vs. 933.23 U/L).

PMID: 29404953

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17. Environ Sci Technol. 2018 Feb 15. doi: 10.1021/acs.est.7b05912. [Epub ahead of print]

UV/Nitrilotriacetic Acid Process as a Novel Strategy for Efficient Photoreductive Degradation of Perfluorooctanesulfonate.

Sun Z[1,2], Zhang C[1,2], Xing L[1,2], Zhou Q[1,2], Dong W[3], Hoffmann MR[4].

Author information:

1 State Key Laboratory of Pollution Control and Resources Reuse, College of Environmental Science and Engineering, Tongji University , Shanghai 200092, China.

2 Shanghai Institute of Pollution Control and Ecological Security , Shanghai 200092, China.

3 Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention, Department of Environmental Science & Engineering, Fudan University , Shanghai 200433, China.

4 Linde-Robinson Laboratories, California Institute of Technology , Pasadena, California 91125, United States.

Abstract

Perfluorooctanesulfonate (PFOS) is a toxic, bioaccumulative, and highly persistent anthropogenic chemical. Hydrated electrons (e_{aq}^-) are potent nucleophiles that can effectively decompose PFOS. In previous studies, e_{aq}^- are mainly produced by photoionization of aqueous anions or aromatic compounds. In this study, we proposed a new photolytic strategy to generate e_{aq}^- and in turn decompose PFOS, which utilizes nitrilotriacetic acid (NTA) as a photosensitizer to induce water photodissociation and photoionization, and subsequently as a scavenger of hydroxyl radical ($^{\bullet}OH$) to minimize the geminate recombination between $^{\bullet}OH$ and e_{aq}^-. The net effect is to increase the amount of e_{aq}^- available for PFOS degradation. The UV/NTA process achieved a high PFOS degradation ratio of 85.4% and a defluorination ratio of 46.8% within 10 h. A pseudo-first-order rate constant (k) of 0.27 h^{-1} was obtained. The laser flash photolysis study indicates that e_{aq}^- is the dominant reactive species responsible for PFOS decomposition. The generation of e_{aq}^- is greatly enhanced and its half-life is significantly prolonged in the presence of NTA. The electron spin resonance (ESR) measurement verified the photodissociation of water by detecting $^{\bullet}OH$. The model compound study indicates that the acetate and amine groups are the primary reactive sites.
PMID: 29397704
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18. Environ Health. 2018 Feb 1;17(1):11. doi: 10.1186/s12940-018-0355-4.

Can profiles of poly- and Perfluoroalkyl substances (PFASs) in human serum provide information on major exposure sources?

Hu XC[1,2], Dassuncao C[3,4], Zhang X[4], Grandjean P[3,5], Weihe P[6], Webster GM[7], Nielsen F[5], Sunderland EM[3,4].

Author information:

1 Harvard T.H. Chan School of Public Health, Boston, MA, 02215, USA. xhu@mail.harvard.edu.

2 Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, 128 Pierce Hall, Cambridge, MA, 02138, USA. xhu@mail.harvard.edu.

3 Harvard T.H. Chan School of Public Health, Boston, MA, 02215, USA.

4 Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, 128 Pierce Hall, Cambridge, MA, 02138, USA.

5 University of Southern Denmark, DK-5000, Odense, Denmark.

6 The Faroese Hospital System, FR-100, Tórshavn, Faroe Islands.

7 Simon Fraser University, Burnaby, BC, V5A 1S6, Canada.

Abstract

BACKGROUND:

Humans are exposed to poly- and perfluoroalkyl substances (PFASs) from diverse sources and this has been associated with negative health impacts. Advances in analytical methods have enabled routine detection of more than 15 PFASs in human sera, allowing better profiling of PFAS exposures. The composition of PFASs in human sera reflects the complexity of exposure sources but source identification can be confounded by differences in toxicokinetics affecting uptake, distribution, and elimination. Common PFASs, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS) and their precursors are ubiquitous in multiple exposure sources. However, their composition varies among sources, which may impact associated adverse health effects.

METHODS:

We use available PFAS concentrations from several demographic groups in a North Atlantic seafood consuming population (Faroe Islands) to explore whether chemical fingerprints in human sera provide insights into predominant exposure sources. We compare serum PFAS profiles from Faroese individuals to other North American populations to investigate commonalities in potential exposure sources. We compare individuals with similar demographic and physiological characteristics and samples from the same years to reduce confounding by toxicokinetic differences and changing environmental releases.

RESULTS:

Using principal components analysis (PCA) confirmed by hierarchical clustering, we assess variability in serum PFAS concentrations across three Faroese groups. The first principal component (PC)/cluster consists of C9-C12 perfluoroalkyl carboxylates (PFCAs) and is consistent with measured PFAS profiles in consumed seafood. The second PC/cluster includes perfluorohexanesulfonic acid (PFHxS) and the PFOS precursor N-ethyl perfluorooctane sulfonamidoacetate (N-EtFOSAA), which are directly used or metabolized from fluorochemicals in consumer products such as carpet and food packaging. We find that the same compounds are associated with the same exposure sources in two North American populations, suggesting generalizability of results from the Faroese population.

CONCLUSIONS:

We conclude that PFAS homologue profiles in serum provide valuable information on major exposure sources. It is essential to compare samples collected at similar time periods and to correct for demographic groups that are highly affected by differences in physiological processes (e.g., pregnancy). Information on PFAS homologue profiles is crucial for attributing adverse health effects to the proper mixtures or individual PFASs.

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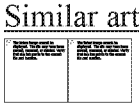

19. Environ Sci Technol. 2018 Feb 12. doi: 10.1021/acs.est.7b06327. [Epub ahead of print]

Chlorinated Polyfluorinated Ether Sulfonates Exhibit Higher Activity toward Peroxisome Proliferator-Activated Receptors Signaling Pathways than Perfluorooctanesulfonate.

Li CH[1,2], Ren XM[1], Ruan T[1], Cao LY[1,2], Xin Y[1,2], Guo LH[1,2], Jiang G[1,2].

Author information:

1 State Key Laboratory of Environmental Chemistry and Eco-toxicology, Research Center for Eco-environmental Sciences, Chinese Academy of Sciences , 18 Shuangqing Road, Beijing 100085, P. R. China.

2 College of Resources and Environment, University of Chinese Academy of Sciences , Beijing 100039, P. R. China.

Abstract

Chlorinated polyfluorinated ether sulfonates (Cl-PFAESs) are the alternative products of perfluorooctanesulfonate (PFOS) in the metal plating industry in China. The similarity in chemical structures between Cl-PFAESs and PFOS makes it reasonable to assume they possess similar biological activities. In the present study, we investigated whether Cl-PFAESs could induce cellular effects through peroxisome proliferator-activated receptors (PPARs) signaling pathways like PFOS. By using fluorescence competitive binding assay, we found two dominant Cl-PFAESs (6:2 Cl-PFAES and 8:2 Cl-PFAES) bound to PPARs with affinity higher than PFOS. Based on the luciferase reporter gene transcription assay, the two Cl-PFAESs also showed agonistic activity toward PPARs signaling pathways with potency similar to (6:2 Cl-PFAES) or higher than (8:2 Cl-PFAES) PFOS. Molecular docking simulation showed the two Cl-PFAESs fitted into the ligand binding pockets of PPARs with very similar binding mode as PFOS. The cell function results showed Cl-PFAESs promoted the process of adipogenesis in 3T3-L1 cells with potency higher than PFOS. Taken together, we found for the first time that Cl-PFAESs have the ability to interfere with PPARs signaling pathways, and current exposure level of 6:2 Cl-PFAES in occupational workers has exceeded the margin of safety. Our study highlights the potential health risks of Cl-PFAESs as PFOS alternatives.

PMID: 29389105

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20. Environ Sci Technol. 2018 Feb 20;52(4):2016-2024. doi: 10.1021/acs.est.7b06241. Epub 2018 Feb 8.

Perfluoroalkyl Acids Including Isomers in Tree Barks from a Chinese Fluorochemical

Manufacturing Park: Implication for Airborne Transportation.

Jin H[1,2], Shan G[1], Zhu L[1,2], Sun H[1], Luo Y[1].

Author information:

1 Key Laboratory of Pollution Processes and Environmental Criteria, Ministry of Education, Tianjin Key Laboratory of Environmental Remediation and Pollution Control, College of Environmental Science and Engineering, Nankai University , Tianjin 300071, P.R. China.

2 College of Natural Resources and Environment, Northwest A&F University , Yangling, Shanxi 712100, P.R. China.

Abstract

Measurement of airborne perfluoroalkyl acids (PFAAs) is challenging, but important for understanding their atmospheric transport. Tree bark is good media for monitoring semivolatile compounds in the atmosphere. Whether it could work as an indicator of airborne PFAAs was first examined in this study. Bark and leaf samples collected around a Chinese fluorochemical manufacturing park (FMP) were analyzed for PFAAs and their branched isomers. Total PFAA concentrations (∑PFAAs) in the bark (mean, 279 ng/g dw) and leaf (250 ng/g dw) samples were comparable. ∑PFAAs in the barks collected within the boundaries of the FMP were significantly ($p < 0.05$) higher than those outside the FMP, and displayed a decreasing spatial trend as the distance from the FMP increased. However, such spatial difference and trend were not observed for the leaves. PFAA compositional profiles in most of the tree barks were consistent with each other, but different from those in tree leaves. These results indicated that tree barks mainly accumulated airborne PFAAs, while uptake from soil and translocation could make partial contribution to those in leaves. Perfluorooctanoate and perfluorooctanesulfonate in barks had strictly consistent isomeric compositions with their electrochemical fluorination products. Overall, these results indicated that the bark could be a good indicator of airborne PFAAs with respect to their occurrence, isomeric signature, and atmospheric transport.

PMID: 29376335

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21. Anal Chem. 2018 Feb 20;90(4):2725-2731. doi: 10.1021/acs.analchem.7b04711. Epub 2018 Feb 2.

Mechanistic Understanding Leads to Increased Ionization Efficiency and Selectivity in Dielectric Barrier Discharge Ionization Mass Spectrometry: A Case Study with Perfluorinated Compounds.

Gyr L[1], Wolf JC[1], Franzke J[2], Zenobi R[1].

Author information:

1 Department of Chemistry and Applied Bioscience, ETH Zurich , CH-8093 Zurich, Switzerland.

2 Leibniz-Institut für Analytische Wissenschaften - ISAS - e.V. , Bunsen-Kirchhoff-Straße 11, 44139 Dortmund, Germany.

Abstract

Perfluorinated compounds have unique properties and many practical applications, but are difficult to ionize efficiently with soft ionization methods. An active capillary plasma ionization source based on dielectric barrier discharge ionization (DBDI) coupled with mass spectrometry was used to study the ionization pathway of perfluorinated compounds (PFCs), with the aim of both increasing the ionization efficiency and influencing the selectivity for generating product ions in negative ion mode. Cyclic and linear perfluorinated alkanes were found to mainly form $[M - F]^-$ and $[M - F + O]^-$ ions, respectively; the $[M]^{-\bullet}$ ion was only obtained at low discharge voltage. Additionally, fluorine attachment $[M + F]^-$ was observed mostly for perfluorinated alkenes. An isotope labeling experiment with $^{18}O_2$ showed that the primary source of oxygen in the substitution reaction is molecular oxygen, reacting with the analyte in the form of $O^{-\bullet}$ ions. The abundance of $[M - F + O]^-$ ions can thus be enhanced by increasing the plasma voltage to produce a higher $O^{-\bullet}$ ion density. The loss of the fluorine (without substitution by oxygen) was mainly observed at high frequency, a fact which can be exploited for tuning the ionization toward specific product ions. Overall, the mechanistic understanding of the ionization of PFCs allowed to increase the selectivity of the product ions, resulting in increased ionization efficiency.

PMID: 29356499

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22. Cytotechnology. 2018 Feb;70(1):479-487. doi: 10.1007/s10616-017-0164-6. Epub 2018 Jan 16.

Perfluorooctanoic acid impaired glucose homeostasis through affecting adipose AKT pathway.

Du G[1], Sun J[1], Zhang Y[2].

Author information:

1 Department of Endocrinology, Affiliated Hospital of Weifang Medical University, No 2428 Yuhe Road of Kuiwen District, Weifang, 261031, Shandong, China.

2 Department of Endocrinology, Affiliated Hospital of Weifang Medical University, No 2428 Yuhe Road of Kuiwen District, Weifang, 261031, Shandong, China. zhang_hospital@sina.com.

Abstract

Perfluorooctanoic acid (PFOA) is commonly applied in manufactured products, and its potential health risk is concerned greatly. Increasing evidences have indicated PFOA-induced liver dysfunction. However, detailed molecular mechanism has not been completely identified. In this study, we aimed to investigate the mechanical association between PFOA exposure and AKT pathway in white adipose tissue. As results, PFOA-treated mice showed increased blood glucose and insulin levels, and induced insulin resistance. In addition, serum levels of leptin and adiponectin in PFOA-treated mice were elevated. As shown in histological examination, increased cell death counts in PFOA-treated adipose were observed, as well as ultrastructural impairment in adipose cells was found. Further, immunohistochemical stains exhibited GLUT4, p-AKT positive cells were down-regulated in PFOA-treated adipose, while PTEN immune-labeled cells were reduced. In validated data, RT-PCR assay suggested adipose AKT mRNA was down-regulated in PFOA-treated mice, and PTEN mRNA was increased. Western blot data showed that intracellular PTEN protein level in PFOA-treated adipose was up-regulated, while phosphorylation of AKT, GSK3β levels were lowered dose-dependently. Taken together, the present findings indicate that PFOA impaired glucose homeostasis via negatively regulating AKT pathway in white adipose tissue.

PMCID: PMC5809677 [Available on 2019-02-01]
PMID: 29335808

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23. Food Chem Toxicol. 2018 Feb;112:375-382. doi: 10.1016/j.fct.2018.01.012. Epub 2018 Jan 11.

Internal exposure-based pharmacokinetic evaluation of potential for biopersistence of 6:2 fluorotelomer alcohol (FTOH) and its metabolites.

Kabadi SV[1], Fisher J[2], Aungst J[3], Rice P[3].

Author information:

1 FDA/CFSAN/OFAS/DFCN, 5001 Campus Drive, HFS 275, College Park, MD 20740, United States. Electronic address: Shruti.Kabadi@fda.hhs.gov.

2 FDA/NCTR, 3900 NCTR Road, Jefferson, AR 72079, United States.

3 FDA/CFSAN/OFAS/DFCN, 5001 Campus Drive, HFS 275, College Park, MD 20740, United States.

Abstract

Polyfluorinated compounds (PFCs) are authorized for use as greaseproofing agents in food contact paper. As C8-PFCs (8-carbons) are known to accumulate in tissues, shorter-chain C6-PFCs (6-carbons) have

replaced C8-PFCs in many food contact applications. However, the potential of C6-PFCs for human biopersistence has not been fully evaluated. For the first time, we provide internal exposure estimates to key metabolites of 6:2 fluorotelomer alcohol (6:2 FTOH), a monomeric component of C6-PFCs, to extend our understanding of exposure beyond estimates of external exposure. Pharmacokinetic data from published rat and human studies on 6:2 FTOH were used to estimate clearance and area under the curve (AUC) for its metabolites: 5:3 fluorotelomer carboxylic acid (5:3 A), perfluorohexanoic acid (PFHxA) and perfluoroheptanoic acid (PFHpA). Internal exposure to 5:3 A was the highest of evaluated metabolites across species and it had the slowest clearance. Additionally, 5:3 A clearance decreased with increasing 6:2 FTOH exposure. Our analysis provides insight into association of increased internal 5:3 A exposure with high biopersistence potential of 6:2 FTOH. Our results identify 5:3 A as an important biomarker of internal 6:2 FTOH exposure for use in biomonitoring studies, and are potentially useful for toxicological assessment of chronic dietary 6:2 FTOH exposure.

PMID: 29331735

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24. Anal Bioanal Chem. 2018 Feb;410(6):1657-1665. doi: 10.1007/s00216-017-0845-1. Epub 2018 Jan 12.

Magnetic covalent triazine-based frameworks as magnetic solid-phase extraction adsorbents for sensitive determination of perfluorinated compounds in environmental water samples.

Ren JY[1,2], Wang XL[1], Li XL[3], Wang ML[2], Zhao RS[4], Lin JM[5].

Author information:

1 Key Laboratory for Applied Technology of Sophisticated Analytical Instruments of Shandong Province, Analysis and Test Center, Qilu University of Technology (Shandong Academy of Sciences), Jinan, Shandong, 250014, China.

2 College of Food Science and Engineering, Shandong Agricultural University, Taian, Shandong, 271018, China.

3 Zibo Agricultural Technology Extension Center, Zibo, Shandong, 255000, China.

4 Key Laboratory for Applied Technology of Sophisticated Analytical Instruments of Shandong Province, Analysis and Test Center, Qilu University of Technology (Shandong Academy of Sciences), Jinan, Shandong, 250014, China. zhaors1976@126.com.

5 Department of Chemistry, Tsinghua University, 321, Hetian Building, Beijing, 100084, China.

Abstract

Covalent organic frameworks (COFs), which are a new type of carbonaceous polymeric material, have attracted great interest because of their large surface area and high chemical and thermal stability. However, to the best of our knowledge, no work has reported the use of magnetic COFs as adsorbents for magnetic solid-phase extraction (MSPE) to enrich and determine environmental pollutants. This work aims to investigate the feasibility of using covalent triazine-based framework (CTF)/Fe_2O_3 composites as MSPE adsorbents to enrich and analyze perfluorinated compounds (PFCs) at trace levels in water samples. Under the optimal conditions, the method developed exhibited low limits of detection (0.62-1.39 $ng \cdot L^{-1}$), a wide linear range (5-4000 ng L^{-1}), good repeatability (1.12-9.71%), and good reproducibility (2.45-7.74%). The new method was successfully used to determine PFCs in actual environmental water samples. MSPE based on CTF/Fe_2O_3 composites exhibits potential for analysis of PFCs at trace levels in environmental water samples. Graphical abstract Magnetic covalent triazine-based frameworks (CTFs) were used as magnetic solid-phase extraction adsorbents for the sensitive determination of perfluorinated compounds in environmental water samples. PFBA perfluorobutyric acid, PFBS perfluorobutane sulfonate, PFDA perfluorodecanoic acid, PFDoA perfluorododecanoic acid, PFHpA perfluoroheptanoic acid, PFHxA perfluorohexanoic acid, PFHxS perfluorohexane sulfonate, PFNA perfluorononanoic acid, PFOA perfluorooctanoic acid, PFPeA perfluoropentanoic acid, PFUdA Perfluoroundecanoic acid.

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Similar articles

25. Environ Int. 2018 Feb;111:260-267. doi: 10.1016/j.envint.2017.12.019. Epub 2018 Jan 8.

Incorporation of fetal and child PFOA dosimetry in the derivation of health-based toxicity values.

Kieskamp KK[1], Worley RR[2], McLanahan ED[3], Verner MA[4].

Author information:

1 Department of Occupational and Environmental Health, School of Public Health, Université de Montréal, Montreal, Canada; Université de Montréal Public Health Research Institute (IRSPUM), Montreal, Canada; Vrije Universiteit Amsterdam, Amsterdam, Netherlands. Electronic address: kyrakieskamp@hotmail.com.

2 Agency for Toxic Substances and Disease Registry, Atlanta, GA, USA. Electronic address: idz7@cdc.gov.

3 Agency for Toxic Substances and Disease Registry, Atlanta, GA, USA. Electronic address: yjp8@cdc.gov.

4 Department of Occupational and Environmental Health, School of Public Health, Université de Montréal, Montreal, Canada; Université de Montréal Public Health Research Institute (IRSPUM), Montreal, Canada. Electronic address: marc-andre.verner.1@umontreal.ca.

Abstract

BACKGROUND:

Multiple agencies have developed health-based toxicity values for exposure to perfluorooctanoic acid (PFOA). Although PFOA exposure occurs in utero and through breastfeeding, current health-based toxicity values have not been derived using fetal or child dosimetry. Therefore, current values may underestimate the potential risks to fetuses and nursing infants.

OBJECTIVE:

Using fetal and child dosimetry, we aimed to calculate PFOA maternal human equivalent doses (HEDs), corresponding to a developmental mouse study lowest observed adverse effect level (LOAEL, 1mg/kg/day). Further, we investigated the impact of breastfeeding duration and PFOA half-life on the estimated HEDs.

METHODS:

First, a pharmacokinetic model of pregnancy and lactation in mice was used to estimate plasma PFOA levels in pups following a maternal exposure to 1mg PFOA/kg/day for gestational days 1-17. Four plasma PFOA concentration metrics were estimated in pups: i) average prenatal; ii) average postnatal; iii) average overall (prenatal and postnatal); and iv) maximum. Then, Monte Carlo simulations were performed using a pharmacokinetic model of pregnancy and lactation in humans to generate distributions of maternal HEDs that would result in fetal/child plasma levels equivalent to those estimated in pups using the mouse model. Median (HED_{50}) and 1st percentile (HED_{01}) of calculated HEDs were calculated.

RESULTS:

Estimated PFOA maternal HED_{50}s ranged from 3.0×10^{-4} to 1.1×10^{-3}mg/kg/day and HED_{01}s ranged from 4.7×10^{-5} to 2.1×10^{-4}mg/kg/day. All calculated HEDs were lower than the HED based on adult dosimetry derived by the Environmental Protection Agency (EPA) (5.3×10^{-3}mg/kg/day).

CONCLUSION:

Our results suggest that fetal/child dosimetry should be considered when deriving health-based toxicity values for potential developmental toxicants.

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PMID: 29325971
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26. Environ Sci Technol. 2018 Feb 6;52(3):982-990. doi: 10.1021/acs.est.7b03662. Epub 2018 Jan 23.

Occurrence and Tissue Distribution of Novel Perfluoroether Carboxylic and Sulfonic Acids and

Legacy Per/Polyfluoroalkyl Substances in Black-Spotted Frog (Pelophylax nigromaculatus).

Cui Q[1,2], Pan Y[1], Zhang H[1], Sheng N[1], Wang J[1], Guo Y[3], Dai J[1].

Author information:

1 Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences , Beijing 100101, China.

2 University of Chinese Academy of Sciences , Beijing 100049, P. R. China.

3 Key Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences , Shanghai 200032, P. R. China.

Abstract

Research on perfluoroalkyl substances (PFASs) continues to grow. However, very little is known about these substances in amphibians. Here we report for the first time on the occurrence, tissue distribution, and bioaccumulation of two novel PFASs, chlorinated polyfluorinated ether sulfonic acid (6:2 Cl-PFESA) and hexafluoropropylene oxide trimer acid (HFPO-TA), in the black-spotted frog (Pelophylax nigromaculatus) from China. Frogs from cities with large-scale fluorochemical industries had significantly greater liver ∑PFAS levels (mean 54.28 ng/g in Changshu; 31.22 ng/g in Huantai) than those from cities without similar industry (9.91 ng/g in Zhoushan; 7.68 ng/g in Quzhou). Females had significantly lower liver PFAS levels than males, and older frogs tended to have lower PFAS levels than younger frogs. Skin, liver, and muscle contributed nearly 80% to the whole body burden of 6:2 Cl-PFESA in males, whereas the female ovary alone accounted for 58.4%. These results suggest substantial maternal transfer of 6:2 Cl-PFESA to eggs, raising concern regarding its developmental toxicity on frogs and other species. The bioaccumulation factor results (6:2 Cl-PFESA > PFOS; HFPO-TA > PFOA) suggest a stronger accumulative potential in the black-spotted frog for these alternative substances compared to their predecessors. Future studies on their toxicity and ecology risk are warranted.

PMID: 29310433

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27. Food Chem Toxicol. 2018 Feb;112:86-96. doi: 10.1016/j.fct.2017.12.024. Epub 2017 Dec 16.

Decreased macrophage phagocytic function due to xenobiotic exposures in vitro, difference in sensitivity between various macrophage models.

Berntsen HF[1], Bølling AK[2], Bjørklund CG[3], Zimmer K[3], Ropstad E[3], Zienolddiny S[4], Becher R[2], Holme JA[2], Dirven H[5], Nygaard UC[5], Bodin J[6].

Author information:

1 Norwegian University of Life Sciences, Faculty of Veterinary Medicine, Oslo, Norway; Department of Administration, Lab Animal Unit, National Institute of Occupational Health, Oslo, Norway.

2 Department of Air and Noise, Norwegian Institute of Public Health, Oslo, Norway.

3 Norwegian University of Life Sciences, Faculty of Veterinary Medicine, Oslo, Norway.

4 Department of Biological and Chemical Work Environment, National Institute of Occupational Health, Oslo, Norway.

5 Department of Toxicology and Risk Assessment, Norwegian Institute of Public Health, Oslo, Norway.

6 Department of Toxicology and Risk Assessment, Norwegian Institute of Public Health, Oslo, Norway; Department of Infectious Immunology, Norwegian Institute of Public Health, Oslo, Norway. Electronic address: johanna.bodin@fhi.no.

Abstract

Both autoimmune disease prevalence and exposure to immunotoxic chemicals have increased the last decades. As a first screening of immunotoxic chemicals possibly affecting development of autoimmunity through attenuated macrophage function, we demonstrate a promising model measuring macrophage function in isolated peritoneal macrophages (PCM) from Wistar rats and C57Bl/6 mice. Immunotoxic effects of bisphenol A (BPA) and a selection of perfluoroalkyl acids (PFAAs) were analysed in vitro assessing phagocytic function of macrophages from different sources. Phagocytosis was reduced in PCM of C57Bl/6 mice and Wistar rats after BPA and perfluoroundecanoic acid (PFUnDA) exposure, but not in macrophages derived from human and rat monocyte derived macrophages (MDM). On the other hand, in vitro exposure to mixtures of persistent organic pollutants (POPs) showed similar reductions in rat PCM and rat and human MDM phagocytosis. Reduced phagocytosis was partly due to cytotoxicity. PCM isolated from non-obese diabetic (NOD) mice, interleukin 1α/β knockout (IL-1KO) mice and new-born rats were less sensitive to the xenobiotics than PCM from adult wild type rodents. Finally, in vivo studies with NOD mice verified that POP exposure also decreased the number of pancreatic macrophages in pancreatic islets, reflecting early signs of autoimmunity development, similarly as previously described for BPA.

PMID: 29258957

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28. Chem Biol Interact. 2018 Feb 1;281:1-10. doi: 10.1016/j.cbi.2017.12.021. Epub 2017 Dec 14.

Cellular accumulation and lipid binding of perfluorinated alkylated substances (PFASs) - A comparison with lysosomotropic drugs.

Sanchez Garcia D[1], Sjödin M[1], Hellstrandh M[1], Norinder U[1], Nikiforova V[1], Lindberg J[1], Wincent E[1], Bergman Å[1], Cotgreave I[1], Munic Kos V[2].

Author information:

1 Swetox, Karolinska Institutet, Unit of Toxicology Sciences, Forskargatan 20, SE-151 36 Södertälje, Sweden.

2 Swetox, Karolinska Institutet, Unit of Toxicology Sciences, Forskargatan 20, SE-151 36 Södertälje, Sweden. Electronic address: vesna.munic.kos@swetox.se.

Abstract

Many chemicals accumulate in organisms through a variety of different mechanisms. Cationic amphiphilic drugs (CADs) accumulate in lysosomes and bind to membranes causing phospholipidosis, whereas many lipophilic chemicals target adipose tissue. Perfluoroalkyl substances (PFASs) are widely used as surfactants, but many of them are highly bioaccumulating and persistent in the environment, making them notorious environmental toxicants. Understanding the mechanisms of their bioaccumulation is, therefore, important for their regulation and substitution with new, less harmful chemicals. We compared the highly bioaccumulative perfluorooctanesulfonic acid PFOS to its three less bioaccumulative alternatives perfluorooctanoic acid (PFOA), perfluorohexanoic acid (PFHxA) and perfluorobutane sulfonic acid (PFBS), in their ability to accumulate and remain in lung epithelial cells (NCI-H292) and adipocytes (3T3-L1K) in vitro. As a reference point we tested a set of cationic amphiphilic drugs (CADs), known to highly accumulate in cells and strongly bind to phospholipids, together with their respective non-CAD controls. Finally, all compounds were examined for their ability to bind to neutral lipids and phospholipids in cell-free systems. Cellular accumulation and retention of the test compounds were highly correlated between the lung epithelial cells and adipocytes. Interestingly, although an anion itself, intensities of PFOS accumulation and retention in cells were comparable to those of CAD compounds, but PFOS failed to induce phospholipidosis or alter lysosomal volume. Compared to other lipophilicity measures, phospholipophilicity shows the highest correlation ($R^2 = 0.75$) to cellular accumulation data in both cell types and best distinguishes between high and low accumulating compounds. This indicates that binding to phospholipids may be the most important component in driving high cellular accumulation in lung epithelial cells, as well as in adipocytes, and for both CADs and bioaccumulating PFASs. Obtained continuous PLS models based on compound's affinity for phospholipids and neutral lipids can be used as good prediction models of cellular accumulation and retention of PFASs and CADs.

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PMID: 29248446 [Indexed for MEDLINE]
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29. Aquat Toxicol. 2018 Feb;195:24-32. doi: 10.1016/j.aquatox.2017.12.002. Epub 2017 Dec 7.

6:2 fluorotelomer sulfonamide alkylbetaine (6:2 FTAB), a novel perfluorooctane sulfonate alternative, induced developmental toxicity in zebrafish embryos.

Shi G[1], Xie Y[2], Guo Y[3], Dai J[4].

Author information:

1 Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, PR China; University of Chinese Academy of Sciences, Beijing 100049, PR China.

2 Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, PR China.

3 Key Laboratory of Organofluorine Chemistry Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, PR China.

4 Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, PR China. Electronic address: daijy@ioz.ac.cn.

Abstract

6:2 fluorotelomer sulfonamide alkylbetaine (6:2 FTAB) is a major component of Forafac®1157, a novel perfluorooctane sulfonate (PFOS) alternative used globally in aqueous film forming foams (AFFFs). Although 6:2 FTAB has been recently detected in the aquatic environment, its toxic effects on aquatic organisms remain unclear. Here, zebrafish embryos were exposed to various concentrations of 6:2 FTAB (0, 5, 10, 20, 40, 60, 80, and 100 mg/L) from 6 to 120 h post-fertilization (hpf) to investigate its developmental toxicity and possible mechanism of action. Results showed that exposure to 40 mg/L or higher concentrations of 6:2 FTAB significantly decreased the survival percentage and increased the malformation percentage. The median lethal concentration (LC_{50}) at 120 hpf was 43.73 ± 3.24 mg/L, and the corresponding benchmark dose lower limit (BMDL) of lethal effect was 33.79 mg/L. These values were both higher than those for PFOS, supporting the notion that 6:2 FTAB is less toxic than PFOS to zebrafish embryos. The most common developmental defect in 6:2 FTAB-treated embryos was rough-edged skin/fins. TUNEL assay showed that 6:2 FTAB exposure induced cell apoptosis in the tail region compared with that of the control, which might explain the rough-edged skin/fins. The increased transcriptional levels of p53, bax, and apaf1 and the increased activities of caspase-3, -8, and -9 provided further evidence of 6:2 FTAB-induced apoptosis. We also analyzed the effects of 6:2 FTAB on oxidative stress and the immune system. Results showed that reactive oxygen species and malondialdehyde accumulated in concentration-dependent manners after exposure to 6:2 FTAB, and antioxidant enzyme activities (catalase and glutathione peroxidase) also changed. Exposure to 6:2 FTAB also altered the transcriptional levels of ccl1, il-1β, il-8, tnfα, ifn, and cxcl-c1c, which play important roles in the innate immune system. Collectively, our data

suggest that 6:2 FTAB exposure can induce cell apoptosis, oxidative stress, and immunotoxicity, thus highlighting the developmental toxicity of 6:2 FTAB in zebrafish embryos.

PMID: 29247975

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30. Water Res. 2018 Feb 1;129:509-519. doi: 10.1016/j.watres.2017.10.067. Epub 2017 Oct 30.

Degradation of perfluorinated compounds by sulfate radicals - New mechanistic aspects and economical considerations.

Lutze HV[1], Brekenfeld J[2], Naumov S[3], von Sonntag C[2], Schmidt TC[4].

Author information:

1 University of Duisburg-Essen, Faculty of Chemistry, Instrumental Analytical Chemistry, Universitätsstraße 5, D-45141, Essen, Germany; IWW Water Centre, Moritzstraße 26, 45476, Mülheim an der Ruhr, Germany; Centre for Water and Environmental Research (ZWU), Universitätsstraße 5, 45141, Essen, Germany. Electronic address: holger.lutze@uni-due.de.

2 University of Duisburg-Essen, Faculty of Chemistry, Instrumental Analytical Chemistry, Universitätsstraße 5, D-45141, Essen, Germany.

3 Leibniz-Institut für Oberflächenmodifizierung e. V., Permoserstr. 15, 04318, Leipzig, Germany.

4 University of Duisburg-Essen, Faculty of Chemistry, Instrumental Analytical Chemistry, Universitätsstraße 5, D-45141, Essen, Germany; IWW Water Centre, Moritzstraße 26, 45476, Mülheim an der Ruhr, Germany; Centre for Water and Environmental Research (ZWU), Universitätsstraße 5, 45141, Essen, Germany.

Abstract

Perfluorinated organic compounds (PFC) are an important group of pollutants, which are difficult to be degraded in conventional water treatment. Even hydroxyl radical based processes are not capable to degrade these compounds. Sulfate radicals can oxidize a group of PFC, i.e., perfluorinated carboxylic (PFCAs) acids. However, information in literature on kinetics and reaction mechanism is largely based on model simulations which are prone to errors. The present study provides mechanistic insights based on product formation, material balances, competition kinetics experiments and quantum chemical calculations. Furthermore, energy requirements for sulfate radical based degradation of PFCA is evaluated in the present study. PFCAs can be partly mineralized in chain reactions initiated by sulfate radicals (SO_4^{-}). The perfluorinated acetic acid (TFA), propionic acid, and butanoic acid are largely degraded in a primary reaction with sulfate radicals. In case of PFCA with a chain length of > 4 carbons low yields of PFCA products were observed. Regarding reaction kinetics sulfate radicals react very slow with PFCAs (≈ 10^4 M^{-}

^{1} s^{-1}). Thus, the energy demand required for generation of SO_4^{-} by photolysis of $S_2O_8^{2-}$ (UV/$S_2O_8^{2-}$) is very high. A 90% degradation of a PFCA by UV/$S_2O_8^{2-}$ was estimated to be 55 kW h m^{-3} in pure water.

PMID: 29247911

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31. Environ Int. 2018 Feb;111:224-231. doi: 10.1016/j.envint.2017.11.031. Epub 2017 Dec 20.

Prenatal and childhood perfluoroalkyl substances exposures and children's reading skills at ages 5 and 8years.

Zhang H[1], Yolton K[2], Webster GM[3], Ye X[4], Calafat AM[4], Dietrich KN[5], Xu Y[2], Xie C[5], Braun JM[6], Lanphear BP[3], Chen A[7].

Author information:

1 Department of Environmental Health, School of Public Health, Shanxi Medical University, Taiyuan, Shanxi Province, China.

2 Division of General and Community Pediatrics, Department of Pediatrics, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA.

3 BC Children's Hospital Research Institute, Simon Fraser University, Vancouver, British Columbia, Canada.

4 Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA, USA.

5 Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH, USA.

6 Department of Epidemiology, Brown University School of Public Health, Providence, RI, USA.

7 Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH, USA. Electronic address: aimin.chen@uc.edu.

Abstract

BACKGROUND:

Exposure to perfluoroalkyl substances (PFASs) may impact children's neurodevelopment.

OBJECTIVE:

To examine the association of prenatal and early childhood serum PFAS concentrations with children's reading skills at ages 5 and 8years.

METHODS:

We used data from 167 mother-child pairs recruited during pregnancy (2003-2006) in Cincinnati, OH, quantified prenatal serum PFAS concentrations at 16±3weeks of gestation and childhood sera at ages 3 and 8years. We assessed children's reading skills using Woodcock-Johnson Tests of Achievement III at age 5years and Wide Range Achievement Test-4 at age 8years. We used general linear regression to quantify the covariate-adjusted associations between natural log-transformed PFAS concentrations and reading skills, and used multiple informant model to identify the potential windows of susceptibility.

RESULTS:

Median serum PFASs concentrations were PFOS>PFOA>PFHxS>PFNA in prenatal, 3-year, and 8-year children. The covariate-adjusted general linear regression identified positive associations between serum PFOA, PFOS and PFNA concentrations and children's reading scores at ages 5 and 8years, but no association between any PFHxS concentration and reading skills. The multiple informant model showed: a) Prenatal PFOA was positively associated with higher children's scores in Reading Composite (β: 4.0, 95% CI: 0.6, 7.4 per a natural log unit increase in exposure) and Sentence Comprehension (β: 4.2, 95% CI: 0.5, 8.0) at age 8years; b) 3-year PFOA was positively associated with higher children's scores in Brief Reading (β: 7.3, 95% CI: 0.9, 13.8), Letter Word Identification (β: 6.6, 95% CI: 1.1, 12.0), and Passage Comprehension (β: 5.9, 95% CI: 1.5, 10.2) at age 5years; c) 8-year PFOA was positively associated with higher children's Word Reading scores (β: 5.8, 95% CI: 0.8, 10.7) at age 8years. Prenatal PFOS and PFNA were positively associated with children's reading abilities at age 5years, but not at age 8years; 3-year PFOS and PFNA were positively associated with reading scores at age 5years. But PFHxS concentrations, at any exposure windows, were not associated with reading skills.

CONCLUSION:

Prenatal and childhood serum PFOA, PFOS and PFNA concentrations were positively associated with better children's reading skills at ages 5 and 8years, but no association was found between serum PFHxS and reading skills.

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PMCID: PMC5801149 [Available on 2019-02-01]
PMID: 29241079
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32. Environ Int. 2018 Feb;111:191-199. doi: 10.1016/j.envint.2017.12.002. Epub 2017 Dec 20.

Perfluoroalkyl acid levels in first-time mothers in relation to offspring weight gain and growth.

Gyllenhammar I[1], Diderholm B[2], Gustafsson J[2], Berger U[3], Ridefelt P[4], Benskin JP[5], Lignell S[6], Lampa E[7], Glynn A[6].

Author information:

1 National Food Agency, P.O. Box 622, 751 26 Uppsala, Sweden. Electronic address: Irina.gyllenhammar@slv.se.

2 Department of Women's and Children's Health, Uppsala University, 751 85 Uppsala, Sweden.

3 Department of Environmental Science and Analytical Chemistry (ACES), Stockholm University, 106 91 Stockholm, Sweden; Department Analytical Chemistry, Helmholtz Centre for Environmental Research - UFZ, 04318 Leipzig, Germany.

4 Department of Medical Sciences, Clinical Chemistry, Uppsala University, 751 85 Uppsala, Sweden.

5 Department of Environmental Science and Analytical Chemistry (ACES), Stockholm University, 106 91 Stockholm, Sweden.

6 National Food Agency, P.O. Box 622, 751 26 Uppsala, Sweden.

7 UCR Uppsala Clinical Research Center, Uppsala University, Uppsala, Sweden.

Abstract

We investigated if maternal body burdens of perfluoroalkyl acids (PFAAs) at the time of delivery are associated with birth outcome and if early life exposure (in utero/nursing) is associated with early childhood growth and weight gain. Maternal PFAA body burdens were estimated by analysis of serum samples from mothers living in Uppsala County, Sweden (POPUP), sampled three weeks after delivery between 1996 and 2011. Data on child length and weight were collected from medical records and converted into standard deviation scores (SDS). Multiple linear regression models with appropriate covariates were used to analyze associations between maternal PFAA levels and birth outcomes (n=381). After birth Generalized Least Squares models were used to analyze associations between maternal PFAA and child growth (n=200). Inverse associations were found between maternal levels of perfluorononanoic acid (PFNA), perfluorodecanoic acid (PFDA), and perfluoroundecanoic acid (PFUnDA), and birth weight SDS with a change of -0.10 to -0.18 weight SDS for an inter-quartile range (IQR) increase in ng/g PFAA. After birth, weight and length SDS were not significantly associated with maternal PFAA. However, BMI SDS was significantly associated with PFOA, PFNA, and PFHxS at 3 and 4years of age, and with PFOS at 4 and 5years of age. If causal, these associations suggest that PFAA affects fetal and childhood body development in different directions.

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PMID: 29223808
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33. Environ Sci Pollut Res Int. 2018 Feb;25(5):4787-4793. doi: 10.1007/s11356-017-0872-7. Epub 2017 Dec 2.

Adverse bioeffect of perfluorooctanoic acid on liver metabolic function in mice.

Wu X[1], Xie G[2], Xu X[3], Wu W[3], Yang B[4].

Author information:

1 College of Pharmacy, Guangxi Medical University, Nanning 530021, Guangxi, China, No.22 Shuangyong Road, Nanning, Guangxi, China.

2 Department of Gynecology, Guigang City People's Hospital, The Eight Affiliated Hospital of Guangxi Medical University, Guigang, 537100, People's Republic of China.

3 Guilin Medical University, Guangxi, Guilin, 541004, People's Republic of China.

4 College of Pharmacy, Guangxi Medical University, Nanning 530021, Guangxi, China, No.22 Shuangyong Road, Nanning, Guangxi, China. gxmu_yangbin@126.com.

Abstract

Perfluorooctanoic acid (PFOA), a kind of manufactured material, is widely accumulated around environmental system and into wildlife, including human beings. Toxicologically, PFOA induces hepatomegaly (liver enlargement) in the dose- and time-dependent manners. However, biological mechanism of hepatotoxicity warrants to be further investigated. In the present study, mature male mice were exposed to dosed PFOA for 21 days before conducting biochemical tests and immunoassays. As results, decreased fast blood glucose and elevated insulin contents were observed in PFOA-dosed mice. In addition, PFOA-dosed mice resulted in increased liver functional enzymes (GPT, GOT) in serum. And lipid contents (TG, lipoproteins) in serum and liver were changed abnormally. As shown in immunohistochemistry, increased insulin- and poly (ADP-ribose) polymerase (PARP)-positive cells were showed in PFOA-exposed pancreatic tissues. Moreover, CD36-positive cells were increased in PFOA-exposed livers, while ApoB-labeled cells were reduced. Further, immunoblot data showed that hepatocellular fibroblast growth factor 21 (FGF21) in PFOA-exposed liver was down-regulated dose-dependently. Taken together, our preliminary findings demonstrated that PFOA-induced hepatocellular lipotoxicity may be linked to impairing lipid-regulated proteins, as well as inducing insulin expression from pancreatic tissue.

PMID: 29198028

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34. J Hazard Mater. 2018 Feb 15;344:950-957. doi: 10.1016/j.jhazmat.2017.11.048. Epub 2017 Nov 28.

Photocatalytic degradation and mineralization of perfluorooctanoic acid (PFOA) using a composite TiO2 -rGO catalyst.

Gomez-Ruiz B[1], Ribao P[1], Diban N[1], Rivero MJ[1], Ortiz I[1], Urtiaga A[2].

Author information:

1 Department of Chemical and Biomolecular Engineering, Universidad de Cantabria, Av. de Los Castros s/n, 39005 Santander, Spain.

2 Department of Chemical and Biomolecular Engineering, Universidad de Cantabria, Av. de Los Castros s/n, 39005 Santander, Spain. Electronic address: urtiaga@unican.es.

Abstract

The inherent resistance of perfluoroalkyl substances (PFASs) to biological degradation makes necessary to develop advanced technologies for the abatement of this group of hazardous substances. The present work investigated the photocatalytic decomposition of perfluorooctanoic acid (PFOA) using a composite catalyst based on TiO_2 and reduced graphene oxide (95% TiO_2/5% rGO) that was synthesized using a facile hydrothermal method. The efficient photoactivity of the TiO_2-rGO ($0.1 gL^{-1}$) composite was confirmed for PFOA ($0.24 mmolL^{-1}$) degradation that reached 93±7% after 12h of UV-vis irradiation using a medium pressure mercury lamp, a great improvement compared to the TiO_2 photocatalysis (24±11% PFOA removal) and direct photolysis (58±9%). These findings indicate that rGO provided the suited properties of TiO_2-rGO, possibly as a result of acting as electron acceptor and avoiding the high recombination electron/hole pairs. The release of fluoride and the formation of shorter-chain perfluorocarboxilyc acids, that were progressively eliminated in a good match with the analysed reduction of total organic carbon, is consistent with a step-by-step PFOA decomposition via photogenerated hydroxyl radicals. Finally, the apparent first order rate constants of the TiO_2-rGO UV-vis PFOA decompositions, and the intermediate perfluorcarboxylic acids were found to increase as the length of the carbon chain was shorter.

PMID: 29197229

Similar articles

35. Environ Sci Pollut Res Int. 2018 Feb;25(5):4524-4543. doi: 10.1007/s11356-017-0828-y. Epub 2017 Nov 29.

Observed differentials in the levels of selected environmental contaminants among Mexican and

other Hispanic American children, adolescents, adults, and senior citizens.

Jain RB[1].

Author information:

1
, 2959 Estate View Court, Dacula, GA, 30019, USA. Jain.ram.b@gmail.com.

Abstract

Starting with the 2007-2008 cycle, the National Health and Nutrition Examination Survey (NHANES) also oversampled Hispanics other than Mexicans (OHISP) making it possible to treat OHISP as a separate demographic group along with Mexican Americans (MAs), non-Hispanic whites (NHWs), and non-Hispanic blacks (NHBs). Yet, more often than not, OHISP have been merged with MA to form an all-Hispanic demographic group (HISP) thus limiting comparisons between NHW, NHB, and HISP. Consequently, for the first time, this study was undertaken to evaluate differences in the observed levels of selected environmental contaminants between MA and OHISP from five groups of environmental contaminants, namely, polycyclic aromatic hydrocarbons (PAHs), iodine uptake inhibitors (IUIs), environmental phenols (EPHs), priority pesticides (PPs), and perfluoroalkyl acids (PFAAs). Data for 2007-2010 from NHANES were used to conduct this study. OHISP children born in USA had higher levels of selected PAH metabolites than USA-born MA, and Mexican-born MA adolescents had higher levels of selected PAH metabolites than USA-born MA adolescents. USA-born adolescent MA had higher levels of selected parabens than USA-born adolescent OHISP, and OHISP adults born in another Spanish-speaking country had higher levels of selected parabens than USA-born OHISP adults. USA-born MA adults and seniors had higher levels of selected dichlorophenols than Mexico-born MA adults and seniors, respectively. Females had higher levels of selected PAH metabolites, EPHs, and PPs than males among children, adolescents, adults, and seniors, but the reverse was true for the levels of selected IUIs and PFAAs among adolescents and seniors. Smokers had higher levels of almost all PAH metabolites than non-smokers for adolescents, adults, and seniors. The same was true for urinary thiocynate for adolescents, adults, and seniors. OHISP is a multiracial multiethnic demographic group substantially different from MA with possibly different smoking behavior and with possibly differential levels of exposure to certain environmental contaminants and as such should be treated as a demographic group by itself.

PMID: 29188596

Similar articles

36. Environ Res. 2018 Feb;161:268-275. doi: 10.1016/j.envres.2017.11.018. Epub 2017 Nov 21.

Contribution of diet and other factors to the observed levels of selected perfluoroalkyl acids in serum among US children aged 3-11 years.

Jain RB[1].

Author information:

1
2959 Estate View Ct, Dacula, GA 30019, USA. Electronic address: rbjvjnjajorj@yahoo.com.

Abstract

Data from National Health and Nutrition Examination Survey for 2013-2014 for children aged 3-11 years (N = 639) were analyzed to evaluate the contribution of diet and other factors in variability associated with the observed levels of seven perfluoroalkyl acids in serum, namely, 2(N-methyl-perfluorooctane sulfonamide) acetic acid (MPAH), perfluorodecanoic acid (PFDE), perfluorononanoic acid (PFNA), perflurorohexane sulfonic acid (PFHxS), linear isomer of PFOA (NPFOA), linear isomer of PFOS (NPFOS), and monomethyl isomer of PFOS (MPFOS). Diet accounted for a low of 18.6% of the total explained variance in the adjusted levels of NPFOA and a high of 72.3% for PFNA. Consumption of meat other than fish and poultry was associated with increased levels of NPFOS ($\beta = 0.00035$, $p < 0.01$) and MPFOS ($\beta = 0.00027$, $p=0.02$). However, consumption of fish was associated with decreased levels of PFDE ($\beta = - 0.00058$, $p=0.01$). Consumption of eggs was associated with higher levels of PFDE ($\beta = 0.00105$, $p=0.04$). Higher levels of PFHxS were associated with consumption of fruits and juices ($\beta = 0.00019$, $p = 0.03$). Exposure to environmental tobacco smoke in indoor environments other than home was associated with 12.6% increase in the levels of NPFOA. Boys had higher adjusted geometric mean (AGM) than girls for MPAH (0.88 vs. 0.70ng/mL, $p = 0.04$) and NPFOS (2.73 vs. 2.27ng/mL, $p = 0.04$). Non-Hispanic white had higher AGMs than Hispanics for MPAH (0.15 vs. 0.07, $p < 0.01$), for NPFOA (1.98 vs. 1.64ng/mL, $p < 0.01$), and MPFOS (1.39 vs. 1.18ng/mL, $p = 0.03$). Non-Hispanic white also had higher AGM than non-Hispanic Asians and others for PFHxS (0.99 vs. 0.63ng/mL, $p < 0.01$) and NPFOA (1.98 vs. 1.53ng/mL, $p < 0.01$).
PMID: 29169101
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37. Environ Res. 2018 Feb;161:236-247. doi: 10.1016/j.envres.2017.11.017.

Assessing the effects of seawater temperature and pH on the bioaccumulation of emerging chemical contaminants in marine bivalves.

Maulvault AL[1], Camacho C[2], Barbosa V[2], Alves R[2], Anacleto P[3], Fogaça F[4], Kwadijk C[5], Kotterman M[5], Cunha SC[6], Fernandes JO[6], Rasmussen RR[7], Sloth JJ[7], Aznar-Alemany Ò[8], Eljarrat E[8], Barceló D[8], Marques A[2].

Author information:

1
Division of Aquaculture and Upgrading (DivAV), Portuguese Institute for the Sea and Atmosphere (IPMA, I.P.), Lisbon, Portugal; Interdisciplinary Centre of Marine and Environmental Research

(CIIMAR), University of Porto, Porto, Portugal; MARE - Marine and Environmental Sciences Centre, Faculty of Sciences, University of Lisbon (FCUL), Lisboa, Portugal. Electronic address: aluisa@ipma.pt.

2 Division of Aquaculture and Upgrading (DivAV), Portuguese Institute for the Sea and Atmosphere (IPMA, I.P.), Lisbon, Portugal.

3 Division of Aquaculture and Upgrading (DivAV), Portuguese Institute for the Sea and Atmosphere (IPMA, I.P.), Lisbon, Portugal; Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), University of Porto, Porto, Portugal; MARE - Marine and Environmental Sciences Centre, Faculty of Sciences, University of Lisbon (FCUL), Lisboa, Portugal.

4 EMBRAPA, Embrapa Meio-Norte, Parnaíba, Brazil.

5 Wageningen University & Research, AB Ijmuiden, The Netherlands.

6 LAQV-REQUIMTE, Laboratory of Bromatology and Hydrology, Faculty of Pharmacy, University of Porto, Porto, Portugal.

7 National Food Institute, Technical University of Denmark, Søborg, Denmark.

8 Water and Soil Quality Research Group, Department of Environmental Chemistry, Institute of Environmental Assessment and Water Research, (IDAEA-CSIC), Barcelona, Spain.

Abstract

Emerging chemical contaminants [e.g. toxic metals speciation, flame retardants (FRs) and perfluorinated compounds (PFCs), among others], that have not been historically recognized as pollutants nor their toxicological hazards, are increasingly more present in the marine environment. Furthermore, the effects of environmental conditions (e.g. temperature and pH) on bioaccumulation and elimination mechanisms of these emerging contaminants in marine biota have been poorly studied until now. In this context, the aim of this study was to assess, for the first time, the effect of warmer seawater temperatures ($\Delta = + 4°C$) and lower pH levels ($\Delta = - 0.4$ pH units), acting alone or combined, on the bioaccumulation and elimination of emerging FRs (dechloranes 602, 603 and 604, and TBBPA), inorganic arsenic (iAs), and PFCs (PFOA and PFOS) in two estuarine bivalve species (Mytilus galloprovincialis and Ruditapes philippinarum). Overall, results showed that warming alone or combined with acidification promoted the bioaccumulation of some compounds (i.e. dechloranes 602, 604, TBBPA), but also facilitated the elimination of others (i.e. iAs, TBBPA). Similarly, lower pH also resulted in higher levels of dechloranes, as well as enhanced iAs, PFOA and PFOS elimination. Data also suggests that, when both abiotic stressors are combined, bivalves' capacity to accumulate contaminants may be time-dependent, considering significantly drastic increase observed with Dec 602 and TBBPA, during the last 10 days of exposure, when compared to reference conditions. Such changes in contaminants' bioaccumulation/elimination patterns also suggest a potential increase of human health risks of some compounds, if the climate continues changing as forecasted. Therefore, this first study pointed out the urgent need for further research on the effects of abiotic conditions on emerging contaminants kinetics, to adequately estimate the potential toxicological hazards associated to these compounds and develop recommendations/regulations for their presence in seafood, considering the prevailing environmental conditions expected in tomorrow's ocean.

PMID: 29169098

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38. Environ Int. 2018 Feb;111:1-13. doi: 10.1016/j.envint.2017.11.008. Epub 2017 Nov 20.

Early life exposure to per- and polyfluoroalkyl substances and mid-childhood lipid and alanine aminotransferase levels.

Mora AM[1], Fleisch AF[2], Rifas-Shiman SL[3], Woo Baidal JA[4], Pardo L[5], Webster TF[6], Calafat AM[7], Ye X[7], Oken E[8], Sagiv SK[9].

Author information:

1 Center for Environmental Research and Children's Health (CERCH), School of Public Health, University of California, Berkeley, Berkeley, CA, USA; Central American Institute for Studies on Toxic Substances, Universidad Nacional, Heredia, Costa Rica. Electronic address: animora@berkeley.edu.

2 Pediatric Endocrinology and Diabetes, Maine Medical Center, Portland, ME, USA; Center for Outcomes Research and Evaluation, Maine Medical Center Research Institute, Portland, ME, USA.

3 Division of Chronic Disease Research Across the Lifecourse, Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA.

4 Division of Pediatric Gastroenterology, Hepatology, and Nutrition, Columbia University Medical Center, New York, NY, USA.

5 Central American Institute for Studies on Toxic Substances, Universidad Nacional, Heredia, Costa Rica.

6 Department of Environmental Health, Boston University School of Public Health, Boston, MA, USA.

7 Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA, USA.

8 Division of Chronic Disease Research Across the Lifecourse, Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA; Department of Nutrition, Harvard T. H. Chan School of Public Health, Boston, MA, USA.

9 Center for Environmental Research and Children's Health (CERCH), School of Public Health, University of California, Berkeley, Berkeley, CA, USA; Division of Epidemiology, School of Public Health, University of California, Berkeley, Berkeley, CA, USA.

Abstract

BACKGROUND:

Growing evidence suggests that exposure to per- and polyfluoroalkyl substances (PFASs) may disrupt lipid homeostasis and liver function, but data in children are limited.

OBJECTIVE:

We examined the association of prenatal and mid-childhood PFAS exposure with lipids and alanine aminotransferase (ALT) levels in children.

METHODS:

We studied 682 mother-child pairs from a Boston-area pre-birth cohort. We quantified PFASs in maternal plasma collected in pregnancy (median 9.7weeks gestation, 1999-2002) and in child plasma collected in mid-childhood (median age 7.7years, 2007-2010). In mid-childhood we also measured fasting total (TC), high-density lipoprotein cholesterol (HDL-C), triglycerides (TG), and ALT. We then derived low-density lipoprotein cholesterol (LDL-C) from TC, HDL-C, and TG using the Friedewald formula.

RESULTS:

Median (interquartile range, IQR) perfluorooctane sulfonate (PFOS), perfluorooctanoate (PFOA), and perfluorodecanoate (PFDeA) concentrations in child plasma were 6.2 (5.5), 4.3 (3.0), and 0.3 (0.3) ng/mL, respectively. Among girls, higher child PFOS, PFOA, and PFDeA concentrations were associated with detrimental changes in the lipid profile, including higher TC and/or LDL-C [e.g., β per IQR increment in PFOS=4.0mg/dL (95% CI: 0.3, 7.8) for TC and 2.6mg/dL (-0.5, 5.8) for LDL-C]. However, among both boys and girls, higher plasma concentrations of these child PFASs were also associated with higher HDL-C, which predicts better cardiovascular health, and slightly lower ALT, which may indicate better liver function. Prenatal PFAS concentrations were also modestly associated with improved childhood lipid and ALT levels.

CONCLUSIONS:

Our data suggest that prenatal and mid-childhood PFAS exposure may be associated with modest, but somewhat conflicting changes in the lipid profile and ALT levels in children.

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PMID: 29156323
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39. Chemosphere. 2018 Feb;193:358-364. doi: 10.1016/j.chemosphere.2017.10.082. Epub 2017 Oct 27.

Detection of perfluoroalkyl acids and sulphonates in Italian eel samples by HPLC-HRMS Orbitrap.

Chiesa LM[1], Nobile M[1], Pasquale E[1], Balzaretti C[1], Cagnardi P[1], Tedesco D[2], Panseri S[3], Arioli F[1].

Author information:

1 Department of Health, Animal Science and Food Safety, University of Milan, Via Celoria 10, 20133, Milan, Italy.

2 Department of Environmental Sciences and Policies, University of Milan, Via Celoria 10, 20133, Milan, Italy.

3 Department of Health, Animal Science and Food Safety, University of Milan, Via Celoria 10, 20133, Milan, Italy. Electronic address: sara.panseri@unimi.it.

Abstract

Perfluoroalkyl substances (PFASs) contain one or more carbon-bound hydrogens substituted by fluorine. Since the 1950s, these compounds have been used to manufacture fat- and water-resistant fabrics, paper and food containers, and to produce photographic films, firefighting foams, detergents and insecticides. The widespread use and global distribution of PFASs, have led to their accumulation in the environment. Food, particularly fish and other seafood, is considered the main route of human exposure to PFASs. Consequently, the European Food Safety Authority (EFSA) recommends that more data be collected, to build a database on the contamination levels of the individual PFASs in food, to evaluate a reliable chronic risk to the European consumers. This requires high-sensitivity analytical methods, to increase the number of quantifiable samples and, thereby, improve the credibility of exposure assessments. In this context, the aim of the present research is to develop and validate a sensitive and specific method based on high-performance liquid chromatography-high resolution mass spectrometry (HPLC-HRMS) analysis, to monitor the presence of 16 PFASs in Italian eels (Anguilla anguilla) from the Italian Lake Garda. The detection limits (CCα) and detection capability (CCβ) in the order of pg g^{-1}, the recoveries between 80 and 101% and the other validation parameters fulfilled the requirements of Commission Decision 657/2002/EC. The identification and quantification of PFASs, up to 11 in the same sample, showed a similar distribution among 90 eels. Perfluorooctane sulphonic acid (PFOS) and perfluorobutanoic acid (PFBA) were the analytes more frequently found in the eel samples (94 and 82%, respectively).

PMID: 29149712

Similar articles

40. Talanta. 2018 Feb 1;178:955-961. doi: 10.1016/j.talanta.2017.10.034. Epub 2017 Oct 21.

A High Sensitivity Biosensor to detect the presence of perfluorinated compounds in environment.

Cennamo N[1], Zeni L[2], Tortora P[3], Regonesi ME[3], Giusti A[4], Staiano M[5], D'Auria S[6], Varriale A[5].

Author information:

1

Department of Industrial and Information Engineering, University of Campania "Luigi Vanvitelli", 81031 Aversa, Italy.

2

Department of Industrial and Information Engineering, University of Campania "Luigi Vanvitelli", 81031 Aversa, Italy. Electronic address: luigi.zeni@unicampania.it.

3

Department of Biotechnologies and Biosciences, University of Milano-Bicocca, Milan, Italy.

4

CyRIC 72, 28th Octovriou Avenue, Office 301, Engomi, 2414 Nicosia, Cyprus.

5

Institute of Food Science, ISA-CNR, Via Roma 64, 83100 Avellino, Italy.

6

Institute of Food Science, ISA-CNR, Via Roma 64, 83100 Avellino, Italy. Electronic address: sabato.dauria@cnr.it.

Abstract

A novel surface plasmon resonance (SPR) optical fiber biosensor, able to bind perfluorooctanoate and perfluorooctanesulfonate compounds, is presented. In the first step, an ad hoc antibody compound has been designed, produced and tested by ELISA, then, in the second step, the gold surface of a plastic optical fiber sensor has been derivatizated and functionalized with this new bio-receptor, able to bind target analytes with high affinity and selectivity. The experimental data have shown that the developed SPR optical fiber biosensor makes it possible to detect these compounds. One advantage of this approach stems from the possibility to monitor the perfluorinated compounds in the environment exploiting the remote sensing capability offered by the optical fibers. The measurements were performed in laboratory, also exploiting matrices mimicking the real environment. The limit of detection of the assay was 0.21ppb, a value that is lower than the maximum residue limit fixed by the European Union regulations.

PMID: 29136923

Similar articles

41. Talanta. 2018 Feb 1;178:129-133. doi: 10.1016/j.talanta.2017.09.008. Epub 2017 Sep 6.

Carboxylated carbon nanospheres as solid-phase extraction adsorbents for the determination of perfluorinated compounds in water samples by liquid chromatography-tandem mass spectrometry.

Wang X[1], Zhang Y[2], Li FW[1], Zhao RS[3].

Author information:

1

Key Laboratory for Applied Technology of Sophisticated Analytical Instruments of Shandong Province, Analysis and Test Center, Shandong Academy of Sciences, Jinan, China.

2 Key Laboratory for Applied Technology of Sophisticated Analytical Instruments of Shandong Province, Analysis and Test Center, Shandong Academy of Sciences, Jinan, China; College of food science and engineering, Shandong Agricultural University, Taian, China.

3 Key Laboratory for Applied Technology of Sophisticated Analytical Instruments of Shandong Province, Analysis and Test Center, Shandong Academy of Sciences, Jinan, China. Electronic address: zhaors1976@126.com.

Erratum in

- Corrigendum to, Carboxylated carbon nanospheres as solid-phase extraction adsorbents for the determination of perfluorinated compounds in water samples by liquid chromatography-tandem mass spectrometry' [Talanta 178 (2018) 129-133]. [Talanta. 2018]

Abstract

This work demonstrates the extraction potential of carboxylated carbon nanospheres (CNSs-COOH) for solid-phase extraction of perfluoroalkyl acids (PFAAs) for the first time. Six PFAAs, including perfluorohexanesulfonate (PFHxS), perfluoroheptanoic acid (PFHpA), perfluorooctanoic acid (PFOA), perfluorooctanoic sulfonic (PFOS), perfluorononanoic acid (PFNA) and perfluorodecanoic acid (PFDA), were quantitatively adsorbed on a CNSs-COOH-packed cartridge; then, the PFAAs retained on the adsorbent were quantitatively eluted with an optimized volume of acetone (pH = 10). Finally, the desorbed PFAAs were determined by liquid chromatography-tandem mass spectrometry. Important relevant factors, such as the eluant and its volume, sample pH, amount of CNSs-COOH, sample flow rate and sample volume were optimized in detail. Under the optimized conditions, low limits of detection (0.01-1.2ngL^{-1}), wide linear range (0.50-200ngL^{-1}) and good repeatability (2.4-5.1%) and good reproducibility (3.7-8.8%) were obtained. The proposed method was applied to analyze the six PFAAs in real environmental water samples, and satisfactory results were achieved. All of these results showed that CNSs-COOH will be a good choice for the pre-concentration and analysis of target PFAAs at trace levels in environmental water samples in the future.

PMID: 29136802

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42. J Colloid Interface Sci. 2018 Feb 15;512:511-521. doi: 10.1016/j.jcis.2017.10.086. Epub 2017 Oct 25.

Modulation of wettability, gradient and adhesion on self-assembled monolayer by counterion exchange and pH.

Mosnáček J[1], Popelka A[2], Osicka J[2], Filip J[3], Ilcikova M[1], Kollar J[1], Yousaf AB[2], Bertok T[4], Tkac J[4], Kasak P[5].

Author information:

1 Center for Advanced Materials, Qatar University, P.O. Box 2713, Doha, Qatar; Polymer Institute, Slovak Academy of Sciences, Dubravska cesta 9, 845 41 Bratislava, Slovak Republic.

2 Center for Advanced Materials, Qatar University, P.O. Box 2713, Doha, Qatar.

3 Department of Environment Protection Engineering, Tomas Bata University, Vavreckova 275, 760 01 Zlin, Czech Republic.

4 Department of Glycobiotechnology, Institute of Chemistry, Slovak Academy of Sciences, Dubravská cesta 9, 845 38 Bratislava, Slovak Republic.

5 Center for Advanced Materials, Qatar University, P.O. Box 2713, Doha, Qatar. Electronic address: peter.kasak@qu.edu.qa.

Abstract

In this study, two quaternary ammonium salts derived from l-lipoic acid were applied for self-assembled monolayers formation on rough structured gold surface. The derivatives differ in functionality since one possesses simple quaternary ammonium group whereas the other one is carboxybetaine ester containing quaternary ammonium group with pH hydrolysable ester group as a pendant. The response of surface wettability to ion exchange between Cl^- and perfluorooctanoate, kinetics and gradient wettability were examined by water contact angle measurement and confirmed by X-ray photoelectron spectroscopy. Furthermore, adhesion forces related to applied counterion on the entire surface and after hydrolysis were investigated by atomic force microscopy measurement at nanometer scales. A dramatic change in wettability upon counterion exchange from superhydrophilic for Cl^- to very or superhydrophobic for perfluorooctanoate in a repeatable manner was observed for both derivatives. Kinetics of counterion exchanges revealed faster hydration of simple quaternary derivate. The wettability gradient could be designed from superhydrophobic to superhydrophilic either in a reversible manner by simple immersion of the modified surface in a counterion solution modulated by ionic strength or in an irreversible manner for carboxybetaine ester derivate by time-controlled hydrolysis to charge balanced carboxybetaine.

PMID: 29096112

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43. J Colloid Interface Sci. 2018 Feb 1;511:474-481. doi: 10.1016/j.jcis.2017.09.102. Epub 2017 Sep 28.

Interactions of perfluoroalkyl substances with a phospholipid bilayer studied by neutron reflectometry.

Nouhi S[1], Ahrens L[2], Campos Pereira H[3], Hughes AV[4], Campana M[4], Gutfreund P[5], Palsson GK[5], Vorobiev A[5], Hellsing MS[6].

Author information:

1
Materials Physics, Department of Physics and Astronomy, Ångström Laboratory, Uppsala University, Box 516, SE-751 20 Uppsala, Sweden. Electronic address: shirin.nouhi@physics.uu.se.

2
Department of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences (SLU), Box 7050, SE-750 07 Uppsala, Sweden.

3
Department of Soil and Environment, Swedish University of Agricultural Sciences (SLU), Box 7050, SE-750 07 Uppsala, Sweden.

4
Rutherford Appleton Laboratory, Harwell Oxford, Didcot OX11 0QX, United Kingdom.

5
Institut Laue - Langevin, 71 avenue des Martyrs, F-38000 Grenoble, France.

6
Materials Physics, Department of Physics and Astronomy, Ångström Laboratory, Uppsala University, Box 516, SE-751 20 Uppsala, Sweden.

Abstract

The interactions between perfluoroalkyl substances (PFASs) and a phospholipid bilayer (1,2-dimyristoyl-sn-glycero-3-phosphocholine) were investigated at the molecular level using neutron reflectometry. Representative PFASs with different chain length and functional groups were selected in this study including: perfluorobutane sulfonate (PFBS), perfluorohexanoate (PFHxA), perfluorohexane sulfonate (PFHxS), perfluorononanoate (PFNA), perfluorooctane sulfonate (PFOS), and perfluorooctane sulfonamide (FOSA). All PFASs were found to interact with the bilayer by incorporation, indicating PFAS ability to accumulate once ingested or taken up by organisms. The interactions were observed to increase with chain length and vary with the functional group as SO_2NH_2(FOSA)>SO_2O^-(PFOS)>COO^-(PFNA). The PFAS hydrophobicity, which is strongly correlated with perfluorocarbon chain length, was found to strongly influence the interactions. Longer chain PFASs showed higher tendency to penetrate into the bilayer compared to the short-chain compounds. The incorporated PFASs could for all substances but one (PFNA) be removed from the lipid membrane by gentle rinsing with water ($2mLmin^{-1}$). Although short-chain PFASs have been suggested to be the potentially less bioaccumulative alternative, we found that in high enough concentrations they can also disturb the bilayer. The roughness and disorder of the bilayer was observed to increase as the concentration of PFASs increased (in particular for the high concentrations of short-chain substances i.e. PFHxA and PFBS), which can be an indication of aggregation of PFASs in the bilayer.

PMID: 29073553

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44. Arch Toxicol. 2018 Feb;92(2):705-716. doi: 10.1007/s00204-017-2077-8. Epub 2017 Oct 23.

PFOS induces proliferation, cell-cycle progression, and malignant phenotype in human breast epithelial cells.

Pierozan P[1], Karlsson O[2].

Author information:

1 Department of Pharmaceutical Biosciences, Uppsala University, Uppsala, Sweden.

2 Department of Pharmaceutical Biosciences, Uppsala University, Uppsala, Sweden. Oskar.Karlsson@farmbio.uu.se.

Abstract

Perfluorooctanesulfonic acid (PFOS) is a synthetic fluorosurfactant widely used in the industry and a prominent environmental toxicant. PFOS is persistent, bioaccumulative, and toxic to mammalian species. Growing evidence suggests that PFOS has the potential to interfere with estrogen homeostasis, posing a risk of endocrine-disrupting effects. Recently, concerns about a potential link between PFOS and breast cancer have been raised, but the mechanisms underlying its actions as a potential carcinogen are unknown. By utilizing cell proliferation assays, flow cytometry, immunocytochemistry, and cell migration/invasion assays, we examined the potentially tumorigenic activity of PFOS (100 nM-1 mM) in MCF-10A breast cell line. The results showed that the growth of MCF-10A cells exposed to 1 and 10 μM PFOS was higher compared to that of the control. Mechanistic studies using 10 μM PFOS demonstrated that the compound promotes MCF-10A proliferation through accelerating G_0/G_1-to-S phase transition of the cell cycle after 24, 48, and 72 h of treatment. In addition, PFOS exposure increased CDK4 and decreased p27, p21, and p53 levels in the cells. Importantly, treatment with 10 μM PFOS for 72 h also stimulated MCF-10A cell migration and invasion, illustrating its capability to induce neoplastic transformation of human breast epithelial cells. Our experimental results suggest that exposure to low levels of PFOS might be a potential risk factor in human breast cancer initiation and development.

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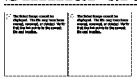

45. Environ Pollut. 2018 Feb;233:8-15. doi: 10.1016/j.envpol.2017.10.039. Epub 2017 Oct 16.

Bioaccumulation and effects of novel chlorinated polyfluorinated ether sulfonate in freshwater alga Scenedesmus obliquus.

Liu W[1], Li J[2], Gao L[2], Zhang Z[2], Zhao J[2], He X[2], Zhang X[2].

Author information:

1 Key Laboratory of Industrial Ecology and Environmental Engineering (MOE), School of Environmental Science and Technology, Dalian University of Technology, Dalian 116024, China. Electronic address: liu_wei@dlut.edu.cn.

2 Key Laboratory of Industrial Ecology and Environmental Engineering (MOE), School of Environmental Science and Technology, Dalian University of Technology, Dalian 116024, China.

Abstract

Chlorinated polyfluorinated ether sulfonate (Cl-PFESA) is a novel alternative compound for perfluorooctane sulfonate (PFOS), with its environmental risk not well known. The bioaccumulation and toxic effects of Cl-PFESA in the freshwater alga is crucial for the understanding of its potential hazards to the aquatic environment. Scenedesmus obliquus was exposed to Cl-PFESA at ng L^{-1} to mg L^{-1}, with the exposure regime beginning at the environmentally relevant level. The total log BAF of Cl-PFESA in S. obliquus was 4.66, higher than the reported log BAF of PFOS in the freshwater plankton (2.2-3.2). Cl-PFESA adsorbed to the cell surface accounted for 33.5-68.3% of the total concentrations. The IC50 of Cl-PFESA to algal growth was estimated to be 40.3 mg L^{-1}. Significant changes in algal growth rate and chlorophyll a/b contents were observed at 11.6 mg L^{-1} and 13.4 mg L^{-1} of Cl-PFESA, respectively. The sample cell membrane permeability, measured by the fluorescein diacetate hydrolyzation, was increased by Cl-PFESA at 5.42 mg L^{-1}. The mitochondrial membrane potential, measured by Rh123 staining, was also increased, indicating the hyperpolarization induced by Cl-PFESA. The increasing ROS and MDA contents, along with the enhanced SOD, CAT activity, and GSH contents, suggested that Cl-PFESA caused oxidative damage in the algal cells. It is less possible that current Cl-PFESA pollution in surface water posed obvious toxic effects on the green algae. However, the bioaccumulation of Cl-PFESA in algae would contribute to its biomagnification in the aquatic food chain and its effects on membrane property could potentially increase the accessibility and toxicity of other coexisting pollutants.

PMID: 29049944

Similar articles

46. Int Arch Occup Environ Health. 2018 Feb;91(2):145-154. doi: 10.1007/s00420-017-1267-2. Epub 2017 Oct 12.

Occupational exposure to perfluoroalkyl substances and serum levels of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in an aging population from upstate New York: a retrospective cohort study.

Tanner EM[1], Bloom MS[1,2], Wu Q[3], Kannan K[1,3], Yucel RM[2], Shrestha S[2], Fitzgerald EF[4,5].

Author information:

1 Department of Environmental Health Sciences, School of Public Health, University at Albany, State University of New York, One University Place, Rensselaer, NY, 12144, USA.

2 Department of Epidemiology and Biostatistics, School of Public Health, University at Albany, State University of New York, One University Place, Rensselaer, NY, 12144, USA.

3 Division of Environmental Health Sciences, Wadsworth Center, New York State Department of Health, Albany, NY, 12201, USA.

4 Department of Environmental Health Sciences, School of Public Health, University at Albany, State University of New York, One University Place, Rensselaer, NY, 12144, USA. efitzgerald@albany.edu.

5 Department of Epidemiology and Biostatistics, School of Public Health, University at Albany, State University of New York, One University Place, Rensselaer, NY, 12144, USA. efitzgerald@albany.edu.

Abstract

PURPOSE:

Perfluoroalkyl substances (PFASs) are environmentally persistent amphiphilic compounds. Exposure to two PFASs, perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) is linked to specific occupations and industries. This study examines the contribution of past occupational PFAS exposure to serum PFOS and PFOA levels among 154 older adults in New York State.

METHODS:

Serum PFOS and PFOA levels were compared to data from the National Health and Nutrition Examination Survey (NHANES). Potential occupational exposure to any PFAS was determined from work histories,

reviewed by an industrial hygienist, and assessed in relation to current serum PFOS and PFOA levels using exposure probability, duration and cumulative exposure.

RESULTS:

We observed 25% higher serum PFOS and 80% higher PFOA levels in study participants compared to NHANES. No participants reported PFAS chemical manufacturing work, but n = 68 reported work in occupations and industries known to use PFASs. We found that participants with high cumulative workplace exposure had 34% higher serum PFOS levels compared to participants without occupational exposure, adjusted for age, sex and income. Serum PFOS levels were 26% higher for participants with longer occupational exposure durations. The probability of occupational PFAS exposure metric was not associated with serum PFOS. Serum PFOA was not associated with any measure of occupational exposure.

CONCLUSION:

Occupational exposure may contribute to total PFOS body burden in this study population, even among workers not directly involved in manufacturing PFASs. PFAS exposure assessments should evaluate the workplace as a potential source, even when workplace exposures are assumed to be low or moderate.

PMID: 29027000

Similar articles

47. Environ Sci Pollut Res Int. 2018 Feb;25(5):4066-4084. doi: 10.1007/s11356-017-0399-y. Epub 2017 Oct 12.

In search of a comprehensible set of endpoints for the routine monitoring of neurotoxicity in vertebrates: sensory perception and nerve transmission in zebrafish (Danio rerio) embryos.

Stengel D[1], Wahby S[1], Braunbeck T[2].

Author information:

1 Aquatic Ecology and Toxicology Group, Center for Organismal Studies (COS), University of Heidelberg, Im Neuenheimer Feld 120, 69120, Heidelberg, Germany.

2 Aquatic Ecology and Toxicology Group, Center for Organismal Studies (COS), University of Heidelberg, Im Neuenheimer Feld 120, 69120, Heidelberg, Germany. braunbeck@uni-hd.de.

Abstract

In order to develop a test battery based on a variety of neurological systems in fish, three sensory systems (vision, olfaction, and lateral line) as well as nerve transmission (acetylcholine esterase) were analyzed in

zebrafish (Danio rerio) embryos with respect to their suitability as a model for the screening of neurotoxic trace substances in aquatic ecosystems. As a selection of known or putative neurotoxic compounds, amidotrizoic acid, caffeine, cypermethrin, dichlorvos, 2,4-dinitrotoluene, 2,4-dichlorophenol, 4-nonylphenol, perfluorooctanoic acid, and perfluorooctane sulfonic acid were tested in the fish embryo test (OECD test guideline 236) to determine EC_{10} values, which were then used as maximum test concentration in subsequent neurotoxicity tests. Whereas inhibition of acetylcholinesterase was investigated biochemically both in vivo and in vitro (ex vivo), the sensory organs were studied in vivo by means of fluorescence microscopy and histopathology in 72- or 96-h-old zebrafish embryos, which are not regarded as protected developmental stages in Europe and thus - at least de jure - represent alternative test methods. Various steps of optimization allowed this neurotoxicity battery to identify neurotoxic potentials for five out of the nine compounds: Cypermethrin and dichlorvos could be shown to specifically modulate acetylcholinesterase activity; dichlorvos, 2,4-dichlorophenol, 4-nonylphenol, and perfluorooctane sulfonic acid led to a degeneration of neuromasts, whereas both vision and olfaction proved quite resistant to concentrations $\leq EC_{10}$ of all of the model neurotoxicants tested. Comparison of neurotoxic effects on acetylcholinesterase activity following in vivo and in vitro (ex vivo) exposure to cypermethrin provided hints to a specific enzyme-modulating activity of pyrethroid compounds. Enhancement of the neuromast assay by applying a simultaneous double-staining procedure and implementing a 4-scale scoring system (Stengel et al. 2017) led to reduced variability of results and better statistical resolution and allowed to differentiate location-dependent effects in single neuromasts. Since acetylcholinesterase inhibition and neuromast degeneration can be analyzed in 72- and 96-h-old zebrafish embryos exposed to neurotoxicants according to the standard protocol of the fish embryo toxicity test (OECD TG 236), the fish embryo toxicity test can be enhanced to serve as a sensitive neurotoxicity screening test in non-protected stages of vertebrates.

PMID: 29022183

Similar articles

48. Toxicol In Vitro. 2018 Feb;46:86-93. doi: 10.1016/j.tiv.2017.09.030. Epub 2017 Oct 2.

Endocrine disruptor effect of perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) on porcine ovarian cell steroidogenesis.

Chaparro-Ortega A[1], Betancourt M[2], Rosas P[3], Vázquez-Cuevas FG[4], Chavira R[5], Bonilla E[6], Casas E[7], Ducolomb Y[8].

Author information:

1 Laboratorio de Biología Celular, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana, Unidad Iztapalapa, CDMX, México; Doctorado en Biología Experimental, Universidad Autónoma Metropolitana-Iztapalapa, CDMX, México. Electronic address: andych022003@yahoo.com.mx.

2 Laboratorio de Biología Celular, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana, Unidad Iztapalapa, CDMX, México. Electronic address: bet@xanum.uam.mx.

3
Unidad de Investigación en Biología de la Reproducción, Laboratorio de Neuroinmuno-endocrinología, Facultad de Estudios Superiores Zaragoza, Universidad Nacional Autónoma de México, CDMX, México. Electronic address: prosas44@yahoo.com.mx.
4
Departamento de Neurobiología Celular y Molecular, Instituto de Neurobiología, Universidad Nacional Autónoma de México, Juriquilla, Querétaro, México. Electronic address: fvazquezc132005@yahoo.com.mx.
5
Departamento de Biología de la Reproducción, Instituto Nacional de la Nutrición "Salvador Zubirán", CDMX, México. Electronic address: robertochavira2002@yahoo.com.mx.
6
Laboratorio de Biología Celular, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana, Unidad Iztapalapa, CDMX, México. Electronic address: mundo@xanum.uam.mx.
7
Laboratorio de Biología Celular, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana, Unidad Iztapalapa, CDMX, México. Electronic address: dino@xanum.uam.mx.
8
Laboratorio de Biología Celular, Departamento de Ciencias de la Salud, Universidad Autónoma Metropolitana, Unidad Iztapalapa, CDMX, México. Electronic address: duco@xanum.uam.mx.

Abstract

Previous studies with perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) indicate that they act as endocrine disruptors, in addition to inducing alterations and damaging reproductive health; however, the biological mechanisms by which these disorders are produced are not yet understood. The aim of this study was to analyze the effect of PFOS and PFOA on in vitro steroidogenic secretion in porcine theca and granulosa cells, with or without gonadotropic stimulation. Granulosa and theca cells were isolated and cultured. Cell nature was performed by immunocytochemistry. PFOS and PFOA effect on steroid secretion was analyzed by chemiluminescence. In the present study, alterations in steroidogenic secretion were found when administering PFOS (0.12, 1.2, 12, 120 or 240μM) or PFOA (0.012, 0.12, 1.2, 12 or 24μM) to theca and granulosa cells. When theca and granulosa cells were stimulated with 500ng/mL LH or 500ng/mL FHS, respectively and immediately followed with 1.2μM of PFOS or PFOA, the perfluorinated compounds inhibited the secretion of steroid hormones in both stimulated cell types. The results indicate that PFOS and PFOA act on steroidogenic ovarian cells as endocrine disruptors, which could affect the dependent functions of sexual steroids.

PMID: 28982594

Similar articles

49. Sci Total Environ. 2018 Feb 1;613-614:352-360. doi: 10.1016/j.scitotenv.2017.09.021. Epub 2017 Sep 14.

Potential effects of changes in climate and emissions on distribution and fate of

perfluorooctane sulfonate in the Bohai Rim, China.

Su C[1], Song S[1], Lu Y[2], Liu S[3], Giesy JP[4], Chen D[5], Jenkins A[6], Sweetman AJ[7], Yvette B[1].

Author information:

1 State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China; University of Chinese Academy of Sciences, Beijing 100049, China.

2 State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China; University of Chinese Academy of Sciences, Beijing 100049, China. Electronic address: yllu@rcees.ac.cn.

3 State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China; State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences, Beijing 100012, China.

4 Toxicology Centre, Department of Veterinary Biomedical Sciences, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

5 Department of Earth Sciences, University of Gothenburg, 405 30 Gothenburg, Sweden.

6 Centre for Ecology & Hydrology, Wallingford, OX 10 8BB, UK.

7 Centre for Ecology & Hydrology, Wallingford, OX 10 8BB, UK; Lancaster Environment Centre, Lancaster University, Lancaster LA1 4YQ, UK.

Abstract

Climate change and emissions rates of contaminants are expected to affect distribution and fate of Persistent Organic Pollutants (POPs) in the environment, however, studies on these combined factors are rare. In this study, Perfluorooctane Sulfonate (PFOS) is used as an example to assess how those two factors synthetically affect fate and disposition of POPs in the Bohai Rim of China by using the Berkeley-Trent-Urban-Rural (BETR-Urban-Rural) model. We set up three climate change scenarios and four emission scenarios to conduct the simulations. The results show that climate change could have significant effects on the transport and fate of PFOS mainly including advection, inter-compartmental transfer under the "worst case" emission scenario. For most grids, a remarkable decrease in concentrations of PFOS are predicted for fresh water and urban soil in the future, with precipitation and temperature being predominant factors, whilst for coastal water and rural soil, an increasing trend is predicted. Additionally, predicted sum of sources to the Bohai Sea increases greater than removals from the Bohai Sea in the future, adding evidence that concentrations of PFOS in coastal water will increase more in the future. Under scenarios of reduced emissions and climate change, concentrations of PFOS in each compartment decreased more rapidly over time. We suggest that assessment of future climate change impacts on fate of PFOS could take emission reductions into consideration.

PMID: 28917174

Similar articles

50. Sci Total Environ. 2018 Feb 1;613-614:176-185. doi: 10.1016/j.scitotenv.2017.09.065. Epub 2017 Sep 12.

Assessing the potential contributions of additional retention processes to PFAS retardation in the subsurface.

Brusseau ML[1].

Author information:

1

429 Shantz Bldg, Soil, Water and Environmental Science Department, Hydrology and Atmospheric Sciences Department, School of Earth and Environmental Sciences, University of Arizona, United States. Electronic address: brusseau@email.arizona.edu.

Abstract

A comprehensive understanding of the transport and fate of per- and poly-fluoroalkyl substances (PFAS) in the subsurface is critical for accurate risk assessments and design of effective remedial actions. A multi-process retention model is proposed to account for potential additional sources of retardation for PFAS transport in source zones. These include partitioning to the soil atmosphere, adsorption at air-water interfaces, partitioning to trapped organic liquids (NAPL), and adsorption at NAPL-water interfaces. An initial assessment of the relative magnitudes and significance of these retention processes was conducted for two PFAS of primary concern, perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), and an example precursor (fluorotelomer alcohol, FTOH). The illustrative evaluation was conducted using measured porous-medium properties representative of a sandy vadose-zone soil. Data collected from the literature were used to determine measured or estimated values for the relevant distribution coefficients, which were in turn used to calculate retardation factors for the model system. The results showed that adsorption at the air-water interface was a primary source of retention for both PFOA and PFOS, contributing approximately 50% of total retention for the conditions employed. Adsorption to NAPL-water interfaces and partitioning to bulk NAPL were also shown to be significant sources of retention. NAPL partitioning was the predominant source of retention for FTOH, contributing ~98% of total retention. These results indicate that these additional processes may be, in some cases, significant sources of retention for subsurface transport of PFAS. The specific magnitudes and significance of the individual retention processes will depend upon the properties and conditions of the specific system of interest (e.g., PFAS constituent and concentration, porous medium, aqueous chemistry, fluid saturations, co-contaminants). In cases wherein these additional retention processes are significant, retardation of PFAS in source areas would likely be greater than what is typically estimated based on the standard assumption of solid-phase adsorption as the sole retention mechanism. This has significant ramifications for accurate determination of the migration potential and magnitude of mass flux to groundwater, as well as for calculations of contaminant mass residing in source zones. Both of which have critical implications for human-health risk assessments.

PMCID: PMC5693257 [Available on 2019-02-01]
PMID: 28915454
Similar articles

51. J Appl Toxicol. 2018 Feb;38(2):219-226. doi: 10.1002/jat.3515. Epub 2017 Aug 31.

Relationship between peroxisome proliferator-activated receptor alpha activity and cellular concentration of 14 perfluoroalkyl substances in HepG2 cells.

Rosenmai AK[1], Ahrens L[2], le Godec T[1], Lundqvist J[1], Oskarsson A[1].

Author information:

1 Department of Biomedical Sciences and Veterinary Public Health, Swedish University of Agricultural Sciences, Box 7028, SE-750 07, Uppsala, Sweden.

2 Department of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences, Box 7050, SE-750 07, Uppsala, Sweden.

Abstract

Peroxisome proliferator-activated receptor alpha (PPARα) is a molecular target for perfluoroalkyl substances (PFASs). Little is known about the cellular uptake of PFASs and how it affects the PPARα activity. We investigated the relationship between PPARα activity and cellular concentration in HepG2 cells of 14 PFASs, including perfluoroalkyl carboxylates (PFCAs), perfluoroalkyl sulfonates and perfluorooctane sulfonamide (FOSA). Cellular concentrations were determined by high-performance liquid chromatography-tandem mass spectrometry and PPARα activity was determined in transiently transfected cells by reporter gene assay. Cellular uptake of the PFASs was low (0.04-4.1%) with absolute cellular concentrations in the range 4-2500 ng mg^{-1} protein. Cellular concentration of PFCAs increased with perfluorocarbon chain length up to perfluorododecanoate. PPARα activity of PFCAs increased with chain length up to perfluorooctanoate. The maximum induction of PPARα activity was similar for short-chain (perfluorobutanoate and perfluoropentanoate) and long-chain PFCAs (perfluorododecanoate and perfluorotetradecanoate) (approximately twofold). However, PPARα activities were induced at lower cellular concentrations for the short-chain homologs compared to the long-chain homologs. Perfluorohexanoate, perfluoroheptanoate, perfluorooctanoate, perfluorononanoate (PFNA) and perfluorodecanoate induced PPARα activities >2.5-fold compared to controls. The concentration-response relationships were positive for all the tested compounds, except perfluorooctane sulfonate PFOS and FOSA, and were compound-specific, as demonstrated by differences in the estimated slopes. The relationships were steeper for PFCAs with chain lengths up to and including PFNA than for the other studied PFASs. To our knowledge, this is the first report establishing relationships between PPARα activity and cellular concentration of a broad range of PFASs.

PMID: 28857218
Similar articles

52. Appl Biochem Biotechnol. 2018 Feb;184(2):471-483. doi: 10.1007/s12010-017-2559-4. Epub 2017 Jul 25.

Thermal Pretreatment of Harvest Residues and Their Use in Anaerobic Co-digestion with Dairy Cow Manure.

Kovačić Đ[1], Kralik D[2], Jovičić D[2], Rupčić S[3], Popović B[2], Tišma M[4].

Author information:

1 Faculty of Agriculture in Osijek, J. J. Strossmayer University of Osijek, Vladimira Preloga 1, 31000, Osijek, HR, Croatia. djkovacic@pfos.hr.

2 Faculty of Agriculture in Osijek, J. J. Strossmayer University of Osijek, Vladimira Preloga 1, 31000, Osijek, HR, Croatia.

3 Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, J. J. Strossmayer University of Osijek, Kneza Trpimira 2B, 31000, Osijek, HR, Croatia.

4 Faculty of Food Technology Osijek, J. J. Strossmayer University of Osijek, F. Kuhača 20, 31000, Osijek, HR, Croatia.

Abstract

Several batch experiments were conducted on the anaerobic co-digestion of dairy cow manure (DCM) with three harvest residues (HR) (soybean straw, sunflower stalks, and corn stover). The influence of thermal pretreatment of HR on biogas production was investigated, where the HR were thermally pretreated at two different temperatures: T = 121 °C and T = 175 °C, during t = 30 and t = 90 min, respectively. All anaerobic co-digestion batch experiments were performed simultaneously under thermophilic regime, at T = 55 °C. Biogas and methane yields were significantly improved in experiments performed with corn stover thermally pretreated at 175 °C for 30 min (491.37 cm^3/g VS and 306.96 cm^3/g VS, respectively), if compared to experiments performed with untreated corn stover. The highest VS and COD removal rates were also observed in the same group of experiments and were 34.5 and 50.1%, respectively. The highest biogas and methane yields with soybean straw (418.93 cm^3/g VS and 261.44 cm^3/g VS, respectively) were obtained when soybean straw pretreated at 121 °C during 90 min. The highest biogas and methane yields with sunflower stalk (393.28 cm^3/g VS and 245.02 cm^3/g VS, respectively) were obtained when sunflower stalk was pretreated at 121 °C during 90 min.

PMID: 28744715 [Indexed for MEDLINE]
Similar articles

ED_006421_00031176-00058

Message

From: Harper, Ashley [harper.ashley@epa.gov]
Sent: 3/9/2018 9:26:03 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: QAs and Comms Plan for GENX

Hello! I imagine that when we send this out for Peer Review we are going to get a lot of public questions because people like to leak. I am going to need your help drafting answers to some QAs and developing QAs in general. I think today was helpful in understanding the types of questions our federal partners and states may have and we can extrapolate their further to other stakeholders. If you think of potential questions along the way I ask that you keep a running list for us to sort through and prioritize answering.

Ashley

Message

From: Miller, Gregory [no-reply@sharepointonline.com]
Sent: 3/12/2018 1:58:41 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Miller, Gregory has shared 'GenX Uncertainty Factors 3 12 18 UFs options'

Draft GenX UF document. Please edit freely.

Open GenX Uncertainty Factors 3 12 18 UFs options.docx

See more related to Miller, Gregory in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/12/2018 3:09:47 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: draft GenX UFs

I don't know she keeps moving it. She is at a retreat, I am here. I have to leave at 330 today so its no ideal as is.

From: Miller, Gregory
Sent: Monday, March 12, 2018 10:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: draft GenX UFs

Jamie,

Our GenX UF discussion is at 3 right? Are we going to your 2:30 General with Betsy too?

I just sent the SharePoint link for the draft UF document. I haven't shared it with Betsy yet. I wanted you both to have a look first in case there was something objectionable.

Message

From: Miller, Gregory [no-reply@sharepointonline.com]
Sent: 3/13/2018 2:00:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Miller, Gregory has shared 'draft GenX Uncertainty Factors 3 12 18 UFs options'

I haven't made any updates since our conversation yesterday afternoon.

Open draft GenX Uncertainty Factors 3 12 18 UFs options.docx

See more related to Miller, Gregory in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/12/2018 3:50:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: UF write up
Attachments: GenX Uncertainty Factors 3 12 18 UFs options jbs.docx

We need to talk about DB UF. This afternoon I guess...see comments and edits attached.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/12/2018 3:18:20 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: DRAFT - FW: GenX review
Attachments: GenX review1.docx

Not sure what this is

From: Behl, Betsy
Sent: Friday, March 09, 2018 5:45 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: DRAFT - FW: GenX review

From: Kernen, Brandon [mailto:Brandon.Kernen@des.nh.gov]
Sent: Friday, March 09, 2018 4:47 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Pillsbury, Sarah <Sarah.Pillsbury@des.nh.gov>
Subject: DRAFT - FW: GenX review

Attached is a draft assessment of Gen Ex by a NHDES risk assessor. We have not finalized it and it has not been peer reviewed internally or externally. It probably contains mostly background info that you already have.

Regards

Brandon

From: Gordon, David
Sent: Friday, November 3, 2017 3:48 PM
To: Susca, Paul
Subject: GenX review

Paul,

Attached is my review of GenX toxicology and the NC drinking water health goal.

David Gordon
DES Environmental Health Program
603-271-4608

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/9/2021 6:13:25 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX toxicity assessment moving to internal EPA review

WOW. She is something else. That is a bold faced lie.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, February 09, 2021 1:10 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX toxicity assessment moving to internal EPA review

revisionist history?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, February 9, 2021 1:02 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX toxicity assessment moving to internal EPA review

Deborah is going to tell Radhika today that ORD and OPPT are good with moving forward with an intra-agency review, so we should see movement of our draft soon. I just thought this email from Tala was interesting given everything that happened.

Jamie, just wanted to keep you updated on the progress of the assessment.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, February 9, 2021 12:23 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: GenX toxicity assessment moving to internal EPA review

FYI.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, February 9, 2021 12:21 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>; Stedeford, Todd <Stedeford.Todd@epa.gov>; Collazo Reyes, Yvette <CollazoReyes.Yvette@epa.gov>
Subject: RE: GenX toxicity assessment moving to internal EPA review

Hi Betsy,

OPPT has no issue with proceeding with an internal EPA review as per the usual/established process. Nor does OPPT now, or in the past, advocate for a range of POD or RfD values be presented.

We will provide our scientific opinions regarding whether the weight of the scientific evidence supports the magnitude of any/all of the UFs used. You have had opportunity to 'preview' those, but we will provide as part of the usual intra-agency review process.

To ensure the document is received and distributed appropriately within OPPT, please address the request for review to OPPT's Senior Science Advisor, **Dr. Todd Stedeford**.

Thanks,
Tala

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, February 9, 2021 12:12 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: GenX toxicity assessment moving to internal EPA review

Tala,

I would like to confirm our conversation on Friday that OCSPP doesn't have an objection to us moving the GenX assessment forward to internal EPA review prior to externa lpeer review. This version will not contain a range of values, and will include the recommendation that the uncertainty factor be 10x. This is largely the same as the document you reviewed previously. We are asking for a review from other offices in EPA who did not have a chance to review the document previously. After we receive comments from across EPA, our plan is to ask peer reviewers for their input on the uncertainty factors.

Thanks for your feedback

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Message

From: Behrsing, Tracy [behrsing.tracy@epa.gov]
Sent: 3/8/2018 12:45:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]
Subject: RE: OST and RAD GenX Assessment Check In
Attachments: draft internal deliberative review - nonCBI rev. 3.8.doc

Thanks, Brittany and Greg! Glad Greg noticed the typo and if there are any others (or comments/concerns with other information), please let us know.

Amy – for your files, attached is the latest version with that typo corrected.

Tracy

From: Jacobs, Brittany
Sent: Wednesday, March 7, 2018 4:28 PM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>
Subject: RE: OST and RAD GenX Assessment Check In

Hey Tracy,

Greg found a typo in the study summary for the Rushing et al., 2016 paper. Where the dosages are initially listed, the last dose should be 100, it's at 1000 right now. The 100 mg/kg-day dose is referenced later, so I think just one too many zeros made it in. Figured we should let you know!

Best,
Britt

From: Behrsing, Tracy
Sent: Wednesday, March 07, 2018 3:30 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>
Subject: RE: OST and RAD GenX Assessment Check In

All –

As a follow-up to today's meeting, please find attached the draft write-up of the review strategy/process. Please note that this version has not yet been reviewed by Tala but we can obviously made edits and comments once the draft document is compiled.

Also as a FYI only, I have attached a short one-pager regarding OECD and OPPTS test methods Tala asked me to put together as a backgrounder in preparation for the upcoming meetings.

Please let me know if there are any questions!
Tracy

From: Strong, Jamie
Sent: Wednesday, March 7, 2018 12:03 PM
To: Aubee, Catherine <Aubee.Catherine@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>; Behrsing, Tracy <behrsing.tracy@epa.gov>
Subject: Re: OST and RAD GenX Assessment Check In

Well yes it is...my fault. Talk to you then.

From: Aubee, Catherine
Sent: Wednesday, March 7, 2018 12:01 PM
To: Strong, Jamie; Jacobs, Brittany; Henry, Tala; Benson, Amy; Brinkerhoff, Chris; Babcock, Amy; Behl, Betsy; Miller, Gregory; Donohue, Joyce; Behrsing, Tracy
Subject: RE: OST and RAD GenX Assessment Check In

Will this be at 12:30PM?

From: Strong, Jamie
Sent: Wednesday, March 07, 2018 12:00 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>; Behrsing, Tracy <behrsing.tracy@epa.gov>
Subject: Re: OST and RAD GenX Assessment Check In

I opened the line

From: Jacobs, Brittany
Sent: Monday, February 12, 2018 4:32 PM
To: Jacobs, Brittany; Henry, Tala; Aubee, Catherine; Benson, Amy; Brinkerhoff, Chris; Babcock, Amy; Behl, Betsy; Miller, Gregory; Donohue, Joyce; Behrsing, Tracy; Strong, Jamie
Subject: OST and RAD GenX Assessment Check In
When: Wednesday, March 7, 2018 12:30 PM-1:00 PM.
Where: DCRoomWest5231L/DC-CCW-OST

Updated 2/15 with call in number

Conference phone number:
Conference ID:

Ex. 6 Personal Privacy (PP)

For OST and RAD to touch base about the GenX assessment. Scheduled through July. Hopefully we will just need the half hour, but I can extend out if needed.

This was the most available time according to the Doodle Poll sent out.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2018 5:58:17 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Genx pchem write up

FYI

-----Original Message-----
From: Behl, Betsy
Sent: Monday, March 19, 2018 1:58 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Genx pchem write up

Tala, any idea when we can get this write up from Laurence? We have a few weeks to get this together.

Thanks, Betsy

Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/19/2018 3:31:05 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX/PFBS workplan changes
Attachments: detailed workplan comparison GenX PFBS 3.19.18 ow.docx

---

From: Behl, Betsy
Sent: Monday, March 19, 2018 11:19 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>
Subject: GenX/PFBS workplan changes

All,

Jamie and I went through the workplan, accepted changes, and made a few additional modifications. I would like to send the updated plan to Peter later today and make the point to him that in engaging with the cross agency workgroup we are working with the same group (and more) as the toxicity workgroup and that is why we are not showing milestones to brief the toxicity workgroup after the "dry run" before engagement two?

First, do you agree with the proposal regarding the toxicity workgroup?
Second, I moved a few milestones back an additional week and highlighted discrepancies in yellow. If you want to stick with the original plan we can. We are trying to allow maximum time to develop a good document and a week extra would help.
Third, we are proposing to move back the internal workgroup review by a week because there is a lot going on the previous week. They will get a week to review so it doesn't really compress them.
Fourth, I added a few of our milestones to yours with comments. Seems like we both have to hit these.

Thanks for getting back to me today. I am off to the ACWA meeting shortly, so will be out of pocket. I will stop by the office at the end of the day to send a note to Peter so he can raise it at the coordinating committee tomorrow.

Thanks!!

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/22/2018 6:55:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Draft Study Summary: DuPont 18405-1307

I am still working on it.

From: Jacobs, Brittany
Sent: Thursday, March 22, 2018 2:50 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Also, if you want to send me whatever you have for the chronic study before you leave, I can work on it this afternoon and send it back for tomorrow.

From: Strong, Jamie
Sent: Thursday, March 22, 2018 2:42 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Okay, stress level coming down. Thanks.

From: Jacobs, Brittany
Sent: Thursday, March 22, 2018 1:45 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Hi Jamie,

I've updated Joyce's summary of the Prenatal and Developmental Toxicity Study in Rats in our sharepoint document. There were some effects missing, but these additions do not affect the NOAEL. Greg also looked at Joyce's write up and made notes in the document explaining that modeling the data presented in this study probably wouldn't get us to a lower POD. All of the effects observed in this study are occurring at 100 mg/kg-d and greater. The write up and Greg's notes are on page 21:

Ex. 6 Personal Privacy (PP)

Britt

From: Miller, Gregory
Sent: Thursday, March 22, 2018 9:01 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

ok

From: Strong, Jamie
Sent: Thursday, March 22, 2018 9:01 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Greg can you also look at what Joyce wrote and discuss with Brittany…Joyce's email said that there are data sets to model?

From: Miller, Gregory
Sent: Thursday, March 22, 2018 8:59 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Draft Study Summary: DuPont 18405-1307

Same as before. I made a redline document starting with the OPPT draft text. Probably easiest to read it in simple markup mode.

Greg

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/22/2018 7:23:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Draft Study Summary: DuPont 18405-1307

I'm going to have to finish the cancer part tomorrow.

From: Jacobs, Brittany
Sent: Thursday, March 22, 2018 3:11 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Great!

From: Strong, Jamie
Sent: Thursday, March 22, 2018 3:08 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

I finished the non cancer piece. On to cancer. Its on sharepoint, just sent to you.

From: Jacobs, Brittany
Sent: Thursday, March 22, 2018 2:50 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Also, if you want to send me whatever you have for the chronic study before you leave, I can work on it this afternoon and send it back for tomorrow.

From: Strong, Jamie
Sent: Thursday, March 22, 2018 2:42 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Okay, stress level coming down. Thanks.

From: Jacobs, Brittany
Sent: Thursday, March 22, 2018 1:45 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Hi Jamie,

I've updated Joyce's summary of the Prenatal and Developmental Toxicity Study in Rats in our sharepoint document. There were some effects missing, but these additions do not affect the NOAEL. Greg also looked at Joyce's write up and made notes in the document explaining that modeling the data presented in this study probably wouldn't get us to a lower POD. All of the effects observed in this study are occurring at 100 mg/kg-d and greater. The write up and Greg's notes are on page 21:

Ex. 6 Personal Privacy (PP)

Britt

From: Miller, Gregory
Sent: Thursday, March 22, 2018 9:01 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

ok

From: Strong, Jamie
Sent: Thursday, March 22, 2018 9:01 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Draft Study Summary: DuPont 18405-1307

Greg can you also look at what Joyce wrote and discuss with Brittany…Joyce's email said that there are data sets to model?

From: Miller, Gregory
Sent: Thursday, March 22, 2018 8:59 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Draft Study Summary: DuPont 18405-1307

Same as before. I made a redline document starting with the OPPT draft text. Probably easiest to read it in simple markup mode.

Greg

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/28/2018 5:08:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Food for thought
Attachments: PFOS_PFOA RfD Poster SOT_2018.pdf

From: Henry, Tala
Sent: Wednesday, March 28, 2018 12:55 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Food for thought

Food for thought when thinking through UCFs for GenX and comparison to NC provisional value

Tala R. Henry, Ph.D.
Director, Risk Assessment Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2018 3:29:14 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: name

Agreed!

From: Jacobs, Brittany
Sent: Wednesday, April 04, 2018 10:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: name

I think HFPO dimer acid and/or ammonium salts. We should be specific in the study summaries though and say if it's the acid or ammonium salt.

From: Strong, Jamie
Sent: Wednesday, April 04, 2018 10:47 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: name

So in the text write HFPO dimer acid and ammonium salts or HFPO dimer acid and/or ammonium salts?

From: Jacobs, Brittany
Sent: Wednesday, April 04, 2018 10:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: name

I vote for the first one since the studies are only with the ammonium salt

---

From: Strong, Jamie
Sent: Wednesday, April 04, 2018 10:44 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: name

So we are using this HEXAFLUOROPROPYLENE OXIDE (HFPO) DIMER ACID AND DIMER ACID AMMONIUM SALT OR this HEXAFLUOROPROPYLENE OXIDE (HFPO) DIMER ACID AND SALTS?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Jamie Strong [jamiebstrong@icloud.com]
Sent: 4/4/2018 7:45:45 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX and table of noaels

Ex. 5 Deliberative Process (DP)

Jamie

Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/5/2018 4:02:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Liguori, Krista [liguori.krista@epa.gov]
Subject: RE: Jacobs, Brittany has shared 'OW DRAFT Tox Assessment for GenX Chemicals_4.5.18'

I am in, works fine.

From: Jacobs, Brittany [mailto:no-reply@sharepointonline.com]
Sent: Thursday, April 05, 2018 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Liguori, Krista <liguori.krista@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Jacobs, Brittany has shared 'OW DRAFT Tox Assessment for GenX Chemicals_4.5.18'

Greg broke the other file (just kidding, Greg) so I uploaded the file again. Can everyone test and make sure they can access this link and let me know that you can access it with no issues? Once I have confirmation from everyone I think we should delete the other file.

Open OW DRAFT Tox Assessment for GenX Chemicals_4.5.18.docx

See more related to Jacobs, Brittany in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [no-reply@sharepointonline.com]
Sent: 4/9/2018 12:26:57 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Strong, Jamie has shared 'genotox studies table genx 04 06 18'

Here's the document that Strong, Jamie shared with you.

Open genotox studies table genx 04 06 18.docx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/9/2018 3:39:24 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: Re: ready for the next engagement!

that's fine

From: Miller, Gregory
Sent: Monday, April 9, 2018 11:34 AM
To: Jacobs, Brittany; Strong, Jamie
Subject: RE: ready for the next engagement!

I have no problem with May 2.

Greg

From: Jacobs, Brittany
Sent: Monday, April 9, 2018 10:54 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: ready for the next engagement!

May 2nd is great for me. I have a PMF training the previous week so if we could push to the 2nd that would be awesome.

From: Behl, Betsy
Sent: Monday, April 09, 2018 10:47 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Fwd: ready for the next engagement!

Does may 2 work for you?

Sent from my iPhone

Begin forwarded message:

> **From:** "Jones, Samantha" <Jones.Samantha@epa.gov>
> **Date:** April 9, 2018 at 10:33:24 AM EDT
> **To:** "Holsinger, Hannah" <Holsinger.Hannah@epa.gov>
> **Cc:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>, "Behl, Betsy" <Behl.Betsy@epa.gov>, "Nagle, Deborah" <Nagle.Deborah@epa.gov>, "Mclain, Jennifer" <Mclain.Jennifer@epa.gov>, "Strong, Jamie" <Strong.Jamie@epa.gov>, "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Burneson, Eric" <Burneson.Eric@epa.gov>
> **Subject: Re: ready for the next engagement!**

I polled my team and it looks like if the 27th doesn't work then May 2nd would work better for them.

Sent from my iPhone

On Apr 9, 2018, at 8:16 AM, Holsinger, Hannah <Holsinger.Hannah@epa.gov> wrote:

> Thanks Betsy,
> Once you have decided which day works best I will work to get these meetings scheduled.
> Thanks!
> Hannah
>
> ---
>
> **From:** Grevatt, Peter
> **Sent:** Thursday, April 05, 2018 5:09 PM
> **To:** Behl, Betsy <Behl.Betsy@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
> **Cc:** Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
> **Subject:** RE: ready for the next engagement!
>
> Very exciting! Yes, Hannah can handle scheduling for us, though please note that I have to be on the road to and from Montreal on Friday the 27th and Monday April 30th. I could do the 26th or the 2nd. I suspect that 90 minutes is adequate for the states and will be viewed as inadequate by our federal partners. We might want to go for a longer time for the latter.
>
> ---
>
> **From:** Behl, Betsy
> **Sent:** Thursday, April 05, 2018 5:03 PM
> **To:** Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
> **Cc:** Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>
> **Subject:** ready for the next engagement!
>
> I conferred with Samantha today and our two teams are getting ready for the second round of engagement with ECOS states and other federal agencies on the toxicity assessments for GenX and PFBS. We think that a meeting of 1 ½ hours for each will be adequate, and would appreciate it if there could be a break between the meeting (like last time). We would like to have the meeting on 4/27, but if that won't work, could move into the next week (earlier in the week). Will that work for you all? Could we ask Hannah to set up the meeting for us?
>
> Many thanks, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2018 11:25:45 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Lit Flow Diagram - GenX Acid and Salt - Draft
Attachments: GenX acid and n3h_combined documentation acb published and chemours.docx

We need to go through this and make sure that all our cited lit in the doc is in the lit flow diagram and included not excluded.

From: Benson, Amy
Sent: Monday, April 09, 2018 6:03 PM
To: Aubee, Catherine <Aubee.Catherine@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Cc: Libelo, Laurence <Libelo.Laurence@epa.gov>; Tobias, David <Tobias.David@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: Lit Flow Diagram - GenX Acid and Salt - Draft

Hello,

Attached is a draft of the combined lit flow diagram (acid, salt, published lit, Chemours studies). A few comments and outstanding issues:

1) PChem
   a.
   b.
2) Fate
   a.

Ex. 5 Deliberative Process (DP)

3) HH exclusions
   a.

Ex. 5 Deliberative Process (DP)

4) Susceptibility
   a.

Ex. 5 Deliberative Process (DP)

Regards,

Amy Benson, M.S., DABT
Biologist, Assessment Branch 4
OCSPP/OPPT/RAD
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460
Mail Code 7403M

phone: 202-564-7624
fax: 202-564-7450

For Courier Deliveries:
WJ Clinton Building East, 7403M, Cube 6308WW
1201 Constitution Ave., N.W.
Washington, DC 20004

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2018 12:14:55 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Strong, Jamie has shared 'GenX UFs'

From: Jones, Samantha
Sent: Thursday, April 05, 2018 5:34 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Strong, Jamie has shared 'GenX UFs'

Hey! My apologies for taking so long to get back to you. I've incorporated comments in the SharePoint version based on my initial reactions and in the absence of true knowledge of GenX. See what you think and let me know if you want to talk.

Thanks,
Samantha

From: Strong, Jamie [mailto:no-reply@sharepointonline.com]
Sent: Wednesday, April 4, 2018 8:45 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Strong, Jamie has shared 'GenX UFs'

Ex. 5 Deliberative Process (DP)

Open GenX UFs.docx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/10/2018 11:52:18 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Acute studies not included at all in the assessment Round 1

So look at what she sent, there is a lot more detail than what Tracy has below.

From: Jacobs, Brittany
Sent: Tuesday, April 10, 2018 7:33 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Acute studies not included at all in the assessment Round 1

I sent her the acute studies that were not mentioned at all in Tracy's write up since there were zero eyes on those. If you also want her to go through the studies that Tracy mentioned in her write up, I can send her those.

From: Strong, Jamie
Sent: Tuesday, April 10, 2018 7:31 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Acute studies not included at all in the assessment Round 1

So it's this paragraph:

> HFPO dimer acid was corrosive in an *in vitro* assay (DuPont-24019).
>
> Seven-day toxicity studies of the ammonium salt and acid were conducted in rats and mice, a NOAEL was not established at doses as low as 30 mg/kg/day based primarily on signs of liver toxicity (DuPont-24009; DuPont-24010; DuPont-24116; DuPont 25281).

These weren't included in the acute studies you sent me so she didn't write them up.

From: Jacobs, Brittany
Sent: Monday, April 09, 2018 5:50 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Acute studies not included at all in the assessment Round 1

Didn't get a chance to look through this. Let's touch base in the morning. I am still addressing comments. Definitely did not get through as much as I would have liked to today.

From: Strong, Jamie
Sent: Monday, April 09, 2018 4:31 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Fwd: Acute studies not included at all in the assessment Round 1

The last two paragraphs, she didn't do those studies?

Sent from my iPhone

Begin forwarded message:

From: "Soares, Barbara" <soares.barbara@epa.gov>
Date: April 9, 2018 at 2:39:05 PM EDT
To: "Strong, Jamie" <Strong.Jamie@epa.gov>
Subject: Re: Acute studies not included at all in the assessment Round 1

Jamie,

Please see attached for summaries of the results from the studies you provided. I erred on the side of caution and tried to include any data that could possibly be relevant, even when study authors considered an observation to be incidental.

Will get started on next task now.

Thank you,

Barbara

From: Strong, Jamie
Sent: Thursday, April 5, 2018 1:05:31 PM
To: Soares, Barbara
Subject: FW: Acute studies not included at all in the assessment Round 1

From: Jacobs, Brittany
Sent: Thursday, April 05, 2018 12:54 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Acute studies not included at all in the assessment Round 1

<Acute Paragraph 4-9-18 BS.docx>

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/13/2018 4:42:45 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Fw: GENX ASSIGNMENT
Attachments: Reference check .docx

Ugh. We need to fix this Monday.

From: Liguori, Krista
Sent: Friday, April 13, 2018 12:33 PM
To: Strong, Jamie
Subject: RE: GENX ASSIGNMENT

Here is the breakdown of the mismatches attached..

Do you want to have a separate References section for the appendices? That's what we did in the RWQC Review.

Krista Liguori, MSPH
ORISE Participant
US Environmental Protection Agency
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division | Human Health Risk Assessment Branch

---

From: Strong, Jamie
Sent: Friday, April 13, 2018 11:51 AM
To: Liguori, Krista <liguori.krista@epa.gov>
Subject: Re: GENX ASSIGNMENT

Yes that's fine.

Sent from my iPhone

On Apr 13, 2018, at 9:49 AM, Liguori, Krista <liguori.krista@epa.gov> wrote:

> OK, I can download and do it that way.
>
> Krista Liguori, MSPH
> ORISE Participant
> US Environmental Protection Agency
> Office of Water, Office of Science and Technology
> Health and Ecological Criteria Division | Human Health Risk Assessment Branch
>
> ---
>
> **From:** Strong, Jamie
> **Sent:** Friday, April 13, 2018 9:15 AM
> **To:** Liguori, Krista <liguori.krista@epa.gov>
> **Subject:** GENX ASSIGNMENT

Krista,
I need you to do a reference cross check for me. I need you to verify the citations in the text have a reference in the reference list, if not note that. If a citation is in reference list and not in text note that too. Can you do this outside of sharepoint? Also, another sweep of acronyms would be helpful.

Thanks,
Jamie

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2018 2:46:08 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Literature search and HERO for GenX

Can you stop by now?

From: Jones, Samantha
Sent: Monday, April 16, 2018 10:44 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Literature search and HERO for GenX

Thanks for laying this out. Here's what I'm thinking (also see my comments in red in your list below):

1)
2)
3)
4)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

What do you think?

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Strong, Jamie
Sent: Thursday, April 12, 2018 2:15 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>

Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Literature search and HERO for GenX

Samantha,
So we talked to OPPT today and didn't get much resolution. I don't know the plan for making Chemours/DuPont studies available to the public, we still need to figure this out with OPPT. I decided that HECD needed to write down exactly what we are having issues with and what we need help with lit search wise. I don't want to dump this on you, but I am not sure what to do or whom to talk to. Amy seems willing and I guess has been the one cultivating the HERO page for GenX, with Jason (?). We can't do this internally here in HECD, so we do need help. Again, not trying to give you all extra work, just hoping you can point me in the right direction. At this point I think HECD working with Jason would be good. Given your concerns about coordination related to HERO, I wanted to get this in front of you. I hope you can help to sort this out. Please let me know when you can chat about how to proceed.

Thanks,
Jamie

Here are the things we need:

-
-
-
-
-
-

Ex. 5 Deliberative Process (DP)

10. Ex. 5 Deliberative Process (DP)

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/18/2018 12:22:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Harper, Ashley [harper.ashley@epa.gov]
Subject: FW: OCSPP GenX Hearing Fact Sheet
Attachments: OCSPP Gen-X.04.04.18 JM NB.DOCX; ATT00001.htm

Good summary info

From: Grevatt, Peter
Sent: Tuesday, April 17, 2018 10:13 PM
To: Hanley, Mary <Hanley.Mary@epa.gov>
Cc: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: Fwd: OCSPP GenX Hearing Fact Sheet

Thanks Mary!

Sent from my iPhone

Begin forwarded message:

> **From:** "Hanley, Mary" <Hanley.Mary@epa.gov>
> **Date:** April 17, 2018 at 3:24:46 PM EDT
> **To:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> **Cc:** "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
> **Subject: OCSPP GenX Hearing Fact Sheet**
>
> Hi Peter,
> Charlotte asked me to forward our GenX hearing fact sheet for your inputs. Please find it attached.
> Cheers
> M

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/17/2018 6:07:09 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: OST and RAD GenX Assessment Check In
Attachments: PMN Attachment 128.pdf

Do we need to add this?

From: Brinkerhoff, Chris
Sent: Thursday, April 12, 2018 6:25 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behrsing, Tracy <behrsing.tracy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>
Cc: Libelo, Laurence <Libelo.Laurence@epa.gov>
Subject: RE: OST and RAD GenX Assessment Check In

I attached the information that Laurence was talking about today in the meeting.
This is not CBI.
Chris

-----Original Appointment-----
From: Jacobs, Brittany
Sent: Monday, February 12, 2018 4:33 PM
To: Jacobs, Brittany; Behrsing, Tracy; Henry, Tala; Aubee, Catherine; Benson, Amy; Brinkerhoff, Chris; Behl, Betsy; Miller, Gregory; Donohue, Joyce; Strong, Jamie; Babcock, Amy
Cc: Libelo, Laurence
Subject: OST and RAD GenX Assessment Check In
When: Thursday, April 12, 2018 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

4/11/18: There was a request to move this meeting to Thursday. I know some of you can't make it today, so hopefully tomorrow will be better. The room is different, but it's next to the room we usually meet in.

4/5/18: There was a conflict for our meeting on 4/10. It looks like most schedules are open for this time. I can reschedule if needed.

Updated 2/15 with call in number

Conference phone number:
Conference ID:

Ex. 6 Personal Privacy (PP)

For OST and RAD to touch base about the GenX assessment. Scheduled through July. Hopefully we will just need the half hour, but I can extend out if needed.

This was the most available time according to the Doodle Poll sent out.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/20/2018 5:46:22 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: update on HERO and literature
Attachments: All Literature for HFPO dimer acid and ammonium salt_4.19.18 HERO CROSSWALK.docx

Keeping everyone in the loop here....

Many thanks to Samantha for letting me use her HERO username to do this. Brittany, Greg and I need access.

I cross walked OPPT's list of DuPont studies with our master list of all the literature/submissions. OPPT left several studies off so I alerted them to that.

I took our master list of everything and then went through HERO and crosswalked what's currently on HERO with the list. I also checked to see if PDFs were in HERO for those DuPont studies already included. The analysis is attached (red means not in HERO).

I provided Samantha with a list of DuPont and other literature not included in HERO currently to add.

Also provided her with a list of issues with current HERO entries (can't open PDF or cant search by DuPont study ID).

I then downloaded the studies for the citations not in HERO and shared them with Samantha.

HERO should have what they need to make the HERO page "complete" as far as content.

I am waiting to find out whether or not HERO can hide the tags, some entries already have tags and some don't. Those that do have tags need to be checked, some are wrong (i.e., say it's the acid and it's the salt). I don't think I have time next week to tag everything myself. If we can just post a dump of everything minus tags for the public on the 27th that would be ideal. If not, then we need to do some thinking if we leave the tags and someone uses them to say select all the salt studies the results will be inaccurate.

This was tedious. Not fun. I think when HERO is stable we ask OPPT to take a look before making it live. At this point I don't want more back and forth, less cooks the better.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/23/2018 11:21:27 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Gen-X
Attachments: OW DRAFT Tox Assessment for GenX Chemicals_4.18.18 - JMD 4-20-18.docx

Need to talk about how to incorporate edits from Joyce and OPPT.

From: Donohue, Joyce
Sent: Friday, April 20, 2018 6:19 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Gen-X

Dear Jamie:

Attached is Gen-X with my suggestions and comments. I think it is good but have made a number of suggestions for refinement. I have asked for p values many times. I know you told me that they were taken out. I do think if might be good to add them in the synthesis where there are no percentages. One of my major suggestion is to include arrows with the percentage values to show increase and decrease. There are so many of them that including the arrows will help when one is doing targeted searching for the values after they have originally read the document.

I believe I only have one technical disagreement and that is with the text about Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

I agree with the uncertainty factors.

Everyone should be proud of what they accomplished in such a short time

Joyce.

Message

From: Aubee, Catherine [Aubee.Catherine@epa.gov]
Sent: 4/23/2018 3:54:59 PM
To: Henry, Tala [Henry.Tala@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]; Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: [initial comments] OW/OPPT internal peer review discussion
Attachments: OW DRAFT Tox Assessment for GenX Chemicals_for discussion RAD 04-23-2018.docx

Sensitivity: Private

Internal deliberative

Hi everyone,

For discussion at noon - I attempted to merge the comments thus far from RAD. Please note that this does not yet reflect any comments from Tala.

Here are a few other comments for consideration:

On the dose-response section:

Ex. 5 Deliberative Process (DP)

Thanks for the opportunity to provide feedback!

Best,
Catherine

-----Original Appointment-----
From: Aubee, Catherine
Sent: Friday, April 20, 2018 1:08 PM
To: Aubee, Catherine; Henry, Tala; Babcock, Amy; Benson, Amy; Brinkerhoff, Chris; Strong, Jamie; Jacobs, Brittany; Behl, Betsy
Cc: Miller, Gregory
Subject: OW/OPPT internal peer review discussion
When: Monday, April 23, 2018 12:00 PM-1:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Office of Water 5231 M
Sensitivity: Private

Internal deliberative

Update 4/20: Betsy booked 5231 M for those who would like to come over (thanks!); start time moved to 12PM.

Hi everyone,

Proposing a time for us to touch base on the assessment. Sorry to propose during the noon hour. I'm covered up with meetings the rest of the day, but feel free to meet at another time if needed.

I will have to join remotely. We can use my conference line:

Conference phone number: Ex. 6 Personal Privacy (PP)
Conferen

Best,
Catherine

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/26/2018 3:50:39 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: House Energy and Commerce Subcommittee on Environment Hearing - Administrator Pruitt testimony on GenX

Rep Hudson (NC) asks Administrator Pruitt specifically about GenX
Pruitt says he's aware of issues in NC
Pruitt says: GenX toxicity assessment will be ready "by the summer" (direct quote)
Additonal standards to be set on PFAS in the future
Makes clear to Rep Hudson that EPA is working with NC and other states
Rep Hudson asks if Chemours complied with the consent order. Pruitt punted on this and said would have to check with staff.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/27/2018 5:27:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Fw: GenX !!
Attachments: OW DRAFT Tox Assessment for GenX Chemicals_for discussion RAD 04-26-2018. TH.docx

Importance: High

FYI. So you have it. I have gone through this version with OPPT comments and transferred changes to the sharepoint version. I ended up accepting changes to the front matter since it was a mess. I kept track changes on beginning at the study summaries. There are still comments we need to discuss. This is going to need to get done next week in between all the presentations. I will keep going today but I am frankly running on empty right now. We will meet first thing Monday and come up with a game plan.

Jamie

From: Henry, Tala
Sent: Thursday, April 26, 2018 6:08 PM
To: Behl, Betsy; Strong, Jamie
Cc: Babcock, Amy; Benson, Amy; Brinkerhoff, Chris; Henry, Tala
Subject: GenX !!

Please call tomorrow if you want help!

Tala R. Henry, Ph.D.
Director, Risk Assessment Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/27/2018 11:22:44 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Fw: Follow-up from Friday
Attachments: ECOS FED PART GENX PFBS PRESENTATION 2_04-26-18_CLEAN-FINAL.PPTX

Final slides. Britt we are doing a dry run with IRIS reviewers Tuesday.

From: Behl, Betsy
Sent: Thursday, April 26, 2018 5:05 PM
To: Flaherty, Colleen
Cc: Strong, Jamie
Subject: FW: Follow-up from Friday

Here you go with the latest!

From: Jones, Samantha
Sent: Thursday, April 26, 2018 5:05 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Follow-up from Friday

Hi Peter,

Here is the version with the latest changes…file renamed to reflect clean/final state ☺.

Thanks,
Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Grevatt, Peter
Sent: Thursday, April 26, 2018 4:40 PM
To: Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Follow-up from Friday

Please let me know when you anticipate having the final product as I need to get this to Nancy and Charlotte for our meeting tomorrow morning.

From: Grevatt, Peter
Sent: Thursday, April 26, 2018 2:03 PM
To: Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Follow-up from Friday

Thanks for the helpful call this afternoon. Here is the updated next step slide.

From: Bahadori, Tina
Sent: Thursday, April 26, 2018 12:30 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Follow-up from Friday

Peter,
Here is the latest version (I THINK!!!). We are still getting input from the ORD IOAA (so, please don't share with OPPT until we have OK from Jennifer). There is still some back and forth with the GenX and PFBS teams. But this is 99% there.

Tina

From: Grevatt, Peter
Sent: Thursday, April 26, 2018 11:34 AM
To: Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: RE: Follow-up from Friday

Thanks Tina. Did I miss the draft PFBS slides yesterday? I don't see an email with these in my inbox. Please advise. Thanks, P.G.

From: Bahadori, Tina
Sent: Thursday, April 26, 2018 7:42 AM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: Re: Follow-up from Friday

Thanks Peter. I am available. Samantha has jury duty today, so she may not be able to check, but either way I can be there.

T.

On Apr 26, 2018, at 7:37 AM, Grevatt, Peter <Grevatt.Peter@epa.gov> wrote:

> I spoke with Jeff Morris this morning and he recommends that we see if we can get 30 minutes with Nancy and Charlotte Bertrand tomorrow morning (Friday) to let them know where we are heading before we send the materials out to the other feds and states. We both agree that this is likely to pay dividends in the long run. Please let me know whether you think this is something you would be able to fit in, provided we can get time on their calendars. Thanks, P.G.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/1/2018 3:44:25 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: GenX and PFBS - brief responses to comments from DOD after last engagement

Looks good, thanks for doing this.

From: Jones, Samantha
Sent: Tuesday, May 01, 2018 11:30 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: GenX and PFBS - brief responses to comments from DOD after last engagement

Hi all,

You may recall that DOD sent a few comments/questions to Betsy and Andy after out last engagement with them (see attached PDF). Betsy/Andy crafted some brief responses and I've added to them (see attached Word file which combines DOD's two columns of comments/questions into one column and our responses on the right). Please note we

Ex. 5 Deliberative Process (DP)

Please take a look and let me know if you have any concerns with the general direction of these responses. Also, Beth/Jason, there is a question (#6) about dosimetry and PBPK for PFBS, can you take a look at that one?

Thanks,
Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/1/2018 3:28:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Check in at 2pm

I'm okay canceling. I've had enough PFAS today.

From: Jacobs, Brittany
Sent: Tuesday, May 01, 2018 11:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Check in at 2pm

Do we want to keep this meeting for 2pm or should I cancel so we can keep working on the document/prepping for tomorrow?

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/3/2018 12:56:34 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX Document: Reference-Related Questions for EPA
Attachments: Questions for EPA_05-02-18.docx

Can you take a look?

From: Akhter, Shamima
Sent: Thursday, May 03, 2018 8:55 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX Document: Reference-Related Questions for EPA

Hi Jamie,

TT has some reference-related questions (attached).

Thanks,
Shamima

From: Mosso, Dacia [mailto:Dacia.Mosso@tetratech.com]
Sent: Wednesday, May 2, 2018 4:22 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Susan Lanberg <susan.lanberg@tetratech.com>; Ichishima, Yukiko <Yukiko.Ichishima@tetratech.com>
Subject: GenX Document: Reference-Related Questions for EPA

Hi Shamima,

We have a few reference-related questions. Please see the attached.

Thanks!
Dacia

Dacia Mosso | Associate Director of Environmental Sciences
Direct: 703.385.1437 | Receptionist: 703.385.6000 x1437 | Fax: 703.385.6007
dacia.mosso@tetratech.com

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/17/2021 1:45:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

I don't think we need to revise for the interagency review, but we can highlight what we did to address that comment. I would revise for the final.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 17, 2021 7:21 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, February 17, 2021 7:16 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

I'd call this a big win for IRIS. Both their systematic review process and Handbook were held up as examples for TSCA.

Lastly, the committee "recommends that a handbook for TSCA review and evidence integration methodology be put together that details the steps in the process. Throughout this report, the committee points to problems of documentation. The committee believes that the effort of developing and publicly vetting a handbook will pay off in the long run by making the process more straightforward, transparent, and easier to follow."

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, February 16, 2021 5:06 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

Wow.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Inside TSCA <epa-alerts@iwpnews.com>
Sent: Tuesday, February 16, 2021 5:04 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

INSIDE EPA'S
INSIDE TSCA
Exclusive news and analysis on the new Toxic Substances Control Act

February 16, 2021

LATEST NEWS

EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

EPA is abandoning the Trump-era approach to systematic data review that guided the first TSCA evaluations of existing chemicals and will craft a new model based in part on a National Academy of Sciences (NAS) report that said the current approach lacked objectivity "at each step" and "compromised" the program's transparency.

READ MORE →

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Mailing address: 1919 South Eads Street, Suite 100, Arlington VA 22202

Telephone: 703-416-8500 or 1-800-424-9068

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/7/2018 12:00:54 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: revised schedule for GenX/PFBS assessments post federal meeting

I cant remember if I sent this or not.

From: Behl, Betsy
Sent: Thursday, May 03, 2018 11:11 AM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: revised schedule for GenX/PFBS assessments post federal meeting

We understand the decision yesterday was to proceed with the interagency review prior to peer review. The interagency review steps are included in the following schedule, which takes into the middle of September.

5/7-11	• Finalize draft assessments
5/14-18	• **2- week interagency and Internal agency reviews for GenX and PFBS begins 5/14**
5/21-25	• **Interagency and internal peer review ends 5/25**
5/28-6/1	• Review peer review comments
6/4-6/8	• **Meet with federal stakeholders 6/14 to discuss their comments** (no response to comments document developed) • Revise draft assessments to address big comments.
6/11-6/15	• Prepare draft for peer review
6/18-6/22	• **Transmittal of GenX and PFBS for External Peer Review 6/18/18**
6/25-6/29	• peer review
7/2-7/6	• peer review
7/9-7/13	• Peer review
7/16-7/20	• **7/20 peer review report received**
7/23-7/27	• Review and revise document • Develop response to peer review comments
7/30-8/3	• Review and revise document • Prepare presentation for engagement # 3 • Develop response to peer review comments
8/6-8/10	• Send presentation for engagement #3 to OW IO and ORD • Send presentation to stakeholders • Comms prepares FRN for public meeting
8/13-8/17	• **Engagement #3: Peer Review Comment Summary Meeting with State Stakeholders; Update Federal Agency representatives**
8/20-24	• Develop draft presentation for public meeting • Finalize draft GenX and PFBS assessments for management review
8/27-31	• Send presentation for public meeting to senior management review • Final showstopper review (OST and RAD) of GenX toxicity document • Final NCEA showstopper review of PFBS toxicity document
9/3-7	• Send GenX and PFBS final assessments to senior management review • **GenX and PFBS toxicity value documents ready for release** • **Response to peer review comments ready for release**

	• **Finalize presentation for public meeting**
9/10-14	• Host Public Meeting • Post Toxicity document and response to peer review complete • Public comment period starts?
9/17-21	• End of summer 9/22

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/4/2018 3:04:04 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: current draft
Attachments: OW DRAFT Tox Assessment for GenX Chemicals_05-04-18.docx

Greg and Brittany,
TT sent the tech edited version. They have several comments. I have left those in. I went through the sharepoint version and carried over edits in track changes and remaining internal comments to be resolved. We will also need to insert the new TK section once Joyce and Chris work that out. I will reach out to Amy Benson on Monday, as there are a lot of broken links in the lit search table in the appendix. Overall looking good. Monday we need to aim to get rid of all comment bubbles. We should also try to develop a paragraph on purity next week. We have until the 14th to do final touches. A little breathing room. This attached version should be considered the new MASTER.

Thanks,
Jamie

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/17/2021 1:57:14 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

Today's news. Sounds ike we should get ready for Has and for criteria.

Regan Touts Biden Science Memo That Led EPA To Scrap PFBS Review

February 16, 2021

EPA Administrator nominee Michael Regan is touting President Joe Biden's scientific integrity memo that has already sparked EPA's retraction of a closely watched risk analysis from the Trump administration's final days, according to his answers to questions from Senate environment committee Chairman Tom Carper (D-DE).

In his written responses, Regan also promised an aggressive EPA response to per- and polyfluoroalkyl substances (PFAS), reiterating a theme of his Feb. 3 confirmation hearing where several senators from both parties pushed him to do more on the chemicals under the Toxic Substances Control Act (TSCA) and other statutes.

Regan's answers add to Democrats' focus on undoing what they see as a host of Trump-era violations of EPA's scientific integrity policy, including its assessment of the PFAS perfluorobutanesulfonic acid (PFBS) that the agency withdrew on Feb. 9, citing "political interference" in its development.

EPA at the time cited Biden's Jan. 27 memo directing agencies to strengthen their integrity policies and review past actions for violations of the policies as a principal justification for the move.

It said that "Career scientists have reviewed" the assessment's release and made an "initial determination" that the conclusions in the PFBS assessment posted in that release were "compromised by political interference as well as infringement of authorship and the scientific independence of the authors' conclusions."

In his responses to Carper, Regan does not specifically mention PFBS but praises the Biden memo and promises to apply it aggressively.

"This Memorandum sends a clear message that the Biden-Harris Administration will protect scientists from political interference and ensure they can think, research, speak, and publish freely to provide valuable information and insights to the American people. If confirmed, I commit to implementing this vision at EPA and considering any recommendations the Agency's career scientific integrity officials have for how to strengthen scientific integrity at EPA," he writes.

Carper's question further implies that he is aware of other cases similar to the PFBS assessment where EPA could uncover political interference in scientific work with a fresh review. "Under the Trump administration, the scientific integrity officer could not act on serious violations of the scientific integrity policy, because it was the political appointees to whom she reported to that committed the violations," he writes.

PFAS Policy

Regan also pledges to make PFAS "a top priority for EPA," referencing both his responses to several questions on the subject during his confirmation hearing and his tenure as chief of the North Carolina Department of Environmental Quality, where PFAS has been a major issue.

"President Biden has highlighted the importance of and his commitment to tackling PFAS pollution and protecting public health and the environment, especially for those communities most heavily impacted and vulnerable to such pollution. If confirmed, I am committed to making addressing PFAS a top priority for EPA, as I did in my position as Secretary of the North Carolina Department of Environmental Quality (NCDEQ). I will discuss the PFAS Action Plan with EPA staff and will consider their advice to determine the appropriate path forward," Regan writes.

Former Administrator Andrew Wheeler issued EPA's PFAS Action Plan in February 2019. The plan centered around EPA's pledge to propose Safe Drinking Water Act determination for drinking water standards for two of the best-understood PFAS, PFOA and PFOS. The plan also includes a series of short-and long-term measures -- including enforcement, monitoring and research actions -- to address PFAS but stops short of setting strict regulatory limits that many had sought and as a result was panned by some states facing PFAS contamination as too slow.

Shortly after Biden's inauguration, an EPA research official announced the agency will be seeking review of research components of the action plan from its Board of Scientific Counselors in late summer.

Lawmakers on both sides of the aisle pressed Regan on Feb. 3 to step up EPA's response to PFAS, both in its efforts to clean up contaminated sites and through restrictions on products and industrial processes that use the chemicals, which would come through TSCA.

"We will pursue discharge limits, we will pursue water quality values, we will pursue all avenues that we can while we're developing these rulemaking processes, to give the proper signals to states so that states can take the appropriate actions, like we've had to take in North Carolina," he said during the hearing.

Regan's written responses also promise to advance environmental justice at the agency, which could become a hot-button issue in TSCA risk management rules as EPA faces a statutory mandate to tailor those policies to protect vulnerable subpopulations.

"If confirmed, I will work with EPA staff and Congress to increase resources to address environmental justice; integrate environmental justice across all EPA policies, actions, and program implementation in accordance with presidential executive orders and directives; and ensure the federal civil rights laws are enforced," he writes. -- *David LaRoss* (dlaross@iwpnews.com)

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, February 17, 2021 7:21 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, February 17, 2021 7:16 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

I'd call this a big win for IRIS. Both their systematic review process and Handbook were held up as examples for TSCA.

Lastly, the committee "recommends that a handbook for TSCA review and evidence integration methodology be put together that details the steps in the process. Throughout this report, the committee points to problems of documentation. The committee believes that the effort of developing and publicly vetting a handbook will pay off in the long run by making the process more straightforward, transparent, and easier to follow."

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, February 16, 2021 5:06 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

Wow.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Inside TSCA <epa-alerts@iwpnews.com>
Sent: Tuesday, February 16, 2021 5:04 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Latest News: EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

INSIDE EPA'S
INSIDE TSCA
Exclusive news and analysis on the new Toxic Substances Control Act

February 16, 2021

LATEST NEWS

EPA To Replace TSCA Systematic Review Approach After Harsh NAS Critique

EPA is abandoning the Trump-era approach to systematic data review that guided the first TSCA evaluations of existing chemicals and will craft a new model based in part on a National Academy of Sciences (NAS) report that said the current approach lacked objectivity "at each step" and "compromised" the program's transparency.

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Telephone: 703-416-8500 or 1-800-424-9068

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/3/2018 3:01:28 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX: A Few Questions This Morning
Attachments: 05-03-18 AM Questions.docx

Help please

From: Akhter, Shamima
Sent: Thursday, May 03, 2018 11:01 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX: A Few Questions This Morning

Hi Jamie, TT has a few more questions. Please below and the attached.

Thanks,
Shamima

From: Mosso, Dacia [mailto:Dacia.Mosso@tetratech.com]
Sent: Thursday, May 3, 2018 10:52 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Susan Lanberg <susan.lanberg@tetratech.com>
Subject: GenX: A Few Questions This Morning

Hi Shamima,

Attached are a few questions that I was wondering if EPA could resolve today.

Thanks!
Dacia

Dacia Mosso | Associate Director of Environmental Sciences
Direct: 703.385.1437 | Receptionist: 703.385.6000 x1437 | Fax: 703.385.6007
dacia.mosso@tetratech.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/2/2018 5:44:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: RIVM Genx report
Attachments: Evaluation of substances used in the GenX technology by Chemours, Dordrecht.pdf

Well aware

From: Jones, Samantha
Sent: Wednesday, May 02, 2018 1:44 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: FW: RIVM Genx report

Hi,

In response to an inquiry to some of our ORD colleagues regarding any published data on air exposures to GenX, we heard back that they were not really aware of any air measurements. However, they shared the attached RIVM report on GenX and some extracted text below that may be of interest.

From: Lindstrom, Andrew
Sent: Wednesday, May 02, 2018 1:28 PM
To: Buckley, Timothy <Buckley.Timothy@epa.gov>; Washington, John <Washington.John@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Riedel, Theran <Riedel.Theran@epa.gov>
Subject: RE: Following up -- urgentish question

Tim,

This modeling report from the Netherlands is all I know about.

From this report:

> A chronic inhalation exposure limit of 73 ng/m^3 for FRD-903 and FRD-902 is derived in the present report in a worst-case approach, taking into account an extra safety margin due to uncertainty in the accumulation potential. The year-average air concentrations of FRD-903 were calculated based on the permitted emissions. This led to estimated concentrations in air of about 20 ng/m^3 for the nearest populated areas (along the dike opposite side of the river) and lower concentrations at greater distances from the plant. Based on the recorded emissions for 2014 the estimated concentrations for the nearest populated areas are about 15 ng/m^3. Comparing these concentrations with the limit value of 73 ng/m^3 leads to the conclusion that based on the available data, no health risk is expected for people living in the vicinity of the Chemours Dordrecht plant due to exposure to FRD-903.

Andy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/22/2018 1:35:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Assessment Check In

Lets touch base for a few minutes to figure out how to triage comments. I hear we have some from ORD (?!?!?).... Joyce probably doesn't need to come, so maybe delete the invite for her.

-----Original Appointment-----
From: Jacobs, Brittany
Sent: Thursday, February 08, 2018 11:11 AM
To: Jacobs, Brittany; Donohue, Joyce; Strong, Jamie; Miller, Gregory
Subject: GenX Assessment Check In
When: Tuesday, May 22, 2018 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest-5231AA/DC-CCW-OST

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/5/2018 7:51:54 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: DAF for 28 day mouse
Attachments: GenX RfD w BW3_4 & UF _ RfD v6_5_18.xlsx

Ex. 5 Deliberative Process (DP)

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 10/6/2020 6:30:37 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: talk about GenX and PFBA

Jamie,
Britt and I talked, and I scheduled another meeting for Thursday at 2pm. You have a lot of tentative meetings on your schedule at the moment, so I just picked a spot and went with it. We can totally move the meeting to whenever works. Here's what we propose for moving forward.

1. Continue to read, digest, and respond to the ORD comments.
2. Ex. 5 Deliberative Process (DP)
3. Revise as needed.
4.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, October 6, 2020 7:52 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: talk about GenX and PFBA

Sure! Greg and I can keep the meeting and let you know where we land.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, October 06, 2020 7:51 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: talk about GenX and PFBA

Okay can you guys meet today, we need to let BB know what the ORD comments say and that we would need to make some revisions before sending. Sorry this is falling to you guys.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, October 06, 2020 7:46 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: talk about GenX and PFBA

Agree that we will need a little time to update a few things, but I don't think we should change too much so everyone has looked at the same thing.

Hope you feel better soon, Jamie!

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, October 06, 2020 7:42 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: talk about GenX and PFBA

I think we need to make some changes before intraAgency. We can't leave that UFLOAEL double-count in there. So we're going to need some time.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, October 6, 2020 7:41 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: talk about GenX and PFBA

You two should meet without me today to talk about PFBA and Betsy's plan for GenX. My only question is would we make changes to GenX write up before intra agency review? I assume we leave as 10 and get other agency perspectives (we will have OCSPP and ORD) then revise. Sorry, need to take time off and get better.

Thanks,
Jamie

-----Original Appointment-----
From: Strong, Jamie
Sent: Thursday, October 01, 2020 1:28 PM
To: Miller, Gregory; Jacobs, Brittany
Subject: talk about GenX and PFBA
When: Tuesday, October 06, 2020 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Sorry it's the only time I have

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) ington DC (Toll)

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/6/2018 2:15:35 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: Charge edits-FOR REVIEW
Attachments: GenX PFBS_External Peer Review_charge questions_06 04 18.docx; NASA charge comments and response.docx

Importance: High

I have tried to clean this up and incorporate most of the comments. I need your help with the intro background and some of the comments. Also, reattaching NASA's comments that are outstanding.Please review and provide comments to me by COB Tuesday June 12th. I need to send this to ERG by the 14th.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2018 11:24:48 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: paper of interest on GenX
Attachments: gomis.pdf; ATT00001.htm

From: Gillespie, Andrew
Sent: Friday, June 01, 2018 5:51 PM
To: Lambert, Jason <Lambert.Jason@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: paper of interest on GenX

For awareness...

Andrew JR Gillespie, PhD
Associate Director USEPA/ORD/NERL
ORD Executive Lead for PFAS R&D

Office 9195413655. Mobile 6143302226

Begin forwarded message:

> **From:** "Lau, Chris" <Lau.Christopher@epa.gov>
> **Date:** June 1, 2018 at 5:43:48 PM EDT
> **To:** "Gray, Earl" <Gray.Earl@epa.gov>, "Wilson, Vickie" <Wilson.Vickie@epa.gov>, "Hines, Ronald" <Hines.Ronald@epa.gov>, "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Lindstrom, Andrew" <Lindstrom.Andrew@epa.gov>, "Strynar, Mark" <Strynar.Mark@epa.gov>, "Flowers, Lynn" <Flowers.Lynn@epa.gov>, "Raffaele, Kathleen" <raffaele.kathleen@epa.gov>, "Donohue, Joyce" <Donohue.Joyce@epa.gov>
> **Cc:** "Rogers, John M." <Rogers.John@epa.gov>
> **Subject: paper of interest on GenX**
>
> See recent comparative study attached.
>
> Chris
>
> Christopher Lau, Ph.D.
> Chief, Developmental Toxicology Branch
> Toxicity Assessment Division, Mail Code B105-04
> National Health and Environmental Effects Research laboratory
> US Environmental Protection Agency
> Research Triangle Park, NC 27711
>
> Phone: 919 541-5097
> Fax: 919 541-4849
> Email: lau.christopher@epa.gov

Message

From: Lambert, Jason [Lambert.Jason@epa.gov]
Sent: 6/11/2018 2:49:24 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Charge edits-FOR REVIEW
Attachments: GenX PFBS_External Peer Review_charge questions_06 04 18_Lambert edits.docx

Hi Jamie/Betsy,
Thank you for pulling the revised charge together. Beth and I gave this a good look and have provided some suggestions/edits that we hope facilitates arriving at a final version for EPR. Let us know if you all have any questions on anything we did.

Jason C. Lambert, PhD, DABT
NCEA Senior Advisor for Alternative Methods
U.S. EPA, ORD, NCEA
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513) 569-7078 ph.
(513) 487-2539 fax
lambert.jason@epa.gov

From: Strong, Jamie
Sent: Wednesday, June 06, 2018 10:16 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: Charge edits-FOR REVIEW
Importance: High

I have tried to clean this up and incorporate most of the comments. I need your help with the intro background and some of the comments. Also, reattaching NASA's comments that are outstanding.Please review and provide comments to me by COB Tuesday June 12th. I need to send this to ERG by the 14th.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/11/2018 2:22:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Notes from GenX & PFBS Schedule meeting

From: Miller, Gregory
Sent: Thursday, June 7, 2018 3:43 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Notes from GenX & PFBS Schedule meeting

GenX/PFBS scheduling meeting
6/7/18

- Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Grevatt, Peter
Sent: Thursday, May 31, 2018 9:54 AM
To: Grevatt, Peter; Behl, Betsy; Bahadori, Tina; Mclain, Jennifer; Strong, Jamie; Jones, Samantha; Holsinger, Hannah; Burneson, Eric; Tiago, Joseph; Gillespie, Andrew
Cc: Miller, Gregory; Nagle, Deborah
Subject: GenX and PFBS Schedule
When: Thursday, June 7, 2018 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: 2203 EPA East - Peter Grevatt's conference line - Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/15/2018 5:03:09 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Draft GenX chemicals toxicity values for agency review
Attachments: Appendix B_GenX_version051518.pdf

Oh my…its very long. I wonder if its consistent with language in our lit eval section.

From: Camacho, Iris
Sent: Tuesday, May 15, 2018 12:48 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Fehrenbacher, Cathy <Fehrenbacher.Cathy@epa.gov>; Selby-Mohamadu, Yvette <Selby-Mohamadu.Yvette@epa.gov>
Subject: RE: Draft GenX chemicals toxicity values for agency review

Attached is OPPT's Appendix B supporting the GenX assessment. Let me know if you have any questions.

****
Iris A. Camacho, Ph.D.
Branch Chief, Assessment Branch 1
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
William Jefferson Clinton Building East, 6308-A
Washington, DC 20460
Phone: 202-564-1229
Work hours: 8:00 am – 4:30 pm
Work cell phone: 202-304-8648
Telework phone: 301-977-3667 or 301-613-5215
Email: camacho.iris@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/12/2018 5:17:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: charge
Attachments: GenX PFBS_External Peer Review_charge questions_06 12 18.docx

Can you two take a look?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/12/2018 5:46:39 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Lambert, Jason [Lambert.Jason@epa.gov]
Subject: RE: revised charge
Attachments: GenX PFBS_External Peer Review_charge questions_06 12 18 FINAL.docx

Importance: High

For now taking Tina and Betsy off this chain to circle back with the group after the conversation this morning. Let me know what you think and add any final edits. I would like to send forward to Tina, Betsy and Peter (?).

Thanks,
Jamie

From: Jones, Samantha
Sent: Monday, June 11, 2018 11:20 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: revised charge

Hi all,

Very nice! I like how this has come along and believe we've been able to address a number of the comments we received. I've included a few edits and comments in the attached.

Thanks!
Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Strong, Jamie
Sent: Monday, June 11, 2018 12:57 PM
To: Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: revised charge
Importance: High

Please find attached the revised charge including edits from Greg and Jason (thank you!!). I would like to get Tina, Samantha, and Betsy's thoughts in advance of the meeting being scheduled with interagency reviewers for next week. If you all could review and send me comments by Wednesday COB that would be great.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/14/2018 2:09:04 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: im done
Attachments: DRAFT EXT PEER REVIEW Tox Assessment for GenX Chemicals_06-14-18.docx

Okay here is a clean version. I can send this to TT for then to start with the formatting and appendix. I am going to have them do a spell check too.

You sent them App B right?

From: Jacobs, Brittany
Sent: Thursday, June 14, 2018 10:02 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: im done

Awesome!!!!!!!!

Yes, I think that's the plan! How exciting!

From: Strong, Jamie
Sent: Thursday, June 14, 2018 10:01 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: im done

Just a few tweaks here and there. Should I save to desktop and accept all changes and remove comments?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/19/2018 3:56:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Assessment Check In

Id cancel

From: Jacobs, Brittany
Sent: Tuesday, June 19, 2018 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Assessment Check In

Should I cancel this meeting at 2pm as well? Or would either of you like to meet?

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/19/2018 5:18:46 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Assessment Check In

On call now, lets chat briefly at 2.

From: Jacobs, Brittany
Sent: Tuesday, June 19, 2018 12:43 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Assessment Check In

Okay responded to your comments.

From: Strong, Jamie
Sent: Tuesday, June 19, 2018 11:57 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Assessment Check In

Take a look at my comments on the response doc.

From: Jacobs, Brittany
Sent: Tuesday, June 19, 2018 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Assessment Check In

Should I cancel this meeting at 2pm as well? Or would either of you like to meet?

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/20/2018 5:52:12 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Revised GenX Document
Attachments: DRAFT EXT PEER REVIEW Tox Assessment for GenX Chemicals_06-20-18_final.docx

Can one of you do a sweep through?

From: Akhter, Shamima
Sent: Wednesday, June 20, 2018 1:24 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Revised GenX Document

Hi Jamie, TT has provided the revised GenX document (attached) and with a few comments.

Thanks,
Shamima

From: Mosso, Dacia [mailto:Dacia.Mosso@tetratech.com]
Sent: Wednesday, June 20, 2018 1:16 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Susan Lanberg <susan.lanberg@tetratech.com>; John Hochheimer <john.hochheimer@tetratech.com>
Subject: Revised GenX Document

Hi Shamima,

Attached is the revised GenX document. We inserted and formatted Appendix B, and did a spell check on the whole document. Please note that we left a few comment bubbles for you. There were two places with incomplete sentences. The third comment bubble discusses recommendations related to references.

Please let me know if you need anything else.

Thanks!
Dacia

Dacia Mosso | Associate Director of Environmental Sciences
Direct: 703.385.1437 | Receptionist: 703.385.6000 x1437 | Fax: 703.385.6007
dacia.mosso@tetratech.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/20/2018 6:42:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: charge with pfbs cut out
Attachments: GenX_External Peer Review_charge questions_06 20 18 FINAL.docx

Please take a quick look. We will get doc back from TT with section numbers today. Need to look at that TK sentence and add purity sentences per Tala info.

Then we are done.

If we can get it to ERG tomorrow awesome.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/20/2018 7:37:56 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: charge with pfbs cut out
Attachments: GenX_External Peer Review_charge questions_06 20 18 FINAL with references.docx

Here you go. W/ cancer guidelines ref.

From: Strong, Jamie
Sent: Wednesday, June 20, 2018 3:35 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: charge with pfbs cut out

No attachement...can you add this and send?

From: Miller, Gregory
Sent: Wednesday, June 20, 2018 3:34 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: charge with pfbs cut out

Here's the charge with references added. I also added a reference to the BMD Tech Guidance. You might also consider adding a cancer guidelines reference to question 7. If you like that idea, here's the ref to cut and paste in.

USEPA (U.S. Environmental Protection Agency). 2005. *Guidelines for Carcinogen Risk Assessment*. EPA/630/P-03/001B. USEPA, Risk Assessment Forum, Washington, DC. Accessed May 2018. https://www.epa.gov/risk/guidelines-carcinogen-risk-assessment.

From: Strong, Jamie
Sent: Wednesday, June 20, 2018 2:42 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: charge with pfbs cut out

Please take a quick look. We will get doc back from TT with section numbers today. Need to look at that TK sentence and add purity sentences per Tala info.

Then we are done.

If we can get it to ERG tomorrow awesome.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/20/2018 6:53:30 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Revised GenX Document
Attachments: DRAFT EXT PEER REVIEW Tox Assessment for GenX Chemicals_06-20-18_final_headings.docx

---

From: Lanberg, Susan [mailto:Susan.Lanberg@tetratech.com]
Sent: Wednesday, June 20, 2018 2:47 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Dacia Mosso <Dacia.Mosso@tetratech.com>
Subject: RE: Revised GenX Document

Hi Shamima,

Attached please find the updated version with heading numbers. Dacia has been in a meeting but she should be finished soon. Let us know if you need anything else.

Thank you,

Sue

From: Akhter, Shamima [mailto:Akhter.Shamima@epa.gov]
Sent: Wednesday, June 20, 2018 2:16 PM
To: Mosso, Dacia <Dacia.Mosso@tetratech.com>; Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Revised GenX Document

Hi Dacia, Please see Jamie's responses below.

Thanks,
Shamima

From: Strong, Jamie
Sent: Wednesday, June 20, 2018 2:12 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Revised GenX Document

They didn't add the section numbers back. I need this turned around fast.

From: Mosso, Dacia [mailto:Dacia.Mosso@tetratech.com]
Sent: Wednesday, June 20, 2018 1:16 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Susan Lanberg <susan.lanberg@tetratech.com>; John Hochheimer <john.hochheimer@tetratech.com>
Subject: Revised GenX Document

Hi Shamima,

Attached is the revised GenX document. We inserted and formatted Appendix B, and did a spell check on the whole document. Please note that we left a few comment bubbles for you. There were two places with incomplete sentences. The third comment bubble discusses recommendations related to references.

Please let me know if you need anything else.

Thanks!
Dacia

Dacia Mosso | Associate Director of Environmental Sciences
Direct: 703.385.1437 | Receptionist: 703.385.6000 x1437 | Fax: 703.385.6007
dacia.mosso@tetratech.com

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10306 Eaton Place, Suite 340 | Fairfax, VA 22030-2201 | www.tetratech.com

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 6/28/2018 12:41:25 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Gen X method

Fyi only

From: Burneson, Eric
Sent: Monday, May 07, 2018 10:14 AM
To: Hautman, Dan <Hautman.Dan@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Subject: RE: Gen X method

Thanks Dan for confirming. I will send a note to Sara Pillsbury.

From: Hautman, Dan
Sent: Monday, May 07, 2018 9:59 AM
To: Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Subject: RE: Gen X method

Eric,

Ex. 5 Deliberative Process (DP)

Dan

From: Burneson, Eric
Sent: Wednesday, May 02, 2018 2:00 PM
To: Hautman, Dan <Hautman.Dan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>
Subject: Gen X method

Greg and Dan:

Ex. 5 Deliberative Process (DP)

Eric Burneson, P.E.

Director of Standards and Risk Management
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
202 564 5250

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 7/9/2018 11:41:28 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: OST and RAD GenX Assessment Check In

I have an all day, off site management retreat (so does Betsy). I suggest you guys keep this meeting though. We will have the report and can hopefully give them an idea if there are any comments for OCSPP.

-----Original Appointment-----
From: Jacobs, Brittany
Sent: Monday, February 12, 2018 4:33 PM
To: Jacobs, Brittany; Behrsing, Tracy; Henry, Tala; Aubee, Catherine; Benson, Amy; Brinkerhoff, Chris; Babcock, Amy; Behl, Betsy; Strong, Jamie; Miller, Gregory; Donohue, Joyce
Subject: OST and RAD GenX Assessment Check In
When: Tuesday, July 24, 2018 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Updated 2/15 with call in number

Conference phone number:
Conference ID:

Ex. 6 Personal Privacy (PP)

For OST and RAD to touch base about the GenX assessment. Scheduled through July. Hopefully we will just need the half hour, but I can extend out if needed.

This was the most available time according to the Doodle Poll sent out.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/9/2018 5:52:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: example slide deck

Correct.

From: Jacobs, Brittany
Sent: Thursday, August 09, 2018 1:49 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: example slide deck

We are just including GenX chemicals information in this briefing right? No PFBS? I think I'll include a slide to say how we've been coordinating with ORD and these assessments are on parallel tracks, but wanted to double check that this is just GenX chemicals

---

From: Strong, Jamie
Sent: Thursday, August 09, 2018 8:59 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: example slide deck

Brittany and Greg,
Here is the admin brief for PFOA and PFOS. Use this example along with the current slides on GenX to develop a Dave Ross briefing while I am gone (the prebrief is the 6th I see). I think you will need a slide for NC current prelim value and what they are doing. May need to touch base with Beth Dittman (ask Betsy to set this up with her boss) after the meeting the 20th in NC. I'd also include peer review comments overview and approach to revisions.

THANKS!!!

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/13/2018 9:15:14 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: BAFs for GenX chemicals.

NC asked what we are doing to characterize baf for genx chemicals, as they need that to develop a final state protective value (think criteria). You have enough to think about right now, but I wanted to get this on your radar. Some time ago we had oppt summarize available data for nc. We should start with that.

Sent from my iPhone

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/13/2018 9:43:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Genx document comments

Great job on this assessment. I read it from cover to cover yesterday and the time flew by. Literally.

I ha a few minor comments and caught a typo or two. Will try to summarize and send to you a couple others tonight.

Nicely done!
Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/8/2020 2:04:25 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Talk about GenX (and PFBA)

So I just talked to Betsy. She said that we should make any changes we need to make to GenX BEFORE we send out for an intraagency review. So after we talk this afternoon we will need to shift to starting to revise that section again. She doesn't have anything from Tala yet, she will ask her to see it again.

-----Original Appointment-----
From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, October 07, 2020 7:25 AM
To: Miller, Gregory; Strong, Jamie; Jacobs, Brittany
Subject: Talk about GenX (and PFBA)
When: Thursday, October 08, 2020 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Wanted to get this on the calendar. Jamie, I see that you have lots of tentative meetings on your calendar. Feel free to offer another time for this meeting if you need to.

Join Microsoft Teams Meeting

Learn more about Teams | Meeting options

By participating in EPA hosted virtual meetings and events, you are consenting to abide by the agency's terms of use. In addition, you acknowledge that content you post may be collected and used in support of FOIA and eDiscovery activities.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/19/2018 2:38:45 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: RE: exec summary edits

Here is what I did. Jason, you will need to let TT know you need to change that page out. I am SO sorry.

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie
Sent: Wednesday, September 19, 2018 10:36 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: exec summary edits

Guys looks like this language is in response to comments too so it needs to be changed there…sorry. There is too much going on.

From: Strong, Jamie
Sent: Tuesday, September 18, 2018 2:15 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: exec summary edits

Betsy talked to Peter briefly and asked that I make the following changes, sending to both teams for consistency:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/20/2018 2:17:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Updated GenX/PFBS briefing document - with minor edit from ORD
Attachments: Briefing for Administrator on GenX Chemicals PFBS Toxicity Assessments 9-20-18.pptx; ATT00001.htm

FYI. Dave has them and is looking at them so they still might change. I went to Andrea and asked for them and she forwarded this email chain.

From: Drinkard, Andrea
Sent: Thursday, September 20, 2018 10:11 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: Updated GenX/PFBS briefing document - with minor edit from ORD

Begin forwarded message:

> **From:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> **Date:** September 20, 2018 at 7:15:10 AM EDT
> **To:** "Ross, David P" <ross.davidp@epa.gov>, "Forsgren, Lee" <Forsgren.Lee@epa.gov>, "Drinkard, Andrea" <Drinkard.Andrea@epa.gov>
> **Cc:** "Tiago, Joseph" <Tiago.Joseph@epa.gov>, "Wadlington, Christina" <Wadlington.Christina@epa.gov>, "Mclain, Jennifer" <Mclain.Jennifer@epa.gov>, "Campbell, Ann" <Campbell.Ann@epa.gov>
> **Subject: Updated GenX/PFBS briefing document - with minor edit from ORD**
>
> Dave, Lee, Andrea and Ann – please note that I received a suggestion on the new slide 12 last night from our ORD lead. If the document has already gone up to the AO, there is no need to modify. If not, please use the updated version which I have attached to this message. Please let me know if you would like to discuss.
>
> Thanks, P.G.
>
> ---
>
> **From:** Grevatt, Peter
> **Sent:** Wednesday, September 19, 2018 5:52 PM
> **To:** Dave Ross (ross.davidp@epa.gov) <ross.davidp@epa.gov>; Forsgren, Lee <Forsgren.Lee@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>
> **Cc:** Tiago, Joseph <Tiago.Joseph@epa.gov>; Wadlington, Christina <wadlington.christina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Ann Campbell <Campbell.Ann@epa.gov>
> **Subject:** Updated GenX/PFBS briefing document to incorporate input from OMB
>
> Please see attached updated presentation. Changes were made to slide 2 and a new slide 12 was added. Dave, note that the two bullets related to status of discussions with OMB and the request for guidance on how to address OMB comments on PFBS fit best in the context of summary slide #2.
>
> Thanks, and please let me know if you have any further recommended changes on this.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/20/2018 3:08:23 PM
To: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: FRN for GenX and PFBS

Looping in Greg also.

From: Flaherty, Colleen
Sent: Thursday, September 20, 2018 11:08 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: FRN for GenX and PFBS

What do you think of this?

I. What are EPA's Draft Toxicity Assessments?

Ex. 5 Deliberative Process (DP)

From: Jones, Samantha
Sent: Thursday, September 20, 2018 10:08 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Messier, Dawn <Messier.Dawn@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: FRN for GenX and PFBS

Hi all,

The PFBS team (cc'd here) added a few other edits to consider as we finalize the FRN. See attachment (track changes and comment bubbles from Lambert).

Thanks,
Samantha

Samantha J. Jones, PhD
NCEA Associate Director
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
RRB 51214
(o) 202-564-6794; (m) 703-943-7990

From: Jones, Samantha
Sent: Wednesday, September 19, 2018 9:53 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Messier, Dawn <Messier.Dawn@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: RE: FRN for GenX and PFBS

Hi Colleen,

Thanks for sharing, overall changes look good. Please see a few places where I've incorporated edits and comment bubbles.

Thanks,
Samantha

Samantha J. Jones, PhD
NCEA Associate Director
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
RRB 51214
(o) 202-564-6794; (m) 703-943-7990

From: Flaherty, Colleen
Sent: Wednesday, September 19, 2018 3:22 PM
To: Messier, Dawn <Messier.Dawn@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: FRN for GenX and PFBS

Hi Dawn and Samantha,

Attached is the latest version of the FRN, which we edited to be consistent with the latest language in the comms materials. The comms have not yet been reviewed by our political folks or federal partners, but I wanted OGC and ORD to have the latest version even if it is a moving target. Also, Samantha, take a look at the statement on cumulative

effects in response to OMB's suggestion ("There are currently insufficient data to assess potential cumulative (mixture) effects of GenX chemicals and PFBS, and their possible interactions with other PFAS and/or other chemicals").

Thanks,
Colleen

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/21/2018 11:51:45 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: FINAL: Updated GenX/PFBS briefing document
Attachments: Briefing for Administrator on GenX Chemicals PFBS Toxicity Assessments 9-20-18.pptx

---

From: Holsinger, Hannah
Sent: Thursday, September 20, 2018 5:22 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: FINAL: Updated GenX/PFBS briefing document

Actually I just got a copy. Please see the attached.

Thanks!
Hannah

From: Tiago, Joseph
Sent: Thursday, September 20, 2018 5:20 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Subject: FINAL: Updated GenX/PFBS briefing document

FYI. Final briefing slides attached for tomorrow's AAW briefing on GenX and PFBS.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/4/2018 12:11:27 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: OST and RAD GenX Assessment Check In

Let's cancel, doc in tech edit. Briefing (including OCSPP management) on the 10th

-----Original Appointment-----
From: Jacobs, Brittany
Sent: Monday, February 12, 2018 4:33 PM
To: Jacobs, Brittany; Henry, Tala; Aubee, Catherine; Benson, Amy; Brinkerhoff, Chris; Babcock, Amy; Behl, Betsy; Strong, Jamie; Miller, Gregory; Donohue, Joyce
Subject: OST and RAD GenX Assessment Check In
When: Tuesday, September 04, 2018 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Realized I had only scheduled these through July (our previous due date). Extending out until the end of September for now.

Conference phone number:
Conference ID:

Ex. 6 Personal Privacy (PP)

For OST and RAD to touch base about the GenX assessment. Scheduled through July. Hopefully we will just need the half hour, but I can extend out if needed.

This was the most available time according to the Doodle Poll sent out.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/27/2018 6:27:46 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI
Attachments: DeWitt_CFRA_52318.pptx; ATT00001.htm

From: Behl, Betsy
Sent: Monday, August 27, 2018 2:26 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI

Sent from my iPhone

Begin forwarded message:

> **From:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> **To:** "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Cc:** "Mclain, Jennifer" <Mclain.Jennifer@epa.gov>, "Tiago, Joseph" <Tiago.Joseph@epa.gov>, "Burneson, Eric" <Burneson.Eric@epa.gov>
> **Subject: Fwd: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI**
>
> FYI.
>
> Sent from my iPhone
>
> Begin forwarded message:
>
> > **From:** "Kathleen Gallagher" <gallagherkm1@gmail.com>
> > **To:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> > **Cc:** "Beth Markesino" <bethamarkesino@yahoo.com>
> > **Subject: Fwd: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI**
> >
> > Mr. Grevatt,
> > We
> > Please see attached study published this year indicating GenX is more toxic than PFOA.
> >
> > I have also included concurrence of Dr. Jamie Dewitt, East Carolina University.
> >
> > Please forward to the appropriate team working in GenX.
> >
> > Thank you for your attendance in Fayetteville NC and your continued commitment to our health.

Katie Gallagher
Beth Markesino
NC Stop GenX in Our Water
501(c)3 and on Facebook

---------- Forwarded message ---------
From: **DeWitt, Jamie** <DEWITTJ@ecu.edu>
Date: Tue, Aug 21, 2018, 8:33 AM
Subject: RE: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI
To: Kathleen Gallagher <gallagherkm1@gmail.com>

Hi Kathleen,

Yes, I also briefly discussed this paper in my presentation to the CFRA back in May (see slides 23-24).

It takes less of an internal dose of GenX to increase liver weight than PFOA. We also see this effect for immune system effects. Internally, it appears to be more potent.

Jamie

From: Kathleen Gallagher [mailto:gallagherkm1@gmail.com]
Sent: Monday, August 20, 2018 5:33 PM
To: Detlef Knappe <knappe@ncsu.edu>; DeWitt, Jamie <DEWITTJ@ecu.edu>
Subject: Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives. - PubMed - NCBI

https://www.ncbi.nlm.nih.gov/pubmed/29421396

Am I reading this correctly? GenX is higher for serum and liver concentration than PFOA, etc.??

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/6/2018 6:29:23 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Heads up - GenX briefing for Dave Ross

From: Wadlington, Christina
Sent: Thursday, September 06, 2018 1:36 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Heads up - GenX briefing for Dave Ross

I added a draft PR (at the end of the roll out) for everyone to edit. Please add anything, edit, delete as needed.

From: Lalley, Cara
Sent: Thursday, August 30, 2018 3:36 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Heads up - GenX briefing for Dave Ross

Hi all,

The latest draft versions of the rollout, Q&A and technical fact sheet are on the Sharepoint. I will remind Lahne that ORD should start filling in PFBS info on the technical fact sheet (or decide to create a separate technical fact sheet for PFBS, if total content is more than 2 pages). Lahne said she'll also contribute to the Q&A. I updated and cleaned up each document as best I could today.

I will be out tomorrow, but back in Tuesday morning, and have a comms check-in scheduled with OST/HECD folks for Tuesday afternoon.

Andrea- I think any suggested details you could add to the rollout about the Media Call-In would be helpful for the Deborah/Peter pre-brief; then we can revise as necessary for the Dave Ross briefing.

Thanks

From: Wadlington, Christina
Sent: Thursday, August 30, 2018 1:27 PM
To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Heads up - GenX briefing for Dave Ross

Perfect. I'll send an invite.

From: Drinkard, Andrea
Sent: Thursday, August 30, 2018 1:26 PM

To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Heads up - GenX briefing for Dave Ross

Yep. I'm happy to meet. I think we have a good sense on what's going to be included in the roll-out, so I think meeting tomorrow is a great idea. Hopefully we can bang it out in an hour ☺

From: Wadlington, Christina
Sent: Thursday, August 30, 2018 1:22 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Heads up - GenX briefing for Dave Ross

Got it. Cara and I just chatted today about a plan that we should be able to articulate by this time. Andrea/Cara, want to meet tomorrow so we're on the same page about what to provide to Dave?

From: Flaherty, Colleen
Sent: Thursday, August 30, 2018 1:21 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Heads up - GenX briefing for Dave Ross

Hi - I just heard from Deborah that the briefing for Dave needs to include a robust presentation of comms/roll out strategy. So, we need your help! Jamie has drafted slides on the science part and I will review them and send to you all for your input later today or tomorrow. The pre-brief for Deborah and Peter is Thursday, Sept. 6 and the briefing for Dave is Monday, Sept. 10.

Thanks,
Colleen

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/5/2018 6:30:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: PFAS Discussion

We should touch base for a few minutes. I am scarfing down lunch now but stop by.

From: Crawford, Tiffany
Sent: Wednesday, September 05, 2018 2:25 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: PFAS Discussion

FYI. This meeting is now scheduled during the pre-briefing.

Sent from my iPhone

Begin forwarded message:

> **From:** "Campbell, Ann" <Campbell.Ann@epa.gov>
> **Date:** September 5, 2018 at 1:56:49 PM EDT
> **To:** "Tiago, Joseph" <Tiago.Joseph@epa.gov>, "Crawford, Tiffany" <Crawford.Tiffany@epa.gov>
> **Subject: Re: PFAS Discussion**
>
> Adding Tiffany as I will also be adding Deborah to tomorrow's meeting.
>
> Ann Campbell
> Chief of Staff (acting)
> Office of Water
>
> On Sep 5, 2018, at 1:56 PM, Tiago, Joseph <Tiago.Joseph@epa.gov> wrote:
>
>> Got it, thanks!
>>
>> ---
>>
>> **From:** Campbell, Ann
>> **Sent:** Wednesday, September 5, 2018 1:55 PM
>> **To:** Tiago, Joseph <Tiago.Joseph@epa.gov>
>> **Subject:** Re: PFAS Discussion
>>
>> Understanding tomorrow's discussion will be on the GenX- PFBS action.
>>
>> Ann Campbell
>> Chief of Staff (acting)
>> Office of Water
>>
>> On Sep 5, 2018, at 12:59 PM, Tiago, Joseph <Tiago.Joseph@epa.gov> wrote:
>>
>>> Yes, Peter can make himself available.
>>>
>>> ---
>>>
>>> **From:** Campbell, Ann

Sent: Wednesday, September 5, 2018 12:58 PM
To: Tiago, Joseph <Tiago.Joseph@epa.gov>
Subject: PFAS Discussion

Is Peter available? I'm still trying to get details. Stay tuned.

Subject: PFAS Discussion
Location: 3233 WJCE Call in Ex. 6 Personal Privacy (PP)

Start: Thu 9/6/2018 3:00 PM
End: Thu 9/6/2018 4:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Forsgren, Lee
Required Attendees: Bodine, Susan; Traylor, Patrick; Cook, Steven; Beck, Nancy; Yamada, Richard (Yujiro); Bolen, Brittany; Leopold, Matt (OGC); Fotouhi, David; Ross, David P; Penman, Crystal

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 9/5/2018 12:25:50 PM
To: Grevatt, Peter [Grevatt.Peter@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]
CC: Crawford, Tiffany [Crawford.Tiffany@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]

Subject: Pre-brief GenX Toxicity Values
Attachments: GenX Pre-brief2018-08-08-154057.pdf
Location: DCRoomWest5233B/DC-CCW-OST

Start: 9/6/2018 7:00:00 PM
End: 9/6/2018 7:30:00 PM
Show Time As: Tentative

Required Attendees: Grevatt, Peter; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; flaherty. colleen (Flaherty.Colleen@epa.gov); Holsinger, Hannah; Burneson, Eric; Mclain, Jennifer; Henry, Tala; Wadlington, Christina; Lalley, Cara
Optional Attendees: Crawford, Tiffany; Tiago, Joseph

Adding call-in number 9/5/2018

Conference c
Conference I

Ex. 6 Personal Privacy (PP)

POC: Betsy Behl
Tele: 566-0788

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/31/2018 12:47:02 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: slides?
Attachments: Draft Briefing for AAs on GenX Chemicals Toxicity Assessment.pptx; Draft Briefing for AAs on GenX Chemicals Toxicity Assessment short.pptx

FYI. Colleen sent two versions, our long one with her edits and a shorter version. I just sent you my edits to the shorter one. I can fill you in later. Just making sure you have emails for files.

From: Flaherty, Colleen
Sent: Friday, August 31, 2018 8:27 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: slides?

Here you go. I hope this is helpful. Start with the short one. I have to get the kids out the door but can work on this again later.

From: Strong, Jamie
Sent: Friday, August 31, 2018 8:15 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: slides?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/10/2018 3:19:12 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Re: Technical Edit of GenX Documents

We need to go through this tomorrow and clean up and finalize. I have to get a draft to Deborah apparently. I am blocking the whole day to deal with GenX since I was out today. Need to walk through slides and prep me for what to say now that they have changed and get the document done.

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Friday, September 7, 2018 11:51 AM
To: Strong, Jamie
Cc: Akhter, Shamima; Jacobs, Brittany; Miller, Gregory; John Hochheimer; Dacia Mosso
Subject: Technical Edit of GenX Documents

Jamie,

We've performed a technical edit of the attached documents (EPA RESPONSE TO COMMENTS_GENX CHEMICALS_09-07-18.docx and PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_09-06-18.docx) following the instructions you sent us.

- We only have one remaining question for you in the PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_09-06-18.docx document about the HERONet website.
- In the main body of the PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_09-06-18.docx file, we have a question for you about the disclaimer and a few questions for you about the in-text citations/references.
- In Appendix B of the PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_09-06-18.docx file, we pointed out where there were some inconsistencies in the Evaluation Domain and Metric category names used in the tables; please let us know if you would like us to make any global edits to those category names. We also had questions about how to clarify a few descriptions in the tables.

Please let us know if you if have any questions or further edits you would like us to make.

Thank you,

Sue

Susan Adair Lanberg | Environmental Scientist
Direct: (703) 385-1906, (703) 385-6000 ext.1906 | Fax: (703)385-6007
susan.lanberg@tetratech.com

Environmental Sciences
Innovative Solutions for Clean Water

Tetra Tech | Complex World, Clear Solutions

10306 Eaton Place, Suite 340 | Fairfax, VA 22030-2201 | www.tetratech.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/31/2018 12:45:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: slides?
Attachments: Draft Briefing for AAs on GenX Chemicals Toxicity Assessment short jbs.pptx

FYI. So very frustrating. I will fill you in, but the short of it is Colleen cut A LOT out.

From: Strong, Jamie
Sent: Friday, August 31, 2018 8:44 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: slides?

A few tweaks to short one. Do you want me to send this to comms group?

From: Flaherty, Colleen
Sent: Friday, August 31, 2018 8:27 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: slides?

Here you go. I hope this is helpful. Start with the short one. I have to get t Ex. 6 Personal Privacy (PP) can work on this again later.

From: Strong, Jamie
Sent: Friday, August 31, 2018 8:15 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: slides?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/11/2018 2:45:10 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: current drafts
Attachments: PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals_09-11-18 FINAL.docx; EPA RESPONSE TO COMMENTS_GENX CHEMICALS_PUBLIC COMMENT FINAL 091118.docx

With Betsy and OGC edits incorporated. Amy just sent something from OPPT on App B.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/12/2018 1:54:14 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment

I am seeing things.

From: Miller, Gregory
Sent: Wednesday, September 12, 2018 9:53 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment

Both docs look clean when I open them.

From: Strong, Jamie
Sent: Wednesday, September 12, 2018 9:43 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment

The TOC is in track changes!!

From: Behl, Betsy
Sent: Wednesday, September 12, 2018 8:29 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Crawford, Tiffany <Crawford.Tiffany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment

Deborah, attached is the GenX toxicity assessment developed by Jamie, Brittany, and Greg. This document addresses internal comments, comments from other federal agencies, and peer review comments.. it has been through a technical edit including for format and punctuation preferences of the OW IO. It is not yet 508 compliant and may need to be updated based on a second round of comments from OMB and federal agency review (tomorrow). Given the timing we wanted to send to you for review.
Best, Betsy
Sent from my iPhone

Begin forwarded message:

> **From:** "Strong, Jamie" <Strong.Jamie@epa.gov>
> **Date:** September 12, 2018 at 7:06:36 AM CDT
> **To:** "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Cc:** "Jacobs, Brittany" <jacobs.brittany@epa.gov>, "Miller, Gregory" <Miller.Gregory@epa.gov>, "Flaherty, Colleen" <Flaherty.Colleen@epa.gov>
> **Subject: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment**
>
> Betsy,
> Attached is the final, tech edited (including the IO guidance on document development) toxicity assessment and response to comments for GenX chemicals for review by the OST OD (Colleen indicated Deborah wanted to see this again to ensure that IO guidance on document development was adhered

to) and OW IO review. I don't know if we have to wait until we hear if the interagency reviewers have additional comments on Thursday before we send this to the IO or not. This version is not 508 compliant. I still need to do that before the 21st but am waiting until all of these final reviews are done.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/17/2018 3:05:14 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX/PFBS Wheeler briefing Friday

FYI, we will have to edit slides.

-----Original Message-----
From: Behl, Betsy
Sent: Monday, September 17, 2018 11:02 AM
To: Tiago, Joseph <Tiago.Joseph@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Re: GenX/PFBS Wheeler briefing Friday

That sounds good. Who do you envision giving the briefing? Deborah would like me to attend. Can you please forward the invite?

Sent from my iPhone

> On Sep 17, 2018, at 10:53 AM, Tiago, Joseph <Tiago.Joseph@epa.gov> wrote:
>
> Morning Betsy and Samantha,
>
> Please find attached Peter's comments on the briefing slides.
>
> Thanks,
>
> Joe.
>
> From: Jones, Samantha
> Sent: Monday, September 17, 2018 9:38 AM
> To: Grevatt, Peter <Grevatt.Peter@epa.gov>
> Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
> Subject: Re: GenX/PFBS Wheeler briefing Friday
>
> Thanks Peter. Let us know when to jump in.
> Sent from my iPhone
>
> On Sep 17, 2018, at 9:36 AM, Grevatt, Peter <Grevatt.Peter@epa.gov<mailto:Grevatt.Peter@epa.gov>> wrote:
> Going through this now for clarity and a bit of streamlining. Will let you know when I have a hard copy marked up.
> Sent from my iPhone
>
> On Sep 17, 2018, at 9:23 AM, Behl, Betsy <Behl.Betsy@epa.gov<mailto:Behl.Betsy@epa.gov>> wrote:
> Peter: If you have comments on the other slides, we are happy to make changes. Please send to me and Jamie. Alternatively I can pick up comments you have on hard copy this morning.
>
> Thanks
> Sent from my iPhone
>
> On Sep 17, 2018, at 9:19 AM, Drinkard, Andrea <Drinkard.Andrea@epa.gov<mailto:Drinkard.Andrea@epa.gov>> wrote:
> I can tweak the comms slides this morning.
>
> On Sep 17, 2018, at 9:17 AM, Grevatt, Peter <Grevatt.Peter@epa.gov<mailto:Grevatt.Peter@epa.gov>> wrote:
> We are on the Acting Administrator's calendar on Friday to bring him up to speed on the first big action out of the gate on the PFAS summit commitments – posting the tox values for GenX and PFBS for public comment. Please let me know who you would like me to work with to adjust our 9/13 briefing package for the Administrator. He will be on the road from this afternoon through the middle of the week and I would like to get the package up to the AO ASAP.
>
> Thanks, P.G.
> <GenX_PFBS_PG Comments 091718.pdf>

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/12/2018 1:43:01 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment
Attachments: EPA RESPONSE TO COMMENTS_GENX CHEMICALS_PUBLIC COMMENT FINAL 091218 .docx; ATT00001.htm; PUBLIC COMMENT DRAFT HH Tox Values for GenX Chemicals FINAL 091218.DOCX; ATT00002.htm

The TOC is in track changes!!

From: Behl, Betsy
Sent: Wednesday, September 12, 2018 8:29 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Crawford, Tiffany <Crawford.Tiffany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment

Deborah, attached is the GenX toxicity assessment developed by Jamie, Brittany, and Greg. This document addresses internal comments, comments from other federal agencies, and peer review comments.. it has been through a technical edit including for format and punctuation preferences of the OW IO. It is not yet 508 compliant and may need to be updated based on a second round of comments from OMB and federal agency review (tomorrow). Given the timing we wanted to send to you for review.
Best, Betsy
Sent from my iPhone

Begin forwarded message:

> **From:** "Strong, Jamie" <Strong.Jamie@epa.gov>
> **Date:** September 12, 2018 at 7:06:36 AM CDT
> **To:** "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Cc:** "Jacobs, Brittany" <jacobs.brittany@epa.gov>, "Miller, Gregory" <Miller.Gregory@epa.gov>, "Flaherty, Colleen" <Flaherty.Colleen@epa.gov>
> **Subject: FOR MANAGEMENT REVIEW-FINAL GenX chemicals assessment and response to comment**
>
> Betsy,
> Attached is the final, tech edited (including the IO guidance on document development) toxicity assessment and response to comments for GenX chemicals for review by the OST OD (Colleen indicated Deborah wanted to see this again to ensure that IO guidance on document development was adhered to) and OW IO review. I don't know if we have to wait until we hear if the interagency reviewers have additional comments on Thursday before we send this to the IO or not. This version is not 508 compliant. I still need to do that before the 21st but am waiting until all of these final reviews are done.
>
> Thanks,
> Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/17/2018 6:57:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX/PFBS Wheeler briefing Friday

Ugh

-----Original Message-----
From: Grevatt, Peter
Sent: Monday, September 17, 2018 2:53 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX/PFBS Wheeler briefing Friday

Thanks Betsy. I will want to open and then I think it would be great if you and Samantha could coordinate on who from your staff you would like to cover each of your parts. I would like to take the former slide 17 that summarizes all of the tox values and then turn it over to Andrea for Coms. Please let me know if this sounds OK to you!

-----Original Message-----
From: Behl, Betsy
Sent: Monday, September 17, 2018 11:02 AM
To: Tiago, Joseph <Tiago.Joseph@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Re: GenX/PFBS Wheeler briefing Friday

That sounds good. Who do you envision giving the briefing? Deborah would like me to attend. Can you please forward the invite?

Sent from my iPhone

> On Sep 17, 2018, at 10:53 AM, Tiago, Joseph <Tiago.Joseph@epa.gov> wrote:
>
> Morning Betsy and Samantha,
>
> Please find attached Peter's comments on the briefing slides.
>
> Thanks,
>
> Joe.
>
> From: Jones, Samantha
> Sent: Monday, September 17, 2018 9:38 AM
> To: Grevatt, Peter <Grevatt.Peter@epa.gov>
> Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
> Subject: Re: GenX/PFBS Wheeler briefing Friday
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> Thanks
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>

> Thanks, P.G.

> <GenX_PFBS_PG Comments 091718.pdf>

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/17/2018 3:21:44 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX/PFBS Wheeler briefing Friday
Attachments: GenX_PFBS_PG Comments 091718.pdf

Samantha is making changes first, then us.

From: Jones, Samantha
Sent: Monday, September 17, 2018 11:20 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: GenX/PFBS Wheeler briefing Friday

Samantha J. Jones, PhD
NCEA Associate Director
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
RRB 51214
(o) 202-564-6794; (m) 703-943-7990

From: Tiago, Joseph
Sent: Monday, September 17, 2018 10:54 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Grevatt, Peter <Grevatt.Peter@epa.gov>
Subject: RE: GenX/PFBS Wheeler briefing Friday

Morning Betsy and Samantha,

Please find attached Peter's comments on the briefing slides.

Thanks,

Joe.

From: Jones, Samantha
Sent: Monday, September 17, 2018 9:38 AM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: Re: GenX/PFBS Wheeler briefing Friday

Thanks Peter. Let us know when to jump in.

Sent from my iPhone

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Sent from my iPhone

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>>
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>>>
>>> Thanks, P.G.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/18/2018 6:04:08 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Re: Are you on the PFAS call?

Yup. I think its Peter and Eric. I remember them saying they were meeting with them one day. They didn't want us to come to "not get in the weeds". Id bet money that is who it was.

From: Miller, Gregory
Sent: Tuesday, September 18, 2018 2:02 PM
To: Strong, Jamie; Jacobs, Brittany
Subject: RE: Are you on the PFAS call?

Hard to know where you stand when people aren't sharing their activities.

From: Strong, Jamie
Sent: Tuesday, September 18, 2018 1:59 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Fw: Are you on the PFAS call?

I wonder who in ORD and OW met with them?

From: Henry, Tala
Sent: Tuesday, September 18, 2018 1:39 PM
To: Behl, Betsy
Cc: Strong, Jamie
Subject: RE: Are you on the PFAS call?

Me too, on the peer review; will you make Peter aware of what we heard?

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy
Sent: Tuesday, September 18, 2018 1:35 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: Re: Are you on the PFAS call?

It looks like office directors for the briefing for the administrator. They left me and Jamie off, but we are going and she will do the briefing.

I was not invited to and don't know anything about a meeting with 3M. It's not a one size fits all thing. I think use of contractor led letter peer review was perfectly appropriate for GenX.

Sent from my iPhone

On Sep 18, 2018, at 1:24 PM, Henry, Tala <Henry.Tala@epa.gov> wrote:

> Ha, just heard you.
> Question: what level/who is invited to the Administrator briefing Friday (im sure my PDAA will want to know...is she invited??
>
> Intel: Last Friday some reps from 3M and some 'corsortia' talking head met with us; they indicated they had met with OW and ORD previously; they were 'posturing' about the Tox Values...one 'message' was about how really need fully public peer review process, "contractor paper peer reviews just miss things"...did you attend that meeting with them/hear that???
>
> Tala R. Henry, Ph.D.
> Acting Deputy Director
> Office of Pollution Prevention and Toxics
> U.S. Environmental Protection Agency
>
> T: 202-564-2959
> E: henry.tala@epa.gov
>
> ---
>
> **From:** Behl, Betsy
> **Sent:** Tuesday, September 18, 2018 1:21 PM
> **To:** Henry, Tala <Henry.Tala@epa.gov>
> **Subject:** Re: Are you on the PFAS call?
>
> Yes
>
> Sent from my iPhone
>
> On Sep 18, 2018, at 1:18 PM, Henry, Tala <Henry.Tala@epa.gov> wrote:
>
>> Tala R. Henry, Ph.D.
>> Acting Deputy Director
>> Office of Pollution Prevention and Toxics
>> U.S. Environmental Protection Agency
>>
>> T: 202-564-2959
>> E: henry.tala@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/19/2018 2:01:05 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX assessment

Can someone send me the FINAL FINAL FINAL docs for 508'ing?

-----Original Message-----
From: Behl, Betsy
Sent: Tuesday, September 18, 2018 6:53 PM
To: McDonough, Owen <mcdonough.owen@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX assessment

Many thanks, we will move the document ot the next (last!) state of production.

-----Original Message-----
From: McDonough, Owen
Sent: Tuesday, September 18, 2018 5:49 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: RE: GenX assessment

I will not have time to review and comment. Please proceed with getting the document to the contractor for 508 compliance.

Thanks,
Owen

-----Original Message-----
From: Behl, Betsy
Sent: Tuesday, September 18, 2018 10:27 AM
To: McDonough, Owen <mcdonough.owen@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: GenX assessment

Owen, we will need to make final adjustments to the GenX document soon in order to post on September 25. We need to send the document to a contractor by tomorrow to generate a 508 compliant version that can be posted. Do you know if you will have comments or if we should proceed?

Thanks for your consideration, Betsy

Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/19/2018 3:58:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: final GenX and PFBS toxicity documents and presentation

---

From: Behl, Betsy
Sent: Wednesday, September 19, 2018 10:46 AM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: final GenX and PFBS toxicity documents and presentation

Peter,

We heard from Owen yesterday that he will not be providing us with comments on GenX. We were able to make some small edits to both documents to reflect our conversation yesterday, emphasizing that these are draft toxicity values. Unless you think otherwise, we are moving forward to make the documents final and 508 compliant. Our contractor should have both documents completed by COB Tuesday 9/25.

I sent Hannah a note earlier today regarding sharing toxicity values with states. You may recall that just prior to our conversation with them (briefing#3) we discussed providing those values, but some were hesitant because we had not shared that information with the Administrator. Do we need to set up another call with the state group to share those values? Both Eric and I are getting questions from region 4.

Finally, Jamie and Samantha are giving part of the presentation on Friday. You mentioned you are making some changes. They would like to practice the presentation beforehand. Can you share the revised presentation with us, or let us know how you would like it to be revised?

Many thanks, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/25/2018 11:50:57 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: UF write up for Wheeler
Attachments: Summary Uncertainty Factors GenX Chemicals 09 24 18 final.docx; ATT00001.htm

FYI

From: Behl, Betsy
Sent: Monday, September 24, 2018 3:50 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: UF write up for Wheeler

Deborah, attached is the write up we did for the administrator. We would also like to send him the s cations from genx on this topic.

Please let us know what you think

Sent from my iPhone

Begin forwarded message:

> **From:** "Strong, Jamie" <Strong.Jamie@epa.gov>
> **Date:** September 24, 2018 at 3:22:54 PM EDT
> **To:** "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Cc:** "Jacobs, Brittany" <jacobs.brittany@epa.gov>, "Miller, Gregory" <Miller.Gregory@epa.gov>
> **Subject: RE: UF write up for Wheeler**
>
> Here you go
>
> ---
>
> **From:** Behl, Betsy
> **Sent:** Monday, September 24, 2018 2:26 PM
> **To:** Strong, Jamie <Strong.Jamie@epa.gov>
> **Cc:** Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
> **Subject:** RE: UF write up for Wheeler
>
> Looks good. Small edits. Let me know when I can send to Deborah.
>
> ---
>
> **From:** Strong, Jamie
> **Sent:** Monday, September 24, 2018 8:27 AM
> **To:** Behl, Betsy <Behl.Betsy@epa.gov>
> **Cc:** Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
> **Subject:** UF write up for Wheeler
> **Importance:** High
>
> Betsy,
> Here is a two pager summary of the uncertainty factors for GenX chemicals for Wheeler. Please let me know what you think as to the level of detail. It was hard to truncate rationales. Also attaching the actual section from the document, I think that should be sent also.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/23/2018 2:19:45 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Inside EPA: EPA to release GenX, PFBS risk estimates 'imminently'

From: Behl, Betsy
Sent: Tuesday, October 23, 2018 10:18 AM
To: Strong, Jamie
Subject: Re: Inside EPA: EPA to release GenX, PFBS risk estimates 'imminently'

Sandy called me last week, as part of our ongoing engagement with North Carolina. I wish she had not implied there was something wrong with pfbs. That's not what I said.

Sent from my iPhone

On Oct 23, 2018, at 7:00 AM, Strong, Jamie <Strong.Jamie@epa.gov> wrote:

> Uhhh....I didn't talk to them!
>
> ---
>
> **From:** Albert, Ryan
> **Sent:** Tuesday, October 23, 2018 7:26 AM
> **To:** Strong, Jamie <Strong.Jamie@epa.gov>
> **Subject:** FW: Inside EPA: EPA to release GenX, PFBS risk estimates 'imminently'
>
> If you haven't seen this. . .
>
> Best regards,
> Ryan
>
> _____
> Ryan Albert, Ph.D.
> Acting Chief, Standards and Risk Reduction Branch
> Standards and Risk Management Division
> Office of Ground Water and Drinking Water
> U.S. Environmental Protection Agency
> Washington, DC
> (202) 564-0763
>
> ---
>
> **From:** Flaharty, Stephanie
> **Sent:** Tuesday, October 23, 2018 7:17 AM
> **To:** Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Rodgers-Jenkins, Crystal <Rodgers-Jenkins.Crystal@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>
> **Subject:** Inside EPA: EPA to release GenX, PFBS risk estimates 'imminently'
>
> **EPA to release GenX, PFBS risk estimates 'imminently'**
>
> October 22, 2018

EPA is preparing the "imminent" release of it oral risk estimates for a pair of short-chain per- and polyfluoroalkyl substance (PFAS) chemicals, known as GenX and PFBS, despite a slight delay due to concerns with the PFBS analysis, according to a North Carolina state official who discussed the issue with EPA last week.

Sandy Mort, a toxicologist with the North Carolina Department of Environmental Quality (DCEQ), told the North Carolina Science Advisory Board (NCSAB) at its Oct. 22 meeting that she spoke last week with members of the EPA group responsible for crafting the GenX reference dose (RfD), a measure of the greatest amount of a chemical that EPA estimates could be consumed daily without adverse noncancer effects.

"They called the release imminent, in the next couple of weeks," she said.

The work follows risk analyses that EPA promised to NCDEQ and other states struggling with how best to address PFAS contamination at sites and in drinking water sources in places around the country. In August, an EPA spokesperson told *Inside EPA* that the agency planned to release toxicity assessments for GenX and PFBS together in September for public comment. But the agency has yet to do so.

The spokesperson indicated that the assessments would be released in draft form, adding that EPA plans to evaluate comments and revise and finalize the assessment. Both EPA programs and state agencies will then have access to the risk values as tools "to address GenX and PFBS contamination concerns in a variety of exposure scenarios," the spokesperson said.

Mort told the board that EPA plans to release the oral reference doses for the two chemicals jointly, and after internal and external peer review, "there are some questions regarding their number or process for PFBS."

Mort added that internal and external reviewers are "comfortable with" the GenX analysis and conclusion, but there is a "slight hold up regarding PFBS."

GenX is a replacement for an older PFAS chemical, perfluorooctanoic acid (PFOA), that manufacturers agreed to phase out by 2015. But GenX has become a potent issue in North Carolina where it has been found in the Cape Fear River, a source of drinking water for four counties in the state, near a manufacturing plant owned by Chemours, a DuPont spin-off.

PFAS -- known for their non-stick and repellent qualities -- have been used in a variety of consumer and industrial applications, but the chemicals have been linked to various adverse health effects, including certain cancers, ulcerative colitis and thyroid disease.

Mort told the NCSAB that she asked EPA "to consider releasing [the] GenX [RfD] without the PFBS [RfD]. They prefer not to do that."

Peter Grevatt, the director of EPA's Office of Ground Water and Drinking Water and the agency's top official on PFAS policy said during an August community meeting EPA supports the 140 parts per trillion (ppt) provisional health goal the North Carolina Department of Health and Human Services has set for GenX, according to *The Fayetteville Observer*. The article does not say if he gave any indication of any level that EPA may adopt.

Grevatt, who also spoke at the Environmental Council of the States (ECOS) Fall Meeting in late August in Stowe, VT, reiterated his past concerns that a single national PFAS standard may be inappropriate. He pointed to a recent agency survey of systems that supply drinking water showing 80 percent of users found PFAS in less than 2 percent of those systems.

Since then, an Ohio firefighter has brought a class action suit against PFAS manufacturers seeking industry-funded, independent nationwide health studies and testing to determine health effects caused by multiple PFAS -- including the newer replacement chemicals -- found in the blood of nearly all Americans.

The Oct. 4 suit, *Kevin D. Hardwick v. 3M Company, et al.* was filed in the U.S. District Court for the Southern District of Ohio, and represents all residents of the United States with a detectable level of PFAS in their blood. Such a class could be huge,

as the suit says testing by independent researchers and defendants has found that 99 percent of the U.S. population has PFAS in their blood.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/25/2018 1:33:46 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: FRN for GenX/PFBS

Feeling salty.

From: Strong, Jamie
Sent: Thursday, October 25, 2018 9:24 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FRN for GenX/PFBS

Didn't realize Nancy Beck had to review final materials, I am not sure what response to comment she has...if I had to guess PFBS since Peter sent that to interagency reviewers.

From: Flaherty, Colleen
Sent: Wednesday, October 24, 2018 6:05 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FRN for GenX/PFBS

Yes, 2 comments, both easy. First is an edit to reflect the recent revisions to the PFBS assessment, and second is that she only has only seen one response to peer review document. I don't know whether she has the peer review doc for GenX or PFBS???

From: Behl, Betsy
Sent: Wednesday, October 24, 2018 6:00 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: Fwd: FRN for GenX/PFBS

I haven't looked at these yet. Hope they are easily addressed

Sent from my iPhone

Begin forwarded message:

> **From:** "Nagle, Deborah" <Nagle.Deborah@epa.gov>
> **Date:** October 24, 2018 at 5:03:06 PM EDT
> **To:** "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Subject: FW: FRN for GenX/PFBS**
>
> FYI
>
> ---
>
> **From:** Campbell, Ann
> **Sent:** Wednesday, October 24, 2018 1:53 PM
> **To:** Grevatt, Peter <Grevatt.Peter@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>
> **Cc:** Mclain, Jennifer <Mclain.Jennifer@epa.gov>
> **Subject:** FRN for GenX/PFBS

Attached are comments received from Nancy Beck on the FRN.

Ann Campbell
Chief of Staff (acting)
Office of Water

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/29/2018 12:52:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: RESPONSE NEEDED: FW: GenX assessment

From: Ohanian, Edward
Sent: Monday, October 29, 2018 8:52 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RESPONSE NEEDED: FW: GenX assessment

Hi Betsy,
Please advise on path forward. It will be great to get Laurie's perspective via face to face or conference call. Thx. Ed

Edward V. Ohanian, Ph.D.
Associate Director for Science
USEPA/Office of Water (MC: 4301T)
(202) 566-1117 (Voice)
(202) 566-0441(Fax)

From: Laurie Haws [mailto:lhaws@toxstrategies.com]
Sent: Saturday, October 27, 2018 2:49 PM
To: Ohanian, Edward <Ohanian.Edward@epa.gov>
Cc: lhaws@toxstrategies.com
Subject: GenX assessment

Ed,

I hope this note finds you well. I wanted to reached out to you regarding some work that Chad and I have been involved with that may be of interest to you and your colleagues in the Office of Water. Specifically, we were approached by Chemours and asked to conduct an independent assessment of the toxicology data for GenX and to develop an oral reference dose. To accomplish this, we employed standard and Bayesian models in BMDS v2.7 and v3.0, as well as developed both deterministic and probabilistic RfDs. We understand that the EPA Office of Water is in the process of developing an oral Rfd for GenX and I thought you might be interested in our work. I'd be happy to send y'all a copy of our assessment and would welcome the opportunity to discuss our findings with you and your colleagues, as well as answer any questions that you might have. Just let me know. Thanks much.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist

ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/6/2018 5:00:08 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: 508 FINAL GenX chemicals docs

Ha!!

From: Jacobs, Brittany
Sent: Tuesday, November 06, 2018 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

We do have a docket, they had me open one when everyone was out in August

---

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 11:56 AM
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

Uh no right?

From: Harper, Ashley
Sent: Tuesday, November 06, 2018 11:55 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

So we do have a docket I am assuming? We need to send these to the docket for their QAQC as soon as the FRN is signed and make sure that ORD does the same.

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 11:50 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Harper, Ashley <harper.ashley@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: 508 FINAL GenX chemicals docs

In case I am not here and these go out…just making sure we all have them.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/6/2018 5:00:01 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: 508 FINAL GenX chemicals docs

Oh thank goodness.

From: Miller, Gregory
Sent: Tuesday, November 06, 2018 11:59 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

Yay! Britt saves the day!

From: Jacobs, Brittany
Sent: Tuesday, November 6, 2018 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

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From: Strong, Jamie
Sent: Tuesday, November 06, 2018 11:56 AM
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
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Sent: Tuesday, November 06, 2018 11:55 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: 508 FINAL GenX chemicals docs

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From: Strong, Jamie
Sent: Tuesday, November 06, 2018 11:50 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Harper, Ashley <harper.ashley@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: 508 FINAL GenX chemicals docs

In case I am not here and these go out…just making sure we all have them.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 12/1/2018 12:15:04 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: GenX article in C&EN

FYI:
https://cen.acs.org/environment/persistent-pollutants/Chemours-clean-GenX-pay-12/96/web/2018/11

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2019 3:42:45 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: home stretch schedule GenX and PBFS
Attachments: Home stretch calendar for GenX and PFBS.docx

Last schedule I have.

From: Behl, Betsy
Sent: Friday, August 10, 2018 7:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: home stretch schedule GenX and PBFS

Please review and comment on this schedule. Anything missing?

From: Strong, Jamie
Sent: Wednesday, August 08, 2018 11:23 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in 2 Ex. 6 Personal Privacy (PP)

To recap the meeting today:

1. Date to send PFBS to OW contractors for tech edit and 508 compliance is September 20th.
2. Send out materials (peer review reports attached here) to state and interagency groups in advance of the meeting (proposal to send report to them on August 20th). Meeting is on August 27th.
3. Send out materials to agency group in advance (proposal to send report to the Monday 13th). Meeting is on August 20th.
4. Need to follow up on comms plan and schedule
5. Need to revise our schedule (include comms and OW and ORD management reviews)

From: Jones, Samantha
Sent: Wednesday, August 08, 2018 10:26 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: coordination on document development: call in 2 Ex. 6 Personal Privacy (PP)

Hi all,

I'm going to have to miss this meeting today. Things seem to be moving right along and we have our meetings with epa, other federal agencies, and ECOS scheduled.

One thing that would be good to work out is the time frame as we work towards having a final public comment draft considering the timing for tech edit, PDF/508 compliance, and web posting.

coordination on document development: ca Ex. 6 Personal Privacy (PP)
Scheduled: Wednesday, Aug 8, 2018 from 11:00 AM to 12:00 PM
Location: DCRoomWest5231M/DC-CCW-OST
Invitees: Jacobs, Brittany, Bahadori, Tina, Miller, Gregory, Behl, Betsy, Owens, Beth, Lambert, Jason, Strong, Jamie, Champlin, Anna

Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/20/2019 1:21:36 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]
Subject: FW: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Proposed schedule_GenX-PFBS_v.2_03 20 19.docx

Looks good, here is a clean version.

From: Jones, Samantha
Sent: Tuesday, March 12, 2019 1:08 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi all,

Just wanted to check to see if you all want to meet tomorrow morning. I believe Betsy is out. Jason is at SOT and Beth will be out of the office. The only topic I really have is the schedule. We've added some PFBS language and I edited the table a bit in text and format, see attached.

If you'd like to discuss, let me know and I'm happy to be on the call!

I've also just become aware of a FOIA request to ORD…don't have all the info but below is what I do have. To my knowledge it has only been sent out to ORD labs or centers.

****

Under the provision of the Freedom of Information Act, I would like to request copies of studies conducted by the EPA regarding the human health effects of perfluorinated chemicals (PFCs) excluding PFOS and PFOA. These chemicals are including but not limited to: PFHxA, PFDA (PFDeA), PFOSA, PFNA, PFPeA, AFPO, PFBA, PFHpA, PFNA, PFUA, PFDoA, PFHxS, PFBuS, Me-PFOSA-AcOH, Et-PFOSA-AcOH, PFESAs, PFECAs, FTOHs, and GenX chemicals.

Please include any review articles written by the EPA about PFCs in addition to studies. Studies that can be found in the AR-226 database need not be included.

If possible, we would like to limit to studies that are not readily available online. We would also like to request information on actual, expected, or modeled concentration of all PFCs in wastewater treatment plant influent and effluent.

We have found reference (on slide 6 of the following presentation: https://www.epa.gov/sites/production/files/2018-08/documents/r4_combined_presentations_.pdf) to an EPA document from the past year or so that investigates 31 PFAS of interest; we would like to request this document as well.

****

Samantha

Samantha J. Jones, PhD
Division Director (Acting)
NCEA Cincinnati
USEPA, ORD
A-133
(o) 513-569-7697; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy
Sent: Wednesday, February 6, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, March 13, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/21/2019 6:48:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov) [suzanne.fenton@nih.gov]; DCRoomWest5231L/DC-CCW-OST [DCRoomWest5231L@epa.gov]

Subject: Discuss NIEHS research on GenX chemicals
Location: DCRoomWest5231L/DC-CCW-OST

Start: 4/4/2019 5:00:00 PM
End: 4/4/2019 6:30:00 PM
Show Time As: Tentative

Required Attendees: Jacobs, Brittany; Miller, Gregory; Fenton, Suzanne (NIH/NIEHS) [E] (suzanne.fenton@nih.gov); DCRoomWest5231L/DC-CCW-OST

Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

Toll number: +1 Ex. 6 Personal Privacy (PP) English (United States)

Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)

Forgot your dial-in PIN? | Help

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, March 14, 2019 9:15 AM
To: Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>
Subject: GenX chemicals research

Sue,
Some of my branch attended SOT and got a chance to catch your posters on GenX chemicals. We are very interested in hearing more about your research. I thought it would be a good idea to reach out to you and see if it's possible to schedule some time to hear what you all have done (and are planning to do) related to GenX chemicals. Informal, just my GenX assessment team (Brittany Jacobs and Greg Miller) and your staff working on these studies. We are in the midst of digging through public comments on our assessment and are really interested in hearing more about the repro/dev effects you'll have identified as this is a data gap currently in our assessment (which I hope you saw as part of interagency review). Let me know if you are amenable and we can look for a chunk of time to talk. Hope you are well!

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Conley, Justin [Conley.Justin@epa.gov]
Sent: 3/28/2019 5:02:38 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Gray, Earl [Gray.Earl@epa.gov]
Subject: RE: GenX manuscript accepted for publication
Attachments:Conley_2019_Adverse_maternal_fetal_and_postnatal_effects_of_hexafluoropropylene_oxide_Environ_Health_Perspect.pdf

As a follow-up, our GenX manuscript is now available online (open access) on the Environmental Health Perspectives website (https://ehp.niehs.nih.gov/). Attached is a pdf copy of the manuscript. Thanks again for your helpful comments.

Cheers,

Justin Conley
Postdoctoral Toxicologist
U.S. Environmental Protection Agency
ORD/NHEERL/TAD
Reproductive Toxicology Branch
Research Triangle Park, NC
(919) 541-3326

From: Conley, Justin
Sent: Thursday, February 28, 2019 10:32 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Earl Gray (Gray.Earl@epa.gov) <Gray.Earl@epa.gov>
Subject: GenX manuscript accepted for publication

Just a heads up. Our GenX manuscript that you previously reviewed has been accepted for publication in Environmental Health Perspectives and is now citable as "in press" with DOI 10.1289/EHP4372

Attached is a pdf copy of the accepted manuscript.

Thanks for your valuable comments and edits on the earlier draft.

Cheers,

Justin Conley
Postdoctoral Toxicologist
U.S. Environmental Protection Agency
ORD/NHEERL/TAD
Reproductive Toxicology Branch
Research Triangle Park, NC
(919) 541-3326

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2019 4:59:58 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Updated Options for GenX chemicals assessment and outline of work
Attachments: Options for the GenX Chemicals Assessment_March 2019 jbs.docx

Having trouble with Sharepoint. Here is the doc with my edits/comments. I got up to Option 1.

From: Jacobs, Brittany
Sent: Tuesday, April 16, 2019 10:00 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Updated Options for GenX chemicals assessment and outline of work

Ex. 6 Personal Privacy (PP)

Something for us to discuss today

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2019 5:08:44 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Updated Options for GenX chemicals assessment and outline of work

We can touch base after my pars (3pm).

From: Strong, Jamie
Sent: Tuesday, April 16, 2019 1:00 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Updated Options for GenX chemicals assessment and outline of work

Having trouble with Sharepoint. Here is the doc with my edits/comments. I got up to Option 1.

From: Jacobs, Brittany
Sent: Tuesday, April 16, 2019 10:00 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Updated Options for GenX chemicals assessment and outline of work

Ex. 6 Personal Privacy (PP)

Something for us to discuss today

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/18/2019 12:25:18 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.
Attachments: Options for the GenX Chemicals Assessment_04 18 19.docx

Here you go. I cant work on One Drive it is so slow and wonky. We can chat. I am booked solid today but will find a time. I am worried this isnt what BB wants. We need a revised schedule assuming we go the way of the PWG too.

From: Jacobs, Brittany
Sent: Wednesday, April 17, 2019 12:06 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

Hi Jamie,

Greg and I addressed comments and I put in timelines under the two feasible options for addressing apoptosis vs necrosis (completely made up). See what you think.

Britt

From: Miller, Gregory
Sent: Tuesday, April 16, 2019 3:21 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

I've made some edits in the sharepoint.

From: Jacobs, Brittany
Sent: Tuesday, April 16, 2019 1:57 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

Okay, I'll start addressing comments

From: Strong, Jamie
Sent: Tuesday, April 16, 2019 1:32 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

okay so made it through. I cant tell if all my changes are there.

This link only works for the direct recipients of this message.

Options for the GenX Chemicals Assessment_March 2019 jbs

Open

Microsoft OneDrive

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/18/2019 1:22:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

I think BB agreed that we shouldn't present that third option too. Just sent you an invite.

From: Jacobs, Brittany
Sent: Thursday, April 18, 2019 8:48 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

Sounds good, yeah give me a call when you can. I think for Dave we just present the options around the NTP working group and get rid of the rest of the issues because we think we can address those within the given timeline. I'd rather not present the third option of addressing ToxStrategies comments by pointing out inconsistencies and logical flaws in their argument after talking to Sue Elmore.

From: Strong, Jamie
Sent: Thursday, April 18, 2019 8:25 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

Here you go. I cant work on One Drive it is so slow and wonky. We can chat. I am booked solid today but will find a time. I am worried this isnt what BB wants. We need a revised schedule assuming we go the way of the PWG too.

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Sent: Wednesday, April 17, 2019 12:06 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

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From: Miller, Gregory
Sent: Tuesday, April 16, 2019 3:21 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

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From: Jacobs, Brittany
Sent: Tuesday, April 16, 2019 1:57 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

Okay, I'll start addressing comments

From: Strong, Jamie
Sent: Tuesday, April 16, 2019 1:32 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Strong, Jamie shared "Options for the GenX Chemicals Assessment_March 2019 jbs" with you.

okay so made it through. I cant tell if all my changes are there.

This link only works for the direct recipients of this message.

Options for the GenX Chemicals Assessment_March 2019 jbs

Open

Microsoft OneDrive

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 1/31/2018 4:41:18 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Charge Questions
Attachments: draft genx charge.docx

Hey. A few minor edits. I put them in a redline doc.

From: Jacobs, Brittany
Sent: Wednesday, January 31, 2018 11:27 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Charge Questions

Hi Greg,

Here are the very general charge questions. I know we can edit these down the road, but is there anything obviously missing here?

Charge Questions
Please provide detailed responses to the charge questions below.

1.
2.
3.
4.

Ex. 5 Deliberative Process (DP)

Thanks for you input!

Britt

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/6/2018 6:29:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX & BW3/4
Attachments: bw34 example_IRIS BAP p 154.pdf; bw34 final.pdf; GenX RfD w BW3_4 v2_6_18.xlsx

Here's a spreadsheet to play with. And supporting docs to explain what's going on. **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

Greg

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/12/2018 3:22:40 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX & BW3/4
Attachments: bw34 example_IRIS BAP p 154.pdf; bw34 final.pdf; GenX RfD w BW3_4 v2_6_18.xlsx

Revised BW3/4 spreadsheet attached. Let me know if you find any errors.

From: Miller, Gregory
Sent: Tuesday, February 06, 2018 1:30 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: GenX & BW3/4

Here's a spreadsheet to play with. And supporting docs to explain what's going on. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Greg

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2018 2:30:56 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: [GenX] Health Review
Attachments: GenXn3h_EndNoteLib.enlx; GenXn3h_documentation.docx

Sensitivity: Private

From: Benson, Amy
Sent: Monday, February 12, 2018 9:03 AM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>
Subject: RE: [GenX] Health Review
Sensitivity: Private

GenX ammonium salt Endnote Library (searching human health hazard and pchem/fate data) is attached. It is also on the PFAS Toxicity Group SP site along with other PFAS chemical results.
HFPC Dimer (GenX) Ammonium Salt Human Health Lit Search Results

On a very quick glance, I didn't notice new info that we were not aware of.

-----Original Appointment-----
From: Behrsing, Tracy
Sent: Wednesday, February 07, 2018 12:27 PM
To: Behrsing, Tracy; Henry, Tala; Aubee, Catherine; Benson, Amy; Brinkerhoff, Chris; Babcock, Amy
Cc: Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Donohue, Joyce
Subject: [GenX] Health Review
When: Thursday, February 08, 2018 12:15 PM-1:15 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Rm. 6122 East
Sensitivity: Private

Sharon was able to reserve 6122 so we will meet there instead of 6334FF.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/14/2018 6:57:57 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: detailed GenX workplan
Attachments: detailed workplan.docx

FYI

From: Behl, Betsy
Sent: Wednesday, February 14, 2018 1:54 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Subject: detailed GenX workplan

Jamie and her team worked with me to develop the attached workplan. It is very tight. Please let us know if you want any milestones changed. I put in tentative dates for the stakeholder meetings and the public meeting as well as process toward the end.

Based on this plan, the first meeting with state stakeholders and the first update for the federal stakeholders is scheduled for the first week in March. How should we go about getting that on ECOS etc schedule?

I will send updates to the status of activities on a weekly basis, so you know how we are progressing. I am sharing this with ORD today along with a proposed document format.

Best, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/20/2018 7:56:34 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: powerpoint material
Attachments: draft Content for GenX Background slides 2 20 18.docx

Here's what I pulled out of the OPPT report. Some of it maybe be useful for plugging in to the powerpoint. I think the background info should be sufficient to run by OPPT for approval.

I skipped over the toxicokinetics material for now. I didn't want to get too far into the weeds on the first pass through this material.

I suspect you'll want to reorganize the tox study summary info according to the conceptual model. That sounds good to me.

Work in progress...

Message

From: Behrsing, Tracy [behrsing.tracy@epa.gov]
Sent: 2/20/2018 5:47:06 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: PFAS Toxicity Values Update Meeting
Attachments: draft internal deliberative review - nonCBI rev. 2.20.doc

Brittany-

Please find attached the revised draft with the minor edits I mentioned at today's meeting.

We will work on a write-up pertaining to guideline studies, etc.

Tracy

From: Strong, Jamie
Sent: Tuesday, February 20, 2018 12:20 PM
To: Henry, Tala <Henry.Tala@epa.gov>; Behrsing, Tracy <behrsing.tracy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: PFAS Toxicity Values Update Meeting

From: Behl, Betsy
Sent: Tuesday, February 20, 2018 8:15 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: PFAS Toxicity Values Update Meeting

Sent from my iPhone

Begin forwarded message:

> **From:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> **Date:** February 19, 2018 at 9:10:38 AM EST
> **To:** "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Mclain, Jennifer" <Mclain.Jennifer@epa.gov>
> **Cc:** "Behl, Betsy" <Behl.Betsy@epa.gov>, "Jones, Samantha" <Jones.Samantha@epa.gov>, "Bahadori, Tina" <Bahadori.Tina@epa.gov>, "Lavoie, Emma" <Lavoie.Emma@epa.gov>
> **Subject: RE: PFAS Toxicity Values Update Meeting**
>
> Thanks Andy. Agenda for tomorrow's meeting will include:

- Workplan with milestones for development of GenX and PFBS assessments (GenX workplan is attached)
- Identification of materials for briefing of state representatives and federal partners (materials will need to be provided in advance)
- Identification of process, key dates and lead for management of peer review for GenX and PFBS

From: Gillespie, Andrew
Sent: Friday, February 16, 2018 1:01 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: RE: PFAS Toxicity Values Update Meeting

Hi Peter, Jennifer, is there an agenda or objective for this meeting Tuesday afternoon? Just wondering since I assume we will be giving a tox value update also at the 12 meeting of the cross agency group same day. Thanks, Andy

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/NERL
ORD Executive Lead for PFAS R&D

-----Original Appointment-----
From: Grevatt, Peter
Sent: Thursday, February 15, 2018 10:14 AM
To: Grevatt, Peter; Lavoie, Emma; Lambert, Jason; Gillespie, Andrew; Behl, Betsy; Mclain, Jennifer; Strong, Jamie
Cc: Tiago, Joseph; Owens, Beth; Bahadori, Tina
Subject: PFAS Toxicity Values Update Meeting
When: Tuesday, February 20, 2018 4:00 PM-4:45 PM (UTC-05:00) Eastern Time (US & Canada).
Where: 2203 EPA East - Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [no-reply@sharepointonline.com]
Sent: 2/21/2018 6:19:57 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Strong, Jamie has shared 'conceptual model GenX'

Here's the document that Strong, Jamie shared with you.

Open conceptual model GenX.pptx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Behl, Betsy [no-reply@sharepointonline.com]
Sent: 2/22/2018 4:34:17 PM
To: Henry, Tala [Henry.Tala@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Behrsing, Tracy [behrsing.tracy@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: Behl, Betsy has shared 'detailed workplan GenX'

Here's the document that Behl, Betsy shared with you.

Open detailed workplan GenX.docx

See more related to Behl, Betsy in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/23/2018 7:38:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Materials
Attachments: conceptual model GenX jbs v 2.pptx

Slide 3 is the concept model to use in slides

From: Jacobs, Brittany
Sent: Thursday, February 22, 2018 5:45 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Materials

Hello,

Attached are the draft slides (I used the most recent TOC as an outline). I will be able to fill out the health effects tables in these slides pretty quickly on Monday, if you want to leave those for me. I updated some of the problem formulation, but wasn't able to get to all sections. I talked to Tracy today and she is hoping to give us their overview of evaluating the studies early next week. One of the Amy's has it now and then it'll go to Tala for review.

Okay I think that's it. Hopefully this is enough to get you started/show Betsy. Have a good Friday!

Britt

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/23/2018 10:10:06 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: presentation for genx

FYI: I told Peter this afternoon that we are developing a presentation with about 15 slides for GenX describing available data and a general approach. He said it sounds perfect. ☺

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/26/2018 8:03:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Bibliography of health studies
Attachments: OPPTPFASWkgrp_health studies bibliography merged 2 26 18 CLEAN v2.docx; GEN X ECOS FED PARTNERS MTG 1 02 26 18 250PM.pptx

Importance: High

THANK YOU!!!

From: Strong, Jamie
Sent: Monday, February 26, 2018 2:51 PM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>
Cc: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: Bibliography of health studies
Importance: High

Tracy, Amy, Amy and Chris,
Here are the draft slides. Again still draft (Betsy hasn't reviewed yet either). Slides 5, 12, 13, 17 and 18 are where we specifically need OPPT input, but would also appreciate a review and welcome feedback/suggested edits on the whole slide deck. I am also including the bibliography (draft) FYI. If you could get us something by tomorrow (Tuesday) COB that would be really helpful. Again, sorry for the tight turn around.

Thanks again,
Jamie

From: Behrsing, Tracy
Sent: Monday, February 26, 2018 8:10 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Subject: RE: Bibliography of health studies

Hi Jamie –

That's no problem, and I've also cc'd Amy Benson who is most familiar with the literature search. I have a draft on the review process we used (submitted studies and then lit review) with Tala and will forward to you once I receive her input.

Tracy

From: Strong, Jamie
Sent: Monday, February 26, 2018 8:07 AM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Bibliography of health studies

Tracy and Chris,
I wanted to give you all a heads up. We have to brief our state and federal partners on the prob formulation for GenX (and PFBS) on March 9th. Slides are due to upper management by this Friday the 2nd and we need to walk through them with the PFAS Tox Wkgp this Thursday the 1st. I am hoping that you might be able to help with a few on the literature submission and evaluation (and be willing to give it a once over review if you have the time). I hope to have something draft to send you by this afternoon. Turn around would be tight. Let me know if this sounds okay. As always many thanks!!

Jamie

From: Behrsing, Tracy
Sent: Monday, February 26, 2018 7:59 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: Bibliography of health studies

Hi Brittany,

Tala asked that I send the latest version of the health studies bibliography. As such, please find attached the most recent version of the draft review which contains the bibliography as Attachment 1.

If there are any questions, please let me know.

Tracy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2018 12:33:17 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Bibliography of health studies

That's my fault, I took it out. I thought that since we are presenting this and in charge of the assessment we should just put OW. Of course, explaining the history.

From: Behl, Betsy
Sent: Monday, February 26, 2018 5:13 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: Bibliography of health studies
Importance: High

Let's include OPPT on the first slide

From: Henry, Tala
Sent: Monday, February 26, 2018 4:07 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: Bibliography of health studies
Importance: High

Can OPPT also be listed on first slide?

Tala R. Henry, Ph.D.
Director, Risk Assessment Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie
Sent: Monday, February 26, 2018 2:51 PM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
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Importance: High

Tracy, Amy, Amy and Chris,
Here are the draft slides. Again still draft (Betsy hasn't reviewed yet either). Slides 5, 12, 13, 17 and 18 are where we specifically need OPPT input, but would also appreciate a review and welcome feedback/suggested edits on the whole slide deck. I am also including the bibliography (draft) FYI. If you could get us something by tomorrow (Tuesday) COB that would be really helpful. Again, sorry for the tight turn around.

Thanks again,
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Subject: RE: Bibliography of health studies

Hi Jamie –

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Tracy

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Sent: Monday, February 26, 2018 8:07 AM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Bibliography of health studies

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Jamie

From: Behrsing, Tracy
Sent: Monday, February 26, 2018 7:59 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Hi Brittany,

Tala asked that I send the latest version of the health studies bibliography. As such, please find attached the most recent version of the draft review which contains the bibliography as Attachment 1.

If there are any questions, please let me know.

Tracy

Message

From: Strong, Jamie [no-reply@sharepointonline.com]
Sent: 2/27/2018 2:49:05 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Strong, Jamie has shared 'ECOS FED PART GENX PFBS PRESENTATION 02 27 18 935AM'

Here's the document that Strong, Jamie shared with you.

Open ECOS FED PART GENX PFBS PRESENTATION 02 27 18 935AM.pptx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/27/2018 8:34:51 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Bibliography of health studies
Attachments: RAD Comments.docx

Can you go through these are start to make changes in slides? I want to get to Betsy by noon tomorrow.

From: Behrsing, Tracy
Sent: Tuesday, February 27, 2018 3:26 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: Bibliography of health studies

Hi Jamie –

Attached are RAD's comments/suggestions on the slides and bibliography you sent for your consideration. Tala is reviewing the draft review process information and will send once that's ready.

Please let us know any questions/concerns.

Tracy

From: Strong, Jamie
Sent: Monday, February 26, 2018 2:51 PM
To: Behrsing, Tracy <behrsing.tracy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
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Tala <Henry.Tala@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Subject: RE: Bibliography of health studies

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Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Bibliography of health studies

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Jamie

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If there are any questions, please let me know.

Tracy

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/28/2018 7:16:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: genX - CompTox Chemistry Dashboard

https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=62037-80-3

https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=13252-13-6

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/14/2020 1:50:38 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX and ORD

I have a general on Monday, Betsy will ask where we are with these comments. I am going to look for some time tomorrow or Friday (are either of you working?) to touch base.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/14/2020 6:02:47 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX meeting

Deborah wants to talk about how to approach this meeting. She is asking that we tease out the most important issue Ex. 5 Deliberative Process (DP) We need to explain to her that they dissect the assessment and get very into the weeds of the studies.

From: Snowden, Belinda <snowden.belinda@epa.gov>
Sent: Wednesday, October 14, 2020 1:53 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX meeting

Meeting is set.
Thanks

~~Belinda~~

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Wednesday, October 14, 2020 1:49 PM
To: Weyer, Erica <weyer.erica@epa.gov>; Snowden, Belinda <snowden.belinda@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: GenX meeting

Hi Erica/Belinda:

I just talked with Deborah and she wants to meet with us tomorrow (Thurs) morning at 10. Here are the details:

Topic: GenX
Participants: Deborah, Colleen, Jamie, Greg Miller, Brittany Jacobs

Thanks,
Colleen

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/14/2020 4:52:44 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX meeting

Well if Deborah expects me to hold my tongue she's wrong. I will call them out, I don't care who is there.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, October 14, 2020 12:51 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX meeting

It's just work. We just need to keep pushing the ball forward.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, October 14, 2020 12:11 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX meeting

well its ridiculous that todd and tala are invited but my team isnt? im so angry right now.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, October 14, 2020 12:09 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX meeting

Very sad I won't get to do another deep dive with these folks.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, October 14, 2020 11:52 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX meeting

I guess that means they intend to say bad things about us. Get ready for another bad one…

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, October 14, 2020 11:50 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: GenX meeting

Well, well. You two aren't allowed to come and they wont move the meeting. We just need to get me as prepared as possible I guess by Monday.

From: Weyer, Erica <weyer.erica@epa.gov>
Sent: Wednesday, October 14, 2020 11:48 AM
To: Snowden, Belinda <snowden.belinda@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie

<Strong.Jamie@epa.gov>
Subject: FW: GenX meeting

All – see below. We will not be moving this meeting.

From: Aguirre, Janita <Aguirre.Janita@epa.gov>
Sent: Wednesday, October 14, 2020 11:39 AM
To: Weyer, Erica <weyer.erica@epa.gov>; Reed, Kristen <Reed.Kristen@epa.gov>
Subject: RE: GenX meeting

Hi Erica,

Charlotte and Deborah had an email exchange about the date/time for this meeting. It needs to stay on Monday at 3pm, and should remain as the original list of attendees.

Thank you,
Janita
Janita Aguirre – Chief of Staff
U.S. Environmental Protection Agency | Office of Water
Phone: **(202) 566-1149** | Email: **aguirre.janita@epa.gov**

From: Reed, Kristen <Reed.Kristen@epa.gov>
Sent: Wednesday, October 14, 2020 11:34 AM
To: Aguirre, Janita <Aguirre.Janita@epa.gov>
Subject: FW: GenX meeting

Janita,

Is this time that Erica indicates good? Can we reschedule? Thanks,

---

From: Weyer, Erica <weyer.erica@epa.gov>
Sent: Wednesday, October 14, 2020 11:25 AM
To: Reed, Kristen <Reed.Kristen@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: GenX meeting

Hi Kris,

I see this meeting was scheduled for Monday at 3pm. Unfortunately, our SME is out that day. It looks like Wednesday from 2-3pm works well for both Charlotte and Deborah – would you mind scheduling it for then? The team is unable to meet after 3:30pm.

Erica Weyer
Special Assistant and Regulatory Manager
Office of Science and Technology – Office of Water
U.S. Environmental Protection Agency
(202)566-2793

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/15/2020 5:22:36 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: genx meeting

Lets talk briefly, Deborah talked to Charlotte.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 15, 2020 1:21 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

Please be more specific. The draft before ORD comments? The draft with ORD comments? Or the draft with ORD comments and Joyce's comments?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 15, 2020 1:19 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

can you send me genx?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 15, 2020 1:14 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

Either way. I'm ok with waiting until tomorrow.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 15, 2020 1:08 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx meeting

do you guys want to meet this afternoon or keep working and move it to tomorrow morning?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/15/2020 5:21:31 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: genx meeting

the current draft

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 15, 2020 1:21 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

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To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
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Subject: genx meeting

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☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/15/2020 5:25:47 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: genx meeting

nevermind I found it

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 15, 2020 1:21 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

Please be more specific. The draft before ORD comments? The draft with ORD comments? Or the draft with ORD comments and Joyce's comments?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 15, 2020 1:19 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

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From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 15, 2020 1:14 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx meeting

Either way. I'm ok with waiting until tomorrow.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 15, 2020 1:08 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx meeting

do you guys want to meet this afternoon or keep working and move it to tomorrow morning?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Henry, Tala [Henry.Tala@epa.gov]
Sent: 3/2/2018 1:00:02 AM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Behrsing, Tracy [behrsing.tracy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]
Subject: FW: GenX Use - references.
Attachments: Ref. 4b_HFP.pdf; Ref. 1_DuPont GenX Processing Aid.pdf; Ref. 2_anitized_consent_order_p_08_0508_and_0509.pdf; Ref. 3a_HFPO DuPont.pdf; Ref. 3b_HFPO_Chemours.pdf; Ref. 4a_PPVE.pdf

Here are the references for the 'Use' Section.

Tala R. Henry, Ph.D.
Director, Risk Assessment Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/24/2020 11:56:42 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: genx to do

me too. ha! I am working on it and will move.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 24, 2020 7:56 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: genx to do

Was just thinking the same thing!

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, June 24, 2020 7:52 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx to do

Yeah, I'm kind of thinking that table should be brought up to the front before the details get presented.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 24, 2020 7:51 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx to do

oh thank goodness. was like oh man.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 24, 2020 7:48 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx to do

Greg put a helpful summary table in at the end of the briefing that has the new RfD and how it compares to the public comment draft

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, June 24, 2020 7:36 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx to do

I just realized…we don't say what the new RfD is. We should probably include that. I woke up at like 2am with this revelation.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, June 24, 2020 5:03 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx to do

The briefing sheet is ready for review

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, June 23, 2020 3:20 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: genx to do

Okay I will start with the briefing tomorrow. Can someone start to go through the UF section? I don't know if we should just accept all the changes and start there or what? I don't know that we can have one response for the comments on the total UF or cumulative parts. Greg do you want to start?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, June 23, 2020 2:59 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: genx to do

I've also been through the briefing and am working on adding the summary sentences right now.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, June 23, 2020 2:54 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: genx to do

On #1. I've been through the briefing. I think it might be a little too technical/detailed in some areas so I tried to smooth it out a bit. I'm hoping that the Deborah briefing would be largely useable for a briefing with Dave and Charlotte. I also added a summary table at the end that might be useful.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, June 23, 2020 2:33 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: genx to do

So I think these are the things we need to do:

1. Briefing-need to send to Betsy by Friday. Have both of you gone through it?
2. RTC-
    a. review and clean UF-need you guys to take a look
    b. policy section-jamie
    c. other sections-need you guys to continue cleaning up as much as possible, if we went through comments and accept either note in response or accept change

Do we need another hour to work through these?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 10/3/2019 5:27:52 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFBS and GenX chemicals DRAFT PWS
Attachments: TO PWS Peer Review for GenX and PFBS Follow Up_clean_Current copy_9'30'19_sjj_JCL again_sjjagain_BLJ gMiller.doc

Looks good. I made a few minor editorial changes. We might be able to get a little more specific with the charge questions based on our conversations yesterday, but I'm reluctant to get into it. NTP's input might completely alter the shape of the draft. So probably best to be vague. If Jamie has another opinion on the questions, then we can talk more. Go ahead and send it to Jamie.

Greg

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 1:06 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Hi Greg,

Attached are my edits (l Ex. 6 Personal Privacy (PP)

Britt

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 3, 2019 12:02 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBS and GenX chemicals DRAFT PWS

Ha. Ok. No problem.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 11:59 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Ex. 6 Personal Privacy (PP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 3, 2019 11:53 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBS and GenX chemicals DRAFT PWS

Can you take the first pass since you were the lead the first time around? I'll chime in once you've been through it. I guess keep the wording as vague as possible so we can adapt it to our needs when we know more.

Thanks

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 11:51 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Hi Greg,

How do you want to provide edits for this? Do you want me to look at it and then send to you when I'm done or vice versa?

I think we will need another task for GenX, but I don't think we can provide draft charge questions yet without having a better idea of the edits we will make to the document.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 3, 2019 11:04 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: PFBS and GenX chemicals DRAFT PWS

Here it is

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Wednesday, October 02, 2019 10:50 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: PFBS and GenX chemicals DRAFT PWS

Hi,

Here's the draft PWS in which we are incorporating text to request a peer review by the same 5 reviewers plus a couple of extra. Take a look, I believe the GenX chemicals option could be easily incorporated. I've asked Dahnish to find out how feasible it is to include.

Note the text and specificity in the charge questions will likely change as we finalize the document but this is to help the contractors cost out.

Thanks,
Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)

US Environmental Protection Agency (EPA)
AWBERC A-133
(o) 513-569-7697; (m) 703-943-7990

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 5/18/2020 12:29:58 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX materials for ORD review
Attachments: Updated Charge Questions for PFBS EPR 2 1.23.2020_CLEAN.docx

Here are the charge questions ORD sent for the 2nd round of peer review

---

From: Lambert, Jason <Lambert.Jason@epa.gov>
Sent: Monday, May 18, 2020 8:24 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX materials for ORD review

Good morning Brittany,
The final version of 2nd round EPR Charge Qs for PFBS is attached. Ignore the watermark; that was used when we sent these to the OMB-TWG. Feel free to send these along to anyone in OW.

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, May 18, 2020 8:11 AM
To: Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jason, good morning,

Would you mind send us the charge questions you sent for the second peer review of PFBS? We are trying to get a sense of what was TWG-approved.

Thanks in advance!
Brittany

From: Jacobs, Brittany
Sent: Wednesday, May 06, 2020 1:51 PM
To: Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jason,

Ex. 6 Personal Privacy (PP)

Thanks for the updates and for the references. I have a feeling thyroid hormones will come up again in my future so it'll be good to get some background on them now. I appreciate all of the help! It's been so great working with you all ☺

All the best,
Brittany

From: Lambert, Jason <Lambert.Jason@epa.gov>
Sent: Wednesday, May 06, 2020 12:24 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX materials for ORD review

Hey Brittany. I Ex. 6 Personal Privacy (PP) Ex. 6 Personal Privacy (PP) Okay, down to business. I am glad you highlighted the specific PFBS/thyroid language in your email below. In re-reading that text I realized that this portion needs citations. Further, one of our external reviewers disagreed with the argument that 'no T3' crosses the placenta during gestation. So...pasted below is the text again with a very minor modification to acknowledge the reviewer's suggestion (and appropriate refs).

Although T3 is the more active hormone form in respondent somatic tissues, the formation of T3 is contingent upon the deiodination of free T4 (for review see Forhead and Fowden (2014)). T4, not T3, is the thyroid hormone that *preferentially* crosses the placenta of humans and rodents (Fisher, 1997; Calvo et al., 1992).

All three of these references are already housed in HERO; check out the bibliography of the PFBS assessment for the official citations. Let me know if you have any questions.

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 2:17 PM
To: Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jason,

Hope you are doing well! Thanks again for reviewing some of the sections for the GenX chemicals assessment, I'm excited to get your edits back. I was hoping I could bug you for one more thing. A recent publication demonstrated that GenX causes decreases in maternal serum total T3 and total T4, so we had to add some information about these hormones. I was looking at the most recent draft of PFBS for help (thanks!) and was hoping you might be able to send me some citations to support this statement:

"Although T3 is the more active hormone form in respondent somatic tissues, the formation of T3 is contingent upon the deiodination of free T4. T4, not T3, is the thyroid hormone that crosses the placenta of humans and rodents."

I'm not at all familiar with the literature in this field so it'll be good to learn something too!

Thanks in advance,
Brittany

From: Lambert, Jason <Lambert.Jason@epa.gov>
Sent: Tuesday, April 28, 2020 1:15 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Hi OW family,
Samantha, Beth and I are reviewing the GenX text you sent earlier today. We are going to collate comments into single track change copies and get back to you soon. Take care

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 8:38 AM
To: Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX materials for ORD review

Good Morning Samantha, Jason and Beth,

Hope you all are doing well and staying healthy!

Attached are a few sections of the updated GenX chemicals toxicity assessment for your review as discussed, we appreciate you taking the time to do this for us.

The first is the updated mode of action section (Word document: Mode of Action_4.27.20). There are a few specific comments in the document we wanted your thoughts on, but please edit/provide suggestions for clarity and accuracy as you see fit. Did we leave anything out? Let us know if you want to see any of the other cited studies.

The second section we wanted for your review are the UF write-ups (UF Section_4.27.20), particularly the the subchronic to chronic UF and the database UF as we are proposing to change these from UFs of 3 to 10. Do these write-ups justify a 10?

Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions.

All the best,

Jamie

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 1/25/2021 8:06:26 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

Here is the draft we discussed. It takes the updated Background from the "current" 1/13/21 draft and adds it to the 9/2/20 draft that had been through review by both Betsy and Ed (but had not yet been shared with IO). I also had a few editorial comments from reading with fresh eyes.

Also **Ex. 5 Deliberative Process (DP)** we'll have to adjust the charge as well.

Greg

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Charge questions for GenX chemicals EPR2 1 25 21

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Message

From: Shams, Dahnish [Shams.Dahnish@epa.gov]
Sent: 8/11/2020 8:32:14 PM
To: Laurie Waite [Laurie.Waite@erg.com]; Owens, Beth [Owens.Beth@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Quick Update on Status of Reviewers for GenX

Thank you Laurie!

- Dahnish

Chemical and Pollutant Assessment Division (CPAD)
Center for Public Health and Environmental Assessment (CPHEA)
Office of Research and Development, U.S. EPA
O: (202) 564-2758

From: Laurie Waite <Laurie.Waite@erg.com>
Sent: Tuesday, August 11, 2020 4:17 PM
To: Shams, Dahnish <Shams.Dahnish@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Quick Update on Status of Reviewers for GenX

Hi Dahnish,

Sure, the original five reviewers are:

1	Karen Chou, Ph.D.; Associate Professor, Michigan State University	Reproductive/developmental toxicology, risk assessment
2	Lisa Kamendulis, PH.D.; Associate Professor, Department of Environmental Health, Indiana University	Liver toxicology, risk assessment, dose-response, PFOA research
3	Angela Leung, M.D.; Health Sciences Clinical Assistant Professor of Medicine, David Geffen School of Medicine; University of California Los Angeles	Thyroid expertise
4	Angela Slitt, Ph.D.; Associate Professor, Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island	Liver toxicology, PFOA/PFAS metabolism, some kidney toxicity
5	David "Alan" Warren, Ph.D.; Program Director, Environmental Health Science, University of South Carolina Beaumont	Benchmark-dose modeling, toxicology, risk assessment, hematotoxicity, immunotoxicity

From: Shams, Dahnish <Shams.Dahnish@epa.gov>
Sent: Tuesday, August 11, 2020 3:58 PM
To: Owens, Beth <Owens.Beth@epa.gov>; Laurie Waite <Laurie.Waite@erg.com>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Quick Update on Status of Reviewers for GenX

Hi Laurie – Thanks for the update. I wasn't involved in the first peer review. Do you mind listing the reviewers for my reference?

- Dahnish

Chemical and Pollutant Assessment Division (CPAD)
Center for Public Health and Environmental Assessment (CPHEA)
Office of Research and Development, U.S. EPA
O: (202) 564-2758

From: Owens, Beth <Owens.Beth@epa.gov>
Sent: Tuesday, August 11, 2020 3:50 PM
To: Laurie Waite <Laurie.Waite@erg.com>; Shams, Dahnish <Shams.Dahnish@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Quick Update on Status of Reviewers for GenX

Thanks Laurie!

From: Laurie Waite <Laurie.Waite@erg.com>
Sent: Tuesday, August 11, 2020 3:41 PM
To: Shams, Dahnish <Shams.Dahnish@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Quick Update on Status of Reviewers for GenX

Hi Everyone!

As an update, I've heard back from 4 of the 5 original reviewers and they have all indicated availability and willingness to conduct the re-review for GenX. The only person I have not yet heard back from is Angela Slitt (I will note it typically takes me a few tries with her before I get a response). I'll follow-up with her again today.

We are continuing to populate our contact list with repro/developmental tox and liver tox experts through searches. We plan on continuing this through this week and then start contacting these additional experts by early next week. I'll provide another update by the end of next week.

Please let me know if you have any questions.

Regards,
Laurie

^<>^<>^<>^<>^<>^<>^<>^<>^
Laurie Waite, Project Manager
Peer Review Services
Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02421
781-674-7362; 978-660-5583 (cell)
Laurie.Waite@erg.com
LinkedIn

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/27/2021 9:40:23 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.
Attachments: Charge questions for GenX chemicals EPR2 1 25 21 jbs.docx

I cannot open in the link. See attached.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, January 27, 2021 3:40 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

GenX Charge link again...

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Charge questions for GenX chemicals EPR2 1 25 21

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/20/2020 5:08:45 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

check out my edits one more time and I will send back to BB.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 20, 2020 12:49 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

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From: Miller, Gregory <Miller.Gregory@epa.gov>
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To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I'll see what I can do. Here's what our external peer reviewers said last time:

1. For GenX chemicals the critical study chosen for determining the subchronic and chronic RfDs is the oral reproductive/developmental toxicity screening study in adult mice (DuPont 18405-1037, 2010) and the critical effect is liver effects (single cell necrosis) in adult males. Is the selection of the critical study and critical effect for the derivation of the subchronic and chronic RfDs for GenX chemicals scientifically justified and defensible?
    a. If so, please explain your justification.
    b. If not, please provide your rationale and detail an alternative critical study and/or critical effect you would select to support the derivation of the subchronic and chronic RfDs.

Chou

The selection of liver effects as the critical effect for derivation of oral subchronic and chronic RfDs, using the oral reproductive/developmental toxicity screening study in adult mice, is well justified. It is justified based on increases in liver weight, relatively high number of animals (22-25) per treatment group for liver endpoints, and consistent adverse effects corroborated in other studies presented in the Draft. The weaknesses of other studies are well described in the draft on p. 51-52.

Kamendulis

a. If so, please explain your justification.

I agree with the selection of the critical study selected for deriving RfD's for GenX chemicals (DuPont-18405-1037 2010). This oral reproductive/developmental toxicity study in mice identified liver effects, specifically single-cell necrosis in males, as the critical effect and was used to derive the subchronic and chronic RfDs for GenX chemicals. As noted, this study utilized a larger sample size (n=24 / dose) and provided the most health protective POD_{HED}. Further, this study was an 84/85 day study compared to the other mouse study (28 days). In addition, several other studies provide support for the selection of liver necrosis as the critical effect following oral exposure to GenX chemicals (DuPont-24459 2008; DuPont-24447 2008; DuPont-18405-1307 2010; DuPont-18405-1238 2013; DuPont-18405-841 2010). Liver effects (changes in liver enzyme levels, histopathological lesions, and tumors) were observed in both male and female mice and rats at varying durations of exposures and doses of GenX chemicals.

b. If not, please provide your rationale and detail an alternative critical study and/or critical effect you would select to support the derivation of the subchronic and chronic RfDs.

N/A

Leung

This study in which the subchronic and chronic RfDs is based upon consisted of 150 mice, in which histopathologic changes and increased liver weights were seen in all three dose groups. However, as summarized in the draft report, these findings have also largely been supported by at least seven other studies, including one from the peer-reviewed published literature, although only one was considered chronic (i.e., >90 days duration). Evidence of hepatic damage is also supported by the very significant increases in serum transaminase levels among mice exposed to the higher doses. Overall, availability of more than one study assessing *chronic* exposure would be relevant toward the hepatic and other potential clinical endpoints.

The draft report describes that the other organ systems and endpoints in which adverse effects have been found were hematology, renal, development/reproduction, immunology, and carcinogenesis (Section 5). No differences in survival at a planned 12-month necropsy timepoint were found in the one available chronic study. Regarding these other organ systems:

a. It is described that the maximum decrement of hemoglobin/hematocrit levels in male mice and in rats was 12% from several studies assessing doses up to 100 mg/kg/day lasting up to 180 days. This may be clinical significant, and consideration of this endpoint in greater detail may be relevant. Additionally, in the one chronic study, female mice and rats had up to a 24% decrease in hemoglobin/hematocrit levels, further supporting this as a possible critical effect.

b. Regarding renal effects, the primary endpoints that have been assessed are weight of the kidneys, microscopic changes of the kidney, and blood urea nitrogen concentrations. The draft report states that given the limited changes in these parameters, renal toxicity is unlikely a critical effect. Animal physiology is not my area of expertise, but there certainly other factors important in the assessment of human renal function like serum creatinine concentrations and filtration rate that are also clinically important. Ex. 5 Deliberative Process (DP)

c. It is unfortunate that the potential developmental/reproductive toxicities are based only on two animal studies. From the description of these, these toxicities are rare and may not be clinically significant. However, only F1 mice were studied and there are no data on potential effects spanning more than two generation Ex. 5 Deliberative Process (DP)

d. The data for immunotoxicity are even more limited, but suggest some adverse effects among female mice. In the absence of more data, it is difficult to ascertain whether these preliminary findings should be considered critical effects.

e. I agree with the summary in Section 5.6, which describes the inability to determine overall carcinogenicity based on the substantially limited available data. However, the observation of increased hepatocellular carcinomas in female dosed rats should not be discounted.

Slitt

Yes, a survey of the data included in the report points to liver effects in adult male is appropriate and defensible. The study meets the criteria listed in almost all elements for being considered of high quality. It meets every metric as high or medium, such as test substance, test setup, exposure characterization, etc. The critical effect of single cell necrosis in male mice is based on n=24-25 F0 males, which a large "n". The selection of this study is scientifically justifiable based on it sufficiently meeting the review criteria. The selection of single-cell necrosis is a reasonable measure to use as a critical effect. This measure has been used previously for PFOA and PFOS, in which rodent studies that have demonstrated hepatotoxicity demonstrate concordance with studies in human populations illustrating slight elevation serum in liver enzymes.

It should be noted that there was PFOA contamination for the test substance for DuPont 18405-1037, 2010 lists that purity of the test article at 84%. Another study listed in the document that meets the evaluation criteria with high confidence (DuPont -

24459, 2008) lists a slightly higher purity of the test article (88% purity). This 28-day oral dosing study that evaluated 0.1, 3 and 30 mg/kg/day did not observe any statistically significant increases in liver single cell necrosis at 0.1 mg/kg, but did observe significant elevation of serum liver enzymes, liver weight, and single cell necrosis in males at 3 mg/kg. Given that the purity of the test article was slightly higher, this study should also be considered along with DuPont 18405-1037, 2010 for considering 0.1 mg/kg in male mice for the RfD.

Warren

Selection of the gavage study of reproduction/developmental toxicity in mice (DuPont 18405-1037, 2010) and single cell necrosis for toxicity value derivation are scientifically justified and well defended in the toxicity assessment. However, the dismissal of studies from further consideration as the critical study on the basis of NOAEL alone (i.e., having a NOAEL > 0.1 mg/kg/day) is a questionable practice. This is especially true when a dismissed study's NOAEL is but an order of magnitude greater than that of the critical study (i.e., 1 mg/kg/day), a difference dwarfed by the total UF applied to toxicity value derivation. Nonetheless, Section 6.1 makes a convincing case for selection of critical study and effect, especially with regard to preference for liver necrosis over a hematological or immunological effect and use of a subchronic study for chronic RfD derivation in lieu of a chronic toxicity/oncogenicity study reporting the same critical effect, albeit at a considerably higher dose in a less sensitive species.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 20, 2020 11:37 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I am in a meeting from 12-2. Can someone take a crack at an intro to #2 like she did for each UF? Detailing what we did prev.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 20, 2020 11:04 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

Same. Have a look, Jamie.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 20, 2020 11:03 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

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From: Miller, Gregory <Miller.Gregory@epa.gov>
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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/20/2020 5:09:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

it wont let me upload changes. frustrated.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 20, 2020 12:49 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

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Sent: Thursday, August 20, 2020 11:37 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

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posting to OneDrive so we can group edit

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Charge questions for GenX chemicals EPR208_18_20BB

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Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 8/24/2020 5:29:23 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Hey,
Not sure when our next opportunity to edit the charge is coming, but the references section needs fixing. We've edited it so much that we no longer cite some of the included references. No biggie at this stage but let's clean it up when we get the chance.

REFERENCES

Blake, B.E., H.A. Cope, S.M. Hall, R.D. Keys, B.W. Mahler, J. McCord, B. Scott, H.M. Stapleton, M.J. Strynar, S.A. Elmore, and S.E. Fenton. 2020. Evaluation of Maternal, Embryo, and Placental Effects in CD-1 Mice following Gestational Exposure to Perfluorooctanoic Acid (PFOA) or Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX). Environmental Health Perspectives 128(2):027006-1:17. doi:10.1289/EHP6233

~~Conley, J.M., C.S. Lambright, N. Evans, M.J. Strynar, J. McCord, B.S. McIntyre, G.S. Travlos, M.C. Cardon, E. Medlock-Kakaley, P.C. Hartig, V.S. Wilson, and L.E. Gray, Jr. 2019. Adverse Maternal, Fetal, and Postnatal Effects of Hexafluoropropylene Oxide Dimer Acid (GenX) from Oral Gestational Exposure in Sprague-Dawley Rats. Environmental Health Perspectives 127(3):037008. doi:10.1289/EHP4372.~~

DuPont-18405-1037: E.I. du Pont de Nemours and Company. 2010. *An Oral (Gavage) Reproduction/ Developmental Toxicity Screening Study of H-28548 in Mice*. U.S. EPA OPPTS 870.3550; OECD Test Guideline 421. Study conducted by WIL Research Laboratories, LLC (Study Completion Date: December 29, 2010), Ashland, OH.

DuPont-18405-1307: E.I. du Pont de Nemours and Company. 2010. H-28548: Subchronic Toxicity 90-Day Gavage Study in Mice. OECD Test Guideline 408. Study conducted by E.I. du Pont de Nemours and Company (Study Completion Date: February 19, 2010), Newark, DE.

Elmore SA, D. Dixon , J.R. Hailey, T. Harada, R.A. Herbert, R.R. Maronpo, T. Nolte, J.E. Rehg, S. Rittinghausen, T.J. Rosol, H. Satoh, J.D. Vidal, C.L. Willard-Mack, and D.M. Creasy. 2016. Recommendations from the INHAND apoptosis/necrosis working group. Toxicology Pathology 44(2):173-88. doi:10.1177/0192623315625859.

~~Hall, A.P., C.R. Elcombe, J.R. Foster, T. Harada, W. Kaufmann, A. Knippel, K. Küttler, D.E. Malarkey, R.R. Maronpot, A. Nishikawa, T. Nolte, A. Schulte, V. Strauss, and M.J. York. 2012. Liver hypertrophy: A review of adaptive (adverse and non-adverse) changes—Conclusions from the 3rd International ESTP Expert Workshop. *Toxicologic Pathology* 40(7):971–994.~~

~~Thompson, C.M., S.E. Fitch, C. Ring, W. Rish, J.M. Cullen, and L.C. Haws. 2019. Development of an Oral Reference Dose for the Perfluorinated Compound GenX. Journal of Applied Toxicology 39(9):1267-1282. doi:10.1002/jat.3812~~

Thoolen, B., R.R. Maronpot, T. Harada, A. Nyska, C. Rousseaux, T. Nolte, D.E. Malarkey, W. Kaufmann, K. Kuttler, U. Deschl, D. Nakae, R. Gregson, M.P. Vinlove, A.E. Brix, B. Sing, F. Belpoggi, and J.M. Ward. 2010. Proliferative and nonproliferative lesions of the rat and mouse hepatobiliary system. Toxicologic Pathology 38(7_suppl):5S-81S. doi:10.1177/0192623310386499.

~~USEPA (U.S. Environmental Protection Agency). 2012. *Benchmark Dose Technical Guidance*. EPA/100/R-12/ 001. USEPA, Risk Assessment Forum, Washington, DC. Accessed May 2018. (provided as attachment)~~

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Friday, August 21, 2020 3:10 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FOR YOUR REVIEW-Revised GenX chemicals charge

Deborah, we revised the charge questions from those we sent to you previously, as suggested by the IO. We removed the question on Mode of Action and we removed the question on systematic review. The remaining questions are specifically about how to address new information we have since the draft was published that increases our uncertainty on the assessment. There is one on the change in the critical effect, one on the database uncertainty factor, and one on the uncertainty factor for extrapolation from subchronic to chronic exposure duration. We explain the basis t=for the UFs in the draft and what changed to make us propose an increase and we ask if this is justified I think it is a non-biased presentation of the information, but we are interested in your feedback.

Note that the request for a meeting with Charlotte was submitted this week with dates proposed of Monday, Tuesday, and Wednesday. Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/20/2020 5:11:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.
Attachments: Charge questions for GenX chemicals EPR208_18_20BB jbs.docx

Here it is, I give up with one drive.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 20, 2020 12:49 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I just added some language about what we did in the draft. Greg, maybe see if there is more you want to add.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 20, 2020 12:41 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I'll see what I can do. Here's what our external peer reviewers said last time:

1. For GenX chemicals the critical study chosen for determining the subchronic and chronic RfDs is the oral reproductive/developmental toxicity screening study in adult mice (DuPont 18405-1037, 2010) and the critical effect is liver effects (single cell necrosis) in adult males. Is the selection of the critical study and critical effect for the derivation of the subchronic and chronic RfDs for GenX chemicals scientifically justified and defensible?
   a. If so, please explain your justification.
   b. If not, please provide your rationale and detail an alternative critical study and/or critical effect you would select to support the derivation of the subchronic and chronic RfDs.

Chou

The selection of liver effects as the critical effect for derivation of oral subchronic and chronic RfDs, using the oral reproductive/developmental toxicity screening study in adult mice, is well justified. It is justified based on increases in liver weight, relatively high number of animals (22-25) per treatment group for liver endpoints, and consistent adverse effects corroborated in other studies presented in the Draft. The weaknesses of other studies are well described in the draft on p. 51-52.

Kamendulis

a. If so, please explain your justification.

I agree with the selection of the critical study selected for deriving RfD's for GenX chemicals (DuPont-18405-1037 2010). This oral reproductive/developmental toxicity study in mice identified liver effects, specifically single-cell necrosis in males, as the critical effect and was used to derive the subchronic and chronic RfDs for GenX chemicals. As noted, this study utilized a larger sample size (n=24 / dose) and provided the most health protective POD_{HED}. Further, this study was an 84/85 day study compared to the other mouse study (28 days). In addition, several other studies provide support for the selection of liver necrosis as the critical effect following oral exposure to GenX chemicals (DuPont-24459 2008; DuPont-24447 2008; DuPont-18405-1307 2010; DuPont-18405-

1238 2013; DuPont-18405-841 2010). Liver effects (changes in liver enzyme levels, histopathological lesions, and tumors) were observed in both male and female mice and rats at varying durations of exposures and doses of GenX chemicals.

b. If not, please provide your rationale and detail an alternative critical study and/or critical effect you would select to support the derivation of the subchronic and chronic RfDs.

N/A

Leung

This study in which the subchronic and chronic RfDs is based upon consisted of 150 mice, in which histopathologic changes and increased liver weights were seen in all three dose groups. However, as summarized in the draft report, these findings have also largely been supported by at least seven other studies, including one from the peer-reviewed published literature, although only one was considered chronic (i.e., >90 days duration). Evidence of hepatic damage is also supported by the very significant increases in serum transaminase levels among mice exposed to the higher doses. Overall, availability of more than one study assessing *chronic* exposure would be relevant toward the hepatic and other potential clinical endpoints.

The draft report describes that the other organ systems and endpoints in which adverse effects have been found were hematology, renal, development/reproduction, immunology, and carcinogenesis (Section 5). No differences in survival at a planned 12-month necropsy timepoint were found in the one available chronic study. Regarding these other organ systems:

a. It is described that the maximum decrement of hemoglobin/hematocrit levels in male mice and in rats was 12% from several studies assessing doses up to 100 mg/kg/day lasting up to 180 days. This may be clinical significant, and consideration of this endpoint in greater detail may be relevant. Additionally, in the one chronic study, female mice and rats had up to a 24% decrease in hemoglobin/hematocrit levels, further supporting this as a possible critical effect.

b. Regarding renal effects, the primary endpoints that have been assessed are weight of the kidneys, microscopic changes of the kidney, and blood urea nitrogen concentrations. The draft report states that given the limited changes in these parameters, renal toxicity is unlikely a critical effect. Animal physiology is not my area of expertise, but there certainly other factors important in the assessment of human renal function like serum creatinine concentrations and filtration rate that are also clinically important. Ex. 5 Deliberative Process (DP)

c. It is unfortunate that the potential developmental/reproductive toxicities are based only on two animal studies. From the description of these, these toxicities are rare and may not be clinically significant. However, only F1 mice were studied and there are no data on potential effects spanning more than two generations. **Ex. 5 Deliberative Process (DP)**

d. The data for immunotoxicity are even more limited, but suggest some adverse effects among female mice. In the absence of more data, it is difficult to ascertain whether these preliminary findings should be considered critical effects.

e. I agree with the summary in Section 5.6, which describes the inability to determine overall carcinogenicity based on the substantially limited available data. However, the observation of increased hepatocellular carcinomas in female dosed rats should not be discounted.

Slitt

Yes, a survey of the data included in the report points to liver effects in adult male is appropriate and defensible. The study meets the criteria listed in almost all elements for being considered of high quality. It meets every metric as high or medium, such as test substance, test setup, exposure characterization, etc. The critical effect of single cell necrosis in male mice is based on n=24-25 F0 males, which a large "n". The selection of this study is scientifically justifiable based on it sufficiently meeting the review criteria. The selection of single-cell necrosis is a reasonable measure to use as a critical effect. This measure has been used previously for PFOA and PFOS, in which rodent studies that have demonstrated hepatotoxicity demonstrate concordance with studies in human populations illustrating slight elevation serum in liver enzymes.

It should be noted that there was PFOA contamination for the test substance for DuPont 18405-1037, 2010 lists that purity of the test article at 84%. Another study listed in the document that meets the evaluation criteria with high confidence (DuPont - 24459, 2008) lists a slightly higher purity of the test article (88% purity). This 28-day oral dosing study that evaluated 0.1, 3 and 30 mg/kg/day did not observe any statistically significant increases in liver single cell necrosis at 0.1 mg/kg, but did observe significant elevation of serum liver enzymes, liver weight, and single cell necrosis in males at 3 mg/kg. Given that the purity of the test article was slightly higher, this study should also be considered along with DuPont 18405-1037, 2010 for considering 0.1 mg/kg in male mice for the RfD.

Warren

Selection of the gavage study of reproduction/developmental toxicity in mice (DuPont 18405-1037, 2010) and single cell necrosis for toxicity value derivation are scientifically justified and well defended in the toxicity assessment. However, the dismissal of studies from further consideration as the critical study on the basis of NOAEL alone (i.e., having a NOAEL > 0.1 mg/kg/day) is a questionable practice. This is especially true when a dismissed study's NOAEL is but an order of magnitude greater than that of the critical study (i.e., 1 mg/kg/day), a difference dwarfed by the total UF applied to toxicity value derivation. Nonetheless, Section 6.1 makes a convincing case for selection of critical study and effect, especially with regard to preference for liver necrosis over a hematological or immunological effect and use of a subchronic study for chronic RfD derivation in lieu of a chronic toxicity/oncogenicity study reporting the same critical effect, albeit at a considerably higher dose in a less sensitive species.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 20, 2020 11:37 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I am in a meeting from 12-2. Can someone take a crack at an intro to #2 like she did for each UF? Detailing what we did prev.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 20, 2020 11:04 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

Same. Have a look, Jamie.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 20, 2020 11:03 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

I've added some thoughts and edits

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 20, 2020 8:03 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Miller, Gregory shared "Charge questions for GenX chemicals EPR208_18_20BB" with you.

posting to OneDrive so we can group edit

This link only works for the direct recipients of this message.

Charge questions for GenX chemicals EPR208_18_20BB

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/21/2020 2:13:08 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge
Attachments: Charge questions for GenX chemicals EPR2 082120.docx

Take a look at my responses to Betsy please.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Friday, August 21, 2020 6:49 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Hey,
When you're looking over Betsy's edits, can you also look at the passage below. Do we want them to comment on

Ex. 5 Deliberative Process (DP)

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, August 20, 2020 5:01 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Looks great. a couple of questions/edits. I think this is almost ready for Deborah

---

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 20, 2020 3:06 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Betsy,
Here is the revised draft charge, please look at the changes in 2.

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, August 19, 2020 5:46 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Very good. See what you think of these edits

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 19, 2020 10:23 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FOR YOUR REVIEW-Revised GenX chemicals charge
Importance: High

Betsy,
We took the first cut at revising the charge based on feedback from Dave and Charlotte. Please let us know what you think. Any word from Deborah on her review of the GenX docs?

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/21/2020 2:17:40 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge
Attachments: Charge questions for GenX chemicals EPR2 082120.docx

Use this one! Sorry, I edited to address the comment below.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Friday, August 21, 2020 6:49 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Hey,
When you're looking over Betsy's edits, can you also look at the passage below. Do we want them to comment on

Ex. 5 Deliberative Process (DP)

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, August 20, 2020 5:01 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Looks great. a couple of questions/edits. I think this is almost ready for Deborah

---

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 20, 2020 3:06 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Betsy,
Here is the revised draft charge, please look at the changes in 2.

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, August 19, 2020 5:46 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Very good. See what you think of these edits

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 19, 2020 10:23 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FOR YOUR REVIEW-Revised GenX chemicals charge
Importance: High

Betsy,
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Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 8/21/2020 3:21:17 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge
Attachments: Charge questions for GenX chemicals EPR2 082120 gMiller.docx

I read it with no markup and some editorial changes were needed. No substantive changes though.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, August 21, 2020 10:18 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Use this one! Sorry, I edited to address the comment below.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Friday, August 21, 2020 6:49 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Hey,
When you're looking over Betsy's edits, can you also look at the passage below. Do we want them to comment on

Ex. 5 Deliberative Process (DP)

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, August 20, 2020 5:01 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Looks great. a couple of questions/edits. I think this is almost ready for Deborah

---

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 20, 2020 3:06 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Betsy,

Here is the revised draft charge, please look at the changes in 2.

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, August 19, 2020 5:46 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FOR YOUR REVIEW-Revised GenX chemicals charge

Very good. See what you think of these edits

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 19, 2020 10:23 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FOR YOUR REVIEW-Revised GenX chemicals charge
Importance: High

Betsy,
We took the first cut at revising the charge based on feedback from Dave and Charlotte. Please let us know what you think. Any word from Deborah on her review of the GenX docs?

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 8/27/2020 6:36:31 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Edits to GenX Charge for 2nd peer review after IO engagement

I made a couple edits. Looks good if this is the way we have to go.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 27, 2020 7:13 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Edits to GenX Charge for 2nd peer review after IO engagement

Greg I will fill you in. **Ex. 5 Deliberative Process (DP)** He said our rationale for 10 is fine but to get though the IO we should change to 3 and ask peer reviewers if it should be higher. I pushed back quite hard.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, August 26, 2020 5:02 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Edits to GenX Charge for 2nd peer review after IO engagement

Hello,

Here is a first attempt at editing the SC to C UF like we discussed earlier. Please edit as you see fit. As a reminder, I am out tomorrow and Friday.

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/29/2021 3:47:55 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

Sounds good!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, January 29, 2021 10:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

I think the edit looks good. I might wait to send the assessment to Betsy until next week so I can include the new Conley write-up. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, January 29, 2021 10:03 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

I like the addition. There are a few comments about study vs studies in the DB UF ?...what do you guys think? I think the doc and the charge are ready to go. If you want I can send to BB today or Britt you can send to her next week. I believe there is a follow up with Radhika on PFAS happening during Deborah's next general with her, but I would confirm that with BB...her email wasn't clear.

Thanks,
Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, January 29, 2021 6:06 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

Just one thought on the selection of critical study and effect question. I'm fine with the way it is written, but wanted to suggest a broader question. See edits.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, January 27, 2021 4:40 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

I cannot open in the link. See attached.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, January 27, 2021 3:40 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Miller, Gregory shared "Charge questions for GenX chemicals EPR2 1 25 21" with you.

GenX Charge link again...

This link only works for the direct recipients of this message.

Charge questions for GenX chemicals EPR2 1 25 21

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/9/2020 5:12:10 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Task 68HERH20F0097: Proposed Additional Reviewers for GenX
Attachments: Faustman_Elaine_M.docx; Hoberman_Alan_M.doc; Salmon_Andrew_G.docx; Yu_Xiaozhong.docx

Take a look.

From: Laurie Waite <Laurie.Waite@erg.com>
Sent: Wednesday, September 09, 2020 1:07 PM
To: Shams, Dahnish <Shams.Dahnish@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Task 68HERH20F0097: Proposed Additional Reviewers for GenX

Dear Dahnish,

ERG has reviewed the CVs of the additional candidates who responded to our search to conduct the peer review of EPA's draft toxicity assessments for Perfluoro(2-methyl-3-oxahexanoate) (GenX). We are proposing the following four qualified candidates who have indicated willingness and availability to conduct this external peer review.

Pool of Additional Reviewers

1	Elaine M. Faustman, Ph.D., DABT; Professor, University of Washington	Reproductive and developmental toxicology and risk assessment methodologies
2	Alan M. Hoberman, Ph.D., DABT; President, Argus International, Inc.	Reproductive and developmental toxicology and risk assessment methodologies
3	Andrew Salmon, Ph.D.; Retired, California Environmental Protection Agency	Risk assessment methodologies; some reproductive toxicology
4	Xiaozhong (John) Yu, MD, Ph.D.; Associate Professor, University of Georgia	Reproductive and developmental toxicology and risk assessment methodologies

In addition, ERG collected completed and signed conflict of interest (COI) analysis forms and reviewed these along with each candidate's CV. ERG has determined that the above candidates do not have any conflict in conducting the review based on information provided.

As a reminder, the following are the five original reviewers who have also indicated willingness and availability to conduct a re-review of GenX. I have previously provided their resumes/CVs to you but let me know if you need them again. All previous reviewers have reconfirmed a continued lack of COI.

Original Five Reviewers

1	Karen Chou, Ph.D.; Associate Professor, Michigan State University	Reproductive/developmental toxicology, risk assessment
2	Lisa Kamendulis, PH.D.; Associate Professor, Department of Environmental Health, Indiana University	Liver toxicology, risk assessment, dose-response, PFOA research
3	Angela Leung, M.D.; Health Sciences Clinical Assistant Professor of Medicine, David Geffen School of Medicine; University of California Los Angeles	Thyroid expertise
4	*Angela Slitt, Ph.D.; Associate Professor, Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island	Liver toxicology, PFOA/PFAS metabolism, some kidney toxicity
5	David "Alan" Warren, Ph.D.; Program Director, Environmental Health Science, University of South Carolina Beaumont	Benchmark-dose modeling, toxicology, risk assessment, hematotoxicity, immunotoxicity

Please let me know in writing if EPA feels these candidates collectively meet the additional technical expertise criteria for this review. EPA is free to provide comments on a lack of technical qualifications within the overall pool and/or any COI concerns not otherwise reported to ERG.

If EPA feels these candidates are sufficient to meet the technical expertise criteria for this review, ERG will then proceed with selecting and securing the services of two reviewers to add to the previous panel of five reviewers.

Kind Regards,

Laurie

^<>^<>^<>^<>^<>^<>^<>^<>^
Laurie Waite, Project Manager
Peer Review Services
Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02421
781-674-7362; 978-660-5583 (cell)
Laurie.Waite@erg.com
LinkedIn

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 6/21/2018 4:16:22 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: transmission of EPA GenX assessment and draft charge for peer review

Major celebration to come

From: Strong, Jamie
Sent: Thursday, June 21, 2018 12:14 PM
To: Laurie Waite <Laurie.Waite@erg.com>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: transmission of EPA GenX assessment and draft charge for peer review
Importance: High

Laurie,
Please find attached EPA's Human Health Toxicity Value assessment for GenX chemicals for review by the expert panel. Also attached is the charge for GenX chemicals. The PFBS document and charge will follow next week. Please let me know if you need anything further or have any questions.

Thank you,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/19/2018 10:28:55 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Draft Peer Review Report (partial) for GenX

Many thanks to you all. You have done a super job on this GenX assessment. September, here we come!

Betsy

From: Strong, Jamie
Sent: Thursday, July 19, 2018 12:32 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: Draft Peer Review Report (partial) for GenX

Amazing job you two, really really favorable and positive review from 4 out of 5. Impressive.

From: Laurie Waite [mailto:Laurie.Waite@erg.com]
Sent: Thursday, July 19, 2018 11:50 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harrison, Shirley <Harrison.Shirley@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jan Connery <Jan.Connery@erg.com>
Subject: Draft Peer Review Report (partial) for GenX

Dear Jamie,

Please find attached ERG's draft peer review report of compiled comments for the external peer review of EPA's draft Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (GenX Chemicals).

As mentioned, this draft is missing comments from one reviewer, Dr. Angela Slitt. I have discussed the situation with Dr. Slitt and she is finishing up her review of GenX as soon as possible and indicated I should have her comments by tonight or Friday morning. We will then insert her comments and send the completed draft to you on Friday as scheduled.

Please let me know if you have any questions or need any clarifications from reviewers. We will provide a final report for GenX upon your indication that nothing further is needed from reviewers. Thank you!

Regards,
Laurie

Message

From: Strong, Jamie [no-reply@sharepointonline.com]
Sent: 8/1/2018 7:37:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Strong, Jamie has shared 'EPA RESPONSE TO COMMENTS_GENX CHEMICALS 08 01 18.asd'

look at this one

Open EPA RESPONSE TO COMMENTS_GENX CHEMICALS 08 01 18.asd.docx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/7/2018 2:12:14 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

FYI

From: Behl, Betsy
Sent: Tuesday, August 07, 2018 10:05 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

The response doesn't address the comment.

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie
Sent: Tuesday, August 07, 2018 7:55 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

Betsy,

The only comment and response where I think we have an issue…let me know if you are okay with what Tala has proposed below.

J

Ex. 5 Deliberative Process (DP)

From: Henry, Tala
Sent: Monday, August 06, 2018 5:44 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>

Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

Here are responses back on the RtC
We will review Section 2 tomorrow

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie
Sent: Monday, August 06, 2018 2:54 PM
To: Henry, Tala <Henry.Tala@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Thank you for the responses and revisions. We have incorporated these into our response doc and revised draft. We do have several comments that we would like to discuss (see attached). We have also attempted to revise section 2 to reduce redundancy, we would like to keep the table so we edited the body text to limit repeated info. Please review sections 2.1 and 2.2 and make any further edits.

Talk to you tomorrow!
Jamie

From: Henry, Tala
Sent: Thursday, August 02, 2018 4:00 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Jamie et al
Here are OPPTs RtC and edits in document.

See my note in the RtC regarding reducing redundancy in Section 2 … the fact is the Table is summary and then followed by all the same info in text form…I suggest to eliminate one or the other to reduce redundancy, but didn't do it b/c wanted OW to weigh in…I know you wnt this to be similar to the HAs…

If don't eliminate one or the other, then, I think OPPT can take another crack at reducing the text, i.e., referring more to the table and shortening the 'results and referencing' text.

Tala R. Henry, Ph.D.

Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie
Sent: Thursday, August 02, 2018 7:27 AM
To: Henry, Tala <Henry.Tala@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

Tala,
Just checking in to see if you could send the OPPT responses to us this week. Ideally, today since my team is out tomorrow.

Thanks,
Jamie

From: Henry, Tala
Sent: Tuesday, July 31, 2018 11:56 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Brinkerhoff, Chris [Brinkerhoff.Chris@epa.gov]
Sent: 8/7/2018 8:09:07 PM
To: Henry, Tala [Henry.Tala@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Aubee, Catherine [Aubee.Catherine@epa.gov]; Benson, Amy [Benson.Amy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Attachments: DRAFT EXT PEER REVIEW Human Health Tox Values for GenX Chemicals_for OPPT.TH-Section 2 shorten cjb.docx

I moved a couple more sentences in addition to Tala's comments so that the discussion of Gannon is in one place and added small subheaders to make the groupings of information more clear for the reader.

Chris

From: Henry, Tala
Sent: Tuesday, August 07, 2018 11:58 AM
To: Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Here is the file with the OW + OPPT edits

Chris will follow up on the Gannon issue this afternoon.

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Brinkerhoff, Chris
Sent: Tuesday, August 07, 2018 11:49 AM
To: Henry, Tala <Henry.Tala@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

I will be at the meeting at noon. I agree with the edits Tala sent. There was just one question at the end about the description of data from Gannon, I can address that this afternoon.
Chris

From: Henry, Tala
Sent: Tuesday, August 07, 2018 11:41 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory

<Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

We are fine with your edits on the Fate sections in Section 2.

I did some 'reducing redundancy/shortening' edits to the ADME sections; we just need Chris B to do a final review and then we will send those too.

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie
Sent: Monday, August 06, 2018 2:54 PM
To: Henry, Tala <Henry.Tala@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Thank you for the responses and revisions. We have incorporated these into our response doc and revised draft. We do have several comments that we would like to discuss (see attached). We have also attempted to revise section 2 to reduce redundancy, we would like to keep the table so we edited the body text to limit repeated info. Please review sections 2.1 and 2.2 and make any further edits.

Talk to you tomorrow!
Jamie

From: Henry, Tala
Sent: Thursday, August 02, 2018 4:00 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Jamie et al
Here are OPPTs RtC and edits in document.

See my note in the RtC regarding reducing redundancy in Section 2 … the fact is the Table is summary and then followed by all the same info in text form…I suggest to eliminate one or the other to reduce redundancy, but didn't do it b/c wanted OW to weigh in…I know you wnt this to be similar to the HAs…

If don't eliminate one or the other, then, I think OPPT can take another crack at reducing the text, i.e., referring more to the table and shortening the 'results and referencing' text.

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie
Sent: Thursday, August 02, 2018 7:27 AM
To: Henry, Tala <Henry.Tala@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.

Tala,
Just checking in to see if you could send the OPPT responses to us this week. Ideally, today since my team is out tomorrow.

Thanks,
Jamie

From: Henry, Tala
Sent: Tuesday, July 31, 2018 11:56 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Aubee, Catherine <Aubee.Catherine@epa.gov>; Benson, Amy <Benson.Amy@epa.gov>; Babcock, Amy <babcock.amy@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: I cannot make the 12 o'clock due to conflicting meeting; plan to send OPPT responses to OW end of today.
Importance: High

Tala R. Henry, Ph.D.
Acting Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/14/2020 3:14:34 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: revised charge questions for GenX peer review #2
Attachments: Charge questions for GenX chemicals EPR2 09 02 2020 OST.docx

is this it?

From: Strong, Jamie
Sent: Wednesday, September 02, 2020 2:28 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: revised charge questions for GenX peer review #2

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, September 02, 2020 2:26 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: revised charge questions for GenX peer review #2

For your review and in preparation for next Thursday's discussion with Charlotte.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/8/2018 3:22:54 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)
Attachments: Peer Review Report_Task 0008_GenX_Final_7-25-18.pdf; Peer Review Report_Task 0008_PFBS_Final.pdf

To recap the meeting today:

1. Date to send PFBS to OW contractors for tech edit and 508 compliance is September 20th.
2. Send out materials (peer review reports attached here) to state and interagency groups in advance of the meeting (proposal to send report to them on August 20th). Meeting is on August 27th.
3. Send out materials to agency group in advance (proposal to send report to the Monday 13th). Meeting is on August 20th.
4. Need to follow up on comms plan and schedule
5. Need to revise our schedule (include comms and OW and ORD management reviews)

From: Jones, Samantha
Sent: Wednesday, August 08, 2018 10:26 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: coordination on document development: call in Ex. 6 Personal Privacy (PP)

Hi all,

I'm going to have to miss this meeting today. Things seem to be moving right along and we have our meetings with epa, other federal agencies, and ECOS scheduled.

One thing that would be good to work out is the time frame as we work towards having a final public comment draft considering the timing for tech edit, PDF/508 compliance, and web posting.

coordination on document development: call in Ex. 6 Personal Privacy (PP)
Scheduled: Wednesday, Aug 8, 2018 from 11:00 AM to 12:00 PM
Location: DCRoomWest5231M/DC-CCW-OST
Invitees: Jacobs, Brittany, Bahadori, Tina, Miller, Gregory, Behl, Betsy, Owens, Beth, Lambert, Jason, Strong, Jamie, Champlin, Anna

Sent from my iPhone

Message

From: Miller, GregoryG [Miller.Gregory@epa.gov]
Sent: 7/23/2021 2:58:19 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX Chemours Half-life scaling attempt
Attachments: GenX halflife scaling attempt 7 23 21.xlsx

See attached. We can walk through it before I send to Chris B to double check the calculations. I vote to keep using the

Ex. 5 Deliberative Process (DP)

Message

From: Miller, GregoryG [Miller.Gregory@epa.gov]
Sent: 6/1/2021 2:34:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Human half-life estimate for GenX is now available
Attachments: Chemours study of GenX half-life in workers.pdf; GenX halflife scaling attempt 8 13 20.xlsx

I think we need to talk about this. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Attached my spreadsheet from when Paul Schlosser suggested we attempted this half-life conversion last year. See the note on cell D7. We decided that assuming monkeys and humans were the same was not a good idea.

Greg Miller, Senior Environmental Health Scientist
Human Health Risk Assessment Branch
Office of Science and Technology, Health and Ecological Criteria Division
US Environmental Protection Agency, Office of Water
1200 Pennsylvania Ave, NW (MC 4304T)
Washington, DC 20460

phone: (202) 566-2310
miller.gregory@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, June 1, 2021 9:54 AM
To: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Human half-life estimate for GenX is now available

FYI. not sure if this changes anything. Please feel free to contact Gloria directly is needed.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Post, Gloria (DEP) <Gloria.Post@dep.nj.gov>
Sent: Monday, May 31, 2021 9:17 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Human half-life estimate for GenX is now available

Betsy,

You and your staff may already be aware of this, but I wanted to make sure that you and your staff who are working on the GenX risk assessment are aware that a human half-life estimate for GenX is now available.

ECHA had required that Chemours conduct a human biomonitoring study of GenX at is Dordrecht facility in the Netherlands. See p. 12-15 of this document https://echa.europa.eu/documents/10162/2d98dcf1-b069-18d5-520c-bee047c0d47e

I had communicated with scientists at the Netherlands environmental agency (RIVM) to find out if this study had been completed. It is completed, but Chemours has not made the study report publicly available so RIVM cannot share it with NJDEP.

However, a summary of the study, including a human half-life estimate of 81 hours, is posted on the ECHA website at https://urldefense.com/v3/__https:/echa.europa.eu/nl/registration-dossier/-/registered-dossier/2679/7/11/6__;!!J30X0ZrnC1oQtbA!bInPS1S6QkDVFZnB_eOoBzoLdhtWjLET3V8td60NXVgySbPX6c-cJ07WklH8ZzzaklsvUA$ To find it, you need to go to the dropdown box at the top and select the second study.

I am attaching a PDF of the information that is posted on the website.

Best regards,
Gloria

Ammonium... - Registration Dossier - ECHA

urldefense.com

Gloria B. Post, Ph.D., DABT
Research Scientist

Division of Science and Research
New Jersey Department of Environmental Protection
Mail Code 428-01, PO Box 420
Trenton, NJ 08625-0420

Telephone: (609) 292-8497
Fax: (609) 292-7340

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2020 8:20:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX revisions

Importance: High

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, June 04, 2020 4:20 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX revisions
Importance: High

Meant to copy you.

From: Behl, Betsy
Sent: Thursday, June 04, 2020 4:19 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: GenX revisions
Importance: High

Tala,
We wanted to let you know the status of the GenX chemicals assessment and give you a heads up that we would would like OPPT's opinion on a few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90 day and repro/dev studies. We are working to send the draft to you by June 15th.

To use your time most efficiently, we would like to request that you please focus your input on Section 6. The main topic areas where we would like OPPT's review are:

1. the selection of the critical study and effect (section 6.1; the critical study is still the DuPont repro/dev study, but endpoint has changed to a constellation of liver lesions in females based on the NTP PWG conclusions)
2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

We know you are busy, so wanted to give you a chance to set aside some time for a review in mid-June. We value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 4/30/2018 9:44:09 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: GenX/PFBS Overview for Internal Agency Review
Attachments: GENX PFBS PRESENTATION_Overview for Internal Agency Reviewers_FINAL_5-01-18.pptx

Hi all,

I am attaching the latest version of the slides for tomorrow's call. I needed to correct slide 4 to remove "final" from the entry about the public meeting. Missed that last minute change before the other presentation was loaded on the May 2nd invites. The attached powerpoint presentation is the same as the one on the 9am Tuesday meeting invite.

Jamie reserved a room in EPA West. I'll head over there in the morning, a little earlier than 9am to get set up. We have an adobe connect link for sharing the slides and the audio line through Skype. If I can give you access Jason/Beth, I will so that you can advance the PFBS slides. If not, I can do the advancing.

Good luck everyone!

Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

-----Original Appointment-----
From: Jones, Samantha
Sent: Tuesday, April 24, 2018 4:42 PM
To: Jones, Samantha; Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Cassidy, Meghan; Olsen, Marian; Gehlhaus, Martin; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Hiatt, Gerald; Kissinger, Lon; Lynn Flowers; Bob Benson; 'Jamie Strong'; Jacobs, Brittany; Behl, Betsy; Owens, Beth; Lambert, Jason; Bahadori, Tina; Lavoie, Emma; Harper, Ashley; Champlin, Anna; Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Gillespie, Andrew
Cc: Cooperstein, Sharon; Ann Johnson; Metz, Chloe; Braverman, Carole; Davison, Jenny; Maurice, Charles; Mendez, Thomas; Moore, Tammy; Newman, Erin; Poleck, Thomas; Prendiville, Timothy; Seely, David; Shoven, Heather; Valberg, Amelia; Wilson, Jennifer; Suero, Maryann; Miller, Amy; Li, Corine; Holsinger, Hannah; Grevatt, Peter; Mclain, Jennifer; Burneson, Eric; 'mmaddalo22@gmail.com'; Allen, Elizabeth; Jankowski, Mark; Repasky, Ted; Bachman, Brenda; Thomas, Lee; Speth, Thomas; brendabachman@msn.com; Keigwin, Richard; Filipowicz, Urszula; Henry, Tala; Beck, Nancy; Bertrand, Charlotte; Barone, Stan; Morris, Jeff; Hanley, Mary; Keller, Kaitlin; Layne, Arnold; Mottley, Tanya
Subject: Overview of GenX and PFBS assessments - prior to internal review (NOTE: revised materials and Adobe Connect link added)
When: Tuesday, May 1, 2018 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: AUDIO - Skype (link and # in body of invite); VIEWING OF SLIDES - Adobe Connect (link in body of invite)

UPDATE#2: ADOBE CONNECT LINK ADDED. Please note that for the call on Tuesday morning, use Adobe Connect to view the slides, and use the Skype app or phone number for audio. Additionally, a revised version of the slides has been provided, please use the file labeled as "FINAL". These will be shared via Adobe Connect.

UPDATE#1: OVERVIEW MATERIALS ADDED

For viewing the slides: use Adobe Connect link

- Ex. 6 Personal Privacy (PP)

For audio: use Skype phone number or app → Toll number: +1 Ex. 6 Personal Privacy (PP) access code: Ex. 6 Personal Privacy (PP) nd a local number) Conference ID: Ex. 6 Personal Privacy (PP) ame as access code); Join Skype Meeting (Trouble Joining? Try Skype Web App)

Hi all,

As noted below, we are offering a conference call to provide an overview of the GenX and PFBS assessments and answer any questions prior to the internal Agency review of the assessments. Overview materials will be added to the invite prior to the call.

Thank you,
OW/OST and ORD/NCEA

Dear Internal Agency Review contacts,

As you know, in response to an urgent and priority request by the Administrator, OW/OST and ORD/NCEA have taken the lead to develop human health toxicity values for GenX and PFBS, respectively. These two assessments are expanding on existing work from OPPT (GenX) and ORD (PFBS). Some background information is attached. We will be offering an opportunity for rapid review of these assessments starting on 5/07/18. Please identify the expert reviewers in your region or program to prepare for this rapid review – you will have one week for this review, and each program/region is expected to provide one consolidated set of comments. The timeline is short as the Administrator has asked for these assessments and toxicity values to be prepared in a 6-month period including peer review. We are scheduling a conference call on or about 4/30/18 to provide an overview of the assessments and answer any questions.

The list of review coordinators for your organizations is below. Unless we hear from you otherwise, these individuals will be our points of contact for the review.

Please forward your questions to Ashley Harper. We will review and respond accordingly.

Thank you,
OW/OST and ORD/NCEA

Agency Review Contacts

Office of Water Greg Miller

Office of Chemical Safety and Pollution Prevention

- **Office of Pesticide Programs** Anna Lowit
- **Office of Pollution Prevention and Toxics** Susan Laessig
- **Office of Science Coordination and Policy** Karen Hamernik

Office of Land and Emergency Management Kathleen Raffaele

Office of Air and Radiation

- **Office of Air Quality Protection & Standards** Deirdre Murphy and Amy Vasu
- **Office of Transportation & Air Quality** Marion Hoyer

Office of Policy Dan Axelrad

Office of Children's Health Protection Rebecca Dzubow and Sue Euling

Office of Research and Development/Office of Science Policy Lynn Flowers

Region 1 Meghan Cassidy

Region 2 Marian Olsen

Region 3 Martin Gehlhaus

Region 4 Solomon Pollard and Glenn Adams

Region 5 Mario Mangino

Region 6 Anna Milburn

Region 7 Kelly Schumacher

Region 8 Bob Benson

Region 9 Gerald Hiatt

Region 10 Lon Kissinger

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:29:32 AM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: FW: Word document-comments for consideration PFAS
Attachments: ORD Comments on Health Assessments for GenX chemicals and PFBS.docx; ATT00001.htm

More

From: Flowers, Lynn
Sent: Sunday, May 27, 2018 11:28 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Shams, Dahnish <Shams.Dahnish@epa.gov>
Subject: Word document-comments for consideration PFAS

Sorry to be a pain. I am on vacation....good thing. Can't access sharepoint. Hope you can post along with attachment from my last email. Lots of work for you guys!! 5 files from ORD overall. Apologies.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:28:20 AM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: FW: Correct attachment: ORD comments on GenX and PFBS
Attachments: ORD Comments on Health Assessments for GenX chemicals and PFBSv2.docx; ATT00001.htm

Not loaded to SharePoint.

From: Flowers, Lynn
Sent: Monday, May 28, 2018 6:45 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Shams, Dahnish <Shams.Dahnish@epa.gov>
Subject: Correct attachment: ORD comments on GenX and PFBS

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 5/29/2018 7:35:24 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Moore, Alexa [moore.alexa@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: FW: Moore, Alexa has invited you to 'EPA PFAS Toxicity Value Assessment Internal Review'

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Hamernik, Karen
Sent: Tuesday, May 29, 2018 3:31 PM
To: Moore, Alexa <moore.alexa@epa.gov>
Cc: Barone, Stan <Barone.Stan@epa.gov>; Hanley, Mary <Hanley.Mary@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>
Subject: RE: Moore, Alexa has invited you to 'EPA PFAS Toxicity Value Assessment Internal Review'

Hi Alexa,

OCSPP comments have been uploaded.

Thanks,
Karen

From: Hamernik, Karen
Sent: Friday, May 25, 2018 1:11 PM
To: Moore, Alexa <moore.alexa@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Barone, Stan <Barone.Stan@epa.gov>; Hanley, Mary <Hanley.Mary@epa.gov>
Subject: RE: Moore, Alexa has invited you to 'EPA PFAS Toxicity Value Assessment Internal Review'

Hi Alexa,

I've been helping to coordinate comments from OCSPP on review of the draft PFAS toxicity value assessments.

I've received word from Nancy Beck, our DAA, that a bit more time is needed to fully prepare the OCSPP comment-response to these draft materials.

Plans are to provide you with comments early next Tuesday morning (May 29th).

Thanks for your understanding and let me know if there are any problems with this.

Karen

From: Moore, Alexa [mailto:no-reply@sharepointonline.com]
Sent: Monday, May 14, 2018 5:29 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Lowit, Anna <Lowit.Anna@epa.gov>; Laessig, Susan <Laessig.Susan@epa.gov>; Hamernik, Karen <Hamernik.Karen@epa.gov>; Raffaele, Kathleen <raffaele.kathleen@epa.gov>; Murphy, Deirdre <Murphy.Deirdre@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Hoyer, Marion <hoyer.marion@epa.gov>; Axelrad, Daniel <Axelrad.Daniel@epa.gov>; Dzubow, Rebecca <Dzubow.Rebecca@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Flowers, Lynn <Flowers.Lynn@epa.gov>; Cassidy, Meghan <Cassidy.Meghan@epa.gov>; Olsen, Marian <Olsen.Marian@epa.gov>; Gehlhaus, Martin <Gehlhaus.Martin@epa.gov>; Pollard, Solomon <Pollard.Solomon@epa.gov>; Adams, Glenn <Adams.Glenn@epa.gov>; Mangino, Mario <mangino.mario@epa.gov>; Milburn, Anna <Milburn.Anna@epa.gov>; Schumacher, Kelly <Schumacher.Kelly@epa.gov>; Benson, Bob <Benson.Bob@epa.gov>; Hiatt, Gerald <Hiatt.Gerald@epa.gov>; Kissinger, Lon <Kissinger.Lon@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Shams, Dahnish <Shams.Dahnish@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Thayer, Kris <thayer.kris@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Moore, Alexa <moore.alexa@epa.gov>
Subject: Moore, Alexa has invited you to 'EPA PFAS Toxicity Value Assessment Internal Review'

Please use link below for access to GenX and PFBS Draft Assessments.

Go to EPA PFAS Toxicity Value Assessment Internal Review

Follow this site to get updates in your newsfeed.

Get the SharePoint mobile app!

Hello all,

We are pleased to provide the **draft human health toxicity assessments of GenX and PFBS** for your review. This is a 2-week review timeframe. To provide comments please provide only one document from each region and program containing compiled office comments. The assessments for review are available here and your version containing comments (or other written comments) should be uploaded in this site.

Four specific notes for this review are provided below:

- Please focus comments only on substantive issues.
- Combine all comments from an office or region into a single document, then upload to the GenX or PFBS folder on the SharePoint site. Only the Agency Review contacts have access to the site (see below). Sharing of the materials and compilation of comments from your respective office or region is via the designated Agency Review contact. Contacts please coordinate within your respective offices, especially noting the PFAS Regional Coordinators listed in the table below.
- Please note that GenX Appendix B is not included and will be sent as a separate file as soon as possible.

- Post all comments to the SharePoint site by **COB Friday, May 25.**

We appreciate your feedback and will carefully consider it in the assessments. In consideration of the Administrator's timeline, we will not be able to provide a formal response to comments.

Thanks,

Alexa Moore
Environmental Administrative Support
Contractor
National Center for Environmental Assessment
US EPA ORD/NCEA
Moore.alexa@epa.gov
202-564-2762

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:29:53 AM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: FW: Comments directly on GenX pdf from ORD- second set
Attachments: DRAFT AGENCY Tox Assessment for GenX Chemicals_05-14-18 (1)_ORD2.pdf; ATT00001.htm

And more

From: Flowers, Lynn
Sent: Sunday, May 27, 2018 11:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Shams, Dahnish <Shams.Dahnish@epa.gov>
Subject: Comments directly on GenX pdf from ORD- second set

I apologize for being late and not being able to load on SharePoint. Hope these are helpful. I have a word document that I will send ASAP.

Thanks!
Lynn

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/30/2018 1:17:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: responses to OCSPP
Attachments: DRAFT AGENCY Tox Assessment for GenX Chemicals_05-14-18_OCSPP OST response.docx

I need you two to take a look and fill in where I didn't respond/edit my responses. The one on immunotox I took from David Lehman's email directly. Cut and paste. Id like to get this to BB so she can figure out how to deal with this situation.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/30/2018 7:13:04 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: FW: Word document-comments for consideration PFAS
Attachments: Gen X consolidated comments.docx; ORD Comments PFBS consolidated.docx; Comments on External Peer Review Charge Questions.docx

---

From: Doa, Maria
Sent: Wednesday, May 30, 2018 2:28 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Hauchman, Fred <hauchman.fred@epa.gov>; Deener, Kathleen <Deener.Kathleen@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Flowers, Lynn <Flowers.Lynn@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Word document-comments for consideration PFAS

Betsy,
Attached please find 1) a document with consolidated comments on the HFPO dimer acid chemicals, 2) a document with consolidated comments on the PFBS chemicals, and 3) a document with comments on the external peer review charge questions. Please note that for the most part the overarching comments in both of the first two documents are the same because these comments are for the most part about the similarities and differences between the two documents. They are included in both since they pertain to both.

Since Lynn is in lovely Italy and I don't have access to the review site and thus the word docs, I am sending these as attachments with the comments listed.

Please let me know if you have any questions or would like these in a different form.

Thanks for considering our comments.

-Maria

From: Behl, Betsy
Sent: Tuesday, May 29, 2018 7:25 PM
To: Doa, Maria <Doa.Maria@epa.gov>; Hauchman, Fred <hauchman.fred@epa.gov>; Deener, Kathleen <Deener.Kathleen@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Flowers, Lynn <Flowers.Lynn@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Word document-comments for consideration PFAS

All,

We would like to request your assistance with the recent comments we received from ORD/OSP on the draft assessments we are developing for GenX chemicals and PFBS. Both the GenX team and the PFBS team requested one set of comments from your office by 5/25. We received 4 sets of comments on GenX and 2 sets of comments on PFBS. We would like to request that you assemble these comments into two documents: one containing comments on GenX chemicals and the other comments on PFBS and transmit these to us by this Friday (6/1). This will greatly facilitate our

ability to review and address your comments along with all those we received from across the EPA as well as comments from multiple federal agencies.

Above are the two PDF files with different sets of comments on GenX. We combined the two versions of the Word document using the compare feature in Word. If you need us to, we can send the two word files we received from you on PFBS.

Many thanks for your assistance,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/31/2018 11:42:21 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: OSCPP comments on GenX
Attachments: DRAFT AGENCY Tox Assessment for GenX Chemicals_05-14-18_OCSPP OST response v2.docx

FYI

From: Behl, Betsy
Sent: Wednesday, May 30, 2018 6:41 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: OSCPP comments on GenX

Tala,

I have attached above proposed responses to OCSPP comments on the GenX assessment. We probably need to talk more about how to handle the systematic review that you folks have done. Could you take a look at our rationale for the other responses and let me know if you agree? If you don't agree with the responses we should talk about those as well. Friday would be good

Thanks, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/31/2018 2:17:43 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX - Agency comment update

I don't understand the highlighted part. Also, those comments that you couldn't or didn't address, where are those captured?

From: Miller, Gregory
Sent: Thursday, May 31, 2018 10:11 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: GenX - Agency comment update

I've looked at all the comments in detail for R2, R3, R4, R5, R8, OP, OAR, OCSPP, and OCHP. I addressed the technical and editorial comments where I could and entered all remaining substantive edits into our working draft for consideration by the group. Each change/comment is tagged with the originating program office. I'm still working through the comments from ORD and OLEM.

I've also made some comments in the submitted comment documents. I uploaded them in to SharePoint so you have access should you need it. Anything with strikethrough text has been processed by either responding, entering the comment into our sharepoint draft, or dismissal as something we're not going to address.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2018 1:15:18 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: OCSPP
Attachments: DRAFT AGENCY Tox Assessment for GenX Chemicals_05-14-18_OCSPP OST response 06 04 18.DOCX

Importance: High

So apparently we have to respond to Nancy. Please see my cleaned up version. There are two outstanding comments....one is the sys rev and ranking comment. I don't think we can resolve until we see edits to App B that are forthcoming (when I don't know). The second is the one on the duration...Tala added text (its highlighted), what do you think?

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/4/2018 1:36:35 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics
Attachments: DRAFT AGENCY Tox Assessment for GenX Chemicals_Sec 1 and 2 for OPPT 06-4-18.docx; ORD Gen X consolidated comments for OPPT.DOCX

Not much difference from what I sent before. Nobody sent a redline markup of the Appendix B document that was sent out separately. The main thrust of the Appendix B comments was that the content should be better integrated into the main body of the document. Please see attached.

From: Strong, Jamie
Sent: Monday, June 4, 2018 9:23 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics

Tala wants it all.

From: Miller, Gregory
Sent: Monday, June 04, 2018 9:21 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics

I'll have to re-do it to include App B. I thought this was going to Chris B only. Let me resend.

From: Strong, Jamie
Sent: Monday, June 4, 2018 9:20 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics

Nothing on App B?

From: Miller, Gregory
Sent: Monday, June 04, 2018 9:13 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics

Please see ORD comments highlighted in yellow covering Sections 1.0 to 2.3.6. Other comments from program offices are included in the attached draft Tox Assessment.

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/4/2018 1:12:36 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: ORD comments on History, Uses, Occurence, P-chem, Fate, and Toxicokinetics
Attachments: ORD Gen X consolidated comments for OPPT.DOCX; DRAFT AGENCY Tox Assessment for GenX Chemicals_Sec 1 and 2 for OPPT 06-4-18.docx

Please see ORD comments highlighted in yellow covering Sections 1.0 to 2.3.6. Other comments from program offices are included in the attached draft Tox Assessment.

Appointment

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/13/2018 4:08:55 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Lowit, Anna [Lowit.Anna@epa.gov]; Laessig, Susan [Laessig.Susan@epa.gov]; Hamernik, Karen [Hamernik.Karen@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Murphy, Deirdre [Murphy.Deirdre@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]; Hoyer, Marion [hoyer.marion@epa.gov]; Axelrad, Daniel [Axelrad.Daniel@epa.gov]; Dzubow, Rebecca [Dzubow.Rebecca@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Flowers, Lynn [Flowers.Lynn@epa.gov]; Cassidy, Meghan [Cassidy.Meghan@epa.gov]; Olsen, Marian [Olsen.Marian@epa.gov]; Gehlhaus, Martin [Gehlhaus.Martin@epa.gov]; Pollard, Solomon [Pollard.Solomon@epa.gov]; Adams, Glenn [Adams.Glenn@epa.gov]; Mangino, Mario [mangino.mario@epa.gov]; Milburn, Anna [Milburn.Anna@epa.gov]; Schumacher, Kelly [Schumacher.Kelly@epa.gov]; Benson, Bob [Benson.Bob@epa.gov]; Kissinger, Lon [Kissinger.Lon@epa.gov]; Maddaloni, Mark [Maddaloni.Mark@epa.gov]; rogers, rick [rogers.rick@epa.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Morton, Michael [Morton.Michael@epa.gov]; Shields, Amy [Shields.Amy@epa.gov]; Bahrman, Sarah [Bahrman.Sarah@epa.gov]; Small, Matthew [Small.Matthew@epa.gov]; Anderson-Carnahan, Linda [Anderson-Carnahan.Linda@epa.gov]; Allen, Elizabeth [allen.elizabeth@epa.gov]; Bachman, Brenda [bachman.brenda@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Radke-Farabaugh, Elizabeth [radke-farabaugh.elizabeth@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Foster, Stiven [Foster.Stiven@epa.gov]; Yaquian-Luna, Jose [yaquian-luna.josea@epa.gov]; Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Johnson, Ann [Johnson.Ann@epa.gov]; Birchfield, Norman [Birchfield.Norman@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Hines, Ronald [Hines.Ronald@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Hodes, Colette [Hodes.Colette@epa.gov]

Subject: HOLD for PFAS: GenX and PFBS overview of peer review comments
Attachments: Peer Review Report_Task 0008_GenX_Final_7-25-18.pdf; Peer Review Report_Task 0008_PFBS_Final.pdf
Location: Skype (202) 991-0477, access code: 6 Ex. 6 Personal Privacy (PP)

Start: 8/20/2018 5:00:00 PM
End: 8/20/2018 6:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Lowit, Anna; Laessig, Susan; Hamernik, Karen; Raffaele, Kathleen; Murphy, Deirdre; Vasu, Amy; Hoyer, Marion; Axelrad, Daniel; Dzubow, Rebecca; Euling, Susan; Lynn Flowers; Cassidy, Meghan; Olsen, Marian; Martin Gehlhaus; Pollard, Solomon; Adams, Glenn; Mangino, Mario; Milburn, Anna; Schumacher, Kelly; Bob Benson; Kissinger, Lon; Maddaloni, Mark; rogers, rick; Allenbach, Becky; Harris, Kimberly; Morton, Michael; Shields, Amy; Bahrman, Sarah; Small, Matthew; Anderson-Carnahan, Linda; Allen, Elizabeth; Bachman, Brenda; Bahadori, Tina; Owens, Beth; Lambert, Jason; Champlin, Anna; Thayer, Kris; Radke-Farabaugh, Elizabeth; Kraft, Andrew; Behl, Betsy; Jamie Strong; Jacobs, Brittany
Optional Attendees: Foster, Stiven; Yaquian-Luna, Jose; Cooperstein, Sharon; Ann Johnson; Birchfield, Norman; Fitz-James, Schatzi; Libelo, Laurence; Cooke, Maryt; Hines, Ronald; Gillespie, Andrew; Hodes, Colette

UPDATE #1: Materials added.

Hi all,

Please join us for an overview of the peer review comments received on GenX and PFBS and next steps. Materials to be added. We have invited all of the designated regional and program office representatives; please feel free to forward as appropriate within your office.

Thanks,
Samantha

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/5/2018 7:11:33 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: FW: OGC review for GenX chemicals toxicity values and FRN for public comment
Attachments: genxPUBLIC COMMENT DRAFT Human Health Tox Values for GenX Chemicals_08_30_18dmm.docx; GenX Chemicals and PFBS Toxicity Assessment FRN_8.29.18DMM.doc

Importance: High

Need to transfer these into tech edited version. Is she asking if OPPT reviewed FRN???

From: Messier, Dawn
Sent: Wednesday, September 05, 2018 3:07 PM
To: Strong, Jamie
Cc: Wehling, Carrie
Subject: FW: OGC review for GenX chemicals toxicity values and FRN for public comment
Importance: High

Attached are my comments. No additional comments from my TSCA and CERCLA colleagues, although the TSCA folks wanted to be sure that OPPTS had reviewed the notice.

I need to check in with my front office tomorrow morning to see if they want to review it (sorry - but we run almost everything by them these days). Will let you know what they say.

Dawn Messier
U.S.E.P.A.
Office of General Counsel
Water Law Office
202-564-5517

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/26/2021 3:44:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: GenX Tox Review and OPPT/OPP comments from previous administration

Just got out of the management meeting with Betsy and she agrees that we are not required to address these comments because they were not resubmitted or referenced to by OCSPP during the Agency Review that ended on 4/23/21.

Greg Miller, Senior Environmental Health Scientist
Human Health Risk Assessment Branch
Office of Science and Technology, Health and Ecological Criteria Division
US Environmental Protection Agency, Office of Water
1200 Pennsylvania Ave, NW (MC 4304T)
Washington, DC 20460

phone: (202) 566-2310

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/26/2019 3:02:02 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Camacho, Iris [Camacho.Iris@epa.gov]
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT
Attachments: Thompson_et_al-2019-Journal_of_Applied_Toxicology.pdf

Here is the Thompson study.

-----Original Appointment-----
From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 14, 2019 8:37 AM
To: Jacobs, Brittany; Henry, Tala; Strong, Jamie
Cc: Behl, Betsy; Miller, Gregory; Camacho, Iris
Subject: Proposed plan for systematic review of GenX chemicals database for OPPT
When: Tuesday, November 26, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Join Skype Meeting

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Help

Hello Everyone,

This looks to be the first and really only available time for us to meet. We will be updating you on the work we've done to be responsive to the systematic review comments we received for the GenX chemicals assessment (see below; plan sent to OPPT on 4/11/19). I will note that we did not deviate from the OPPT systematic review protocol metrics. Looking forward to chatting with you!

All the best,
Brittany

Overview:

Ex. 5 Deliberative Process (DP)

Workplan:

Ex. 5 Deliberative Process (DP)

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Thursday, November 14, 2019 8:15 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Camacho, Iris <Camacho.Iris@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

OK,

I have cc'd Iris Camacho and would like for her to be in on the meeting, as she is our Office lead on SR and

Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, November 14, 2019 7:55 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT
Importance: High

Tala,
I wanted to touch base with OPPT on the GenX chemicals public comments, specifically what we have done to address those on systematic review. I was hoping to set up some time to walk you and others through the approach we used and the outcome. Please let me know who to include in this discussion and I will look for a time. Brittany Jacobs on my staff lead this effort and is getting ready to go o Ex. 6 Personal Privacy (PP) hopefully we can find something that will work in the next few weeks.

Thanks,
Jamie

From: Strong, Jamie
Sent: Thursday, April 11, 2019 7:35 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Proposed plan for systematic review of GenX chemicals database for OPPT
Importance: High

Tala,
You asked that we lay out the plan to address the comments we received on systematic review for GenX chemicals. Below is the approach we plan to take, please let me know if you have any questions.

Also, wanted to check and see if you have you been able to determine if the OPPT review was done in Distiller and if there was any follow up on the dioxane comments you received and how you are dealing with those?

Thanks,
Jamie

Overview:

Ex. 5 Deliberative Process (DP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/27/2019 12:24:28 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

Adding Greg.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, November 26, 2019 8:52 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

Very nice briefing today. we should add to the agenda for the next OST and AA biweekly. It's a good story for us

---

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 26, 2019 10:09 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Camacho, Iris <Camacho.Iris@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

Here is an electronic version of the briefing sheet to make it easier to provide comments. Thanks!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, November 26, 2019 10:02 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Camacho, Iris <Camacho.Iris@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

Here is the Thompson study.

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From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 14, 2019 8:37 AM
To: Jacobs, Brittany; Henry, Tala; Strong, Jamie
Cc: Behl, Betsy; Miller, Gregory; Camacho, Iris
Subject: Proposed plan for systematic review of GenX chemicals database for OPPT
When: Tuesday, November 26, 2019 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

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Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT

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Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

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Sent: Thursday, November 14, 2019 7:55 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Proposed plan for systematic review of GenX chemicals database for OPPT
Importance: High

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Jamie

From: Strong, Jamie
Sent: Thursday, April 11, 2019 7:35 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Proposed plan for systematic review of GenX chemicals database for OPPT
Importance: High

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Overview:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/16/2021 1:46:59 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: tsca systematic review process NAS REPORT

very glad you did that comparison in the genx document.

NAS Readying Report On TSCA Systematic Review For Feb. 16 Release

February 12, 2021

The National Academy of Science (NAS) committee tasked with examining EPA's use of systematic review in its TSCA evaluations of existing chemicals has completed its work and will brief EPA staff on its findings by the end of the day, with the report to be released publicly on Feb. 16.

Committee Chairman Jon Samet told members of another NAS committee that met Feb. 11 that the Toxic Substances Control Act (TSCA) NAS panel was slated to present the findings of its peer-review to EPA staff Feb. 12, and that he anticipated the report's public release next week. An NAS spokeswoman later confirmed to *Inside TSCA* that the report will be publicly released Feb. 16.

Samet, dean of the Colorado School of Public Health, led NAS' peer-review of EPA's 2018 TSCA tool for conducting systematic reviews -- a technique derived from reviews of medical literature and gaining ground in the environmental health field over the past decade. The approach is intended to strengthen and make more transparent EPA's literature searches and evidence analysis and integration in its chemical assessments.

The new TSCA requires EPA to use systematic review in its evaluations of existing chemicals, as does the agency's 2017 "framework" rule governing how those evaluations are conducted. But EPA's toxics office developed its own tool for systematic reviews rather than adopting an existing approach, meaning NAS' peer review was conducted while EPA was finalizing the last of its first 10 existing-chemical evaluations.

Samet made his announcement during the first meeting of a new NAS committee that EPA has tasked with reviewing its draft handbook for Integrated Risk Information System (IRIS) risk assessments.

The two panels' duties are connected in several ways but most importantly with regard to systematic review, which the Obama administration sought to incorporate into the IRIS program in response to recommendations from another NAS panel, issued in 2011 as part of its peer-review of the risk assessment for formaldehyde.

The academy began its peer review of the TSCA tool after environmentalists and EPA's science advisors criticized officials for deciding to develop a new systematic review approach rather than adopting a pre-existing tool that had already been reviewed, such those developed by IRIS or the National Toxicology Program.

The calls led Democrats to push for NAS peer review of the new TSCA tool -- a commitment Sen. Tom Carper (D-DE), then the ranking member of the Senate environment committee, secured in 2018 from then-Administrator Andrew Wheeler to advance the confirmation of EPA's Trump-era toxics chief, Alex Dunn.

NAS Queries

EPA continued to face questions over why it developed its own tool instead of adopting a pre-existing, reviewed systematic review approach from NAS panelists as well during public portions of the panel's meetings last summer.

In response, agency officials argued that TSCA program needed its own tool because of the unique nature of its chemical evaluations, which are complete risk assessments that focus on individual chemical uses and how people and the environment are exposed to those uses.

For example, during a meeting last July, one of the panelists, Joe Rodericks, a toxicologist and principal with the consulting firm Ramboll, asked, "Why did it seem necessary to harmonize an approach across all these areas, especially when you have [approaches developed by the National Toxicology Program and researchers at the University of California San Francisco that have been] so carefully looked at; a lot of experience already in place. It raises a question about why you needed to depart to create a harmonized approach?"

Francesca Branch, an epidemiologist in the EPA Office of Pollution Prevention and Toxics (OPPT) risk assessment division, replied, "our intention was to create a framework that is harmonized across all of the TSCA disciplines. So some of the frameworks we evaluated were specific to hazard and we have a broader scope under TSCA that we have to consider."

Branch said EPA needed to create a systematic review tool that could encompass all areas of its evaluations, including studies of exposure, chemicals' physical-chemical properties and fate and transport in the environment that have not been used with the existing systematic review approaches.

But experts criticized the approach OPPT developed as well as the office's application of the tool -- ultimately prompting staff to float potential changes during the peer-review process.

At the review committee's last public meeting, Stan Barone, deputy director of the risk assessment division, said toxics office leaders were considering dropping a controversial numeric scoring system staff have used for ranking the quality of studies the agency has considered for use TSCA evaluations after some experts charged that it does not represent best practices in systematic review policies.

"We had a lot of comments on the numerical scoring system and it does take extra time in the processing of the information," Barone said at the August meeting. "One of the concerns that was addressed to us in public comments was a false sense of precision by focusing on the numbers of the score versus looking at the categorical ranking." -- *Maria Hegstad* (mhegstad@iwpnews.com)

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Appointment

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 2/14/2019 4:14:22 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]

Subject: Systematic Review
Location: DCRoomRRB71214-NCEADir for RRB folks (everyone else Skype, unless you want to come to RRB!)

Start: 2/14/2019 5:00:00 PM
End: 2/14/2019 5:30:00 PM
Show Time As: Tentative

Required Attendees: Jamie Strong; Jacobs, Brittany; Miller, Gregory; Thayer, Kris; Kraft, Andrew
Optional Attendees: Behl, Betsy; Bahadori, Tina; Soares, Barbara

Hi all,

This was the earliest time I could fine in everyone's busy schedules for us to briefly get together to talk about scope of the systematic review questions for GenX chemicals. Getting us all on the same page at the beginning will facilitate the next steps.

Betsy and Tina, I have you guys as optional.

Thanks,
Samantha

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Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/14/2019 5:29:05 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
Subject: RE: Systematic Review
Attachments: GenX Chem OCSPP Systematic Review _ source Public Comment draft.pdf

-----Original Appointment-----
From: Jones, Samantha
Sent: Thursday, February 14, 2019 11:14 AM
To: Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Thayer, Kris; Kraft, Andrew
Cc: Behl, Betsy; Bahadori, Tina; Soares, Barbara
Subject: Systematic Review
When: Thursday, February 14, 2019 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomRRB71214-NCEADir for RRB folks (everyone else Skype, unless you want to come to RRB!)

Hi all,

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English (United States)

Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)
Forgot your dial-in PIN? | Help

.....

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 5/2/2019 3:59:32 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call i Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231L/DC-CCW-OST

Start: 5/8/2019 1:00:00 PM
End: 5/8/2019 2:00:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara; Owens, Beth

Message

From: Thayer, Kris [thayer.kris@epa.gov]
Sent: 3/4/2019 5:42:19 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]
Subject: RE: Systematic Review

Thanks Brittany!

I'll follow-up separately to lock down a time to chat..

From: Jacobs, Brittany
Sent: Monday, March 4, 2019 8:01 AM
To: Thayer, Kris <thayer.kris@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: Systematic Review

Hi Kris,

I can do the co-screening and am semi-familiar with Distiller. If you want to give me a call a little later (I'm free between 9-10am; 12pm; and after 3pm EST; 202-566-1352) to talk about the screening/next steps, that would be great! Thanks again for your help and getting us moving so quickly.

Best,
Brittany

From: Thayer, Kris
Sent: Sunday, March 03, 2019 10:05 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: Systematic Review

Hi there.

I finished title and abstract screening on the studies identified from database searches but had a number of "unclears" that I think are probably excludes.

There were only 40 studies to screen (took longer to create the form than screen). It took maybe 20 minutes to screen. Can I get an OW co-screener to make sure any conflicts are resolved in the direction OW envisioned? Knowledge of Distiller software is NOT required. We could probably get someone up to speed in ~10-15 minutes...

Once we are done with this screening we can go through and indicate the number of studies identified from non-database sources and screen them too (they would be identified as coming from "other" sources) in a study flow diagram.

Thanks!

-----Original Appointment-----
From: Jones, Samantha
Sent: Wednesday, February 13, 2019 11:43 AM
To: Jones, Samantha; Strong, Jamie; Jacobs, Brittany; Miller, Gregory; Thayer, Kris; Kraft, Andrew
Cc: Behl, Betsy; Bahadori, Tina; Soares, Barbara
Subject: Systematic Review
When: Thursday, February 14, 2019 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomRRB71214-NCEADir for RRB folks (everyone else Skype, unless you want to come to RRB!)

Hi all,

This was the earliest time I could fine in everyone's busy schedules for us to briefly get together to talk about scope of the systematic review questions for GenX chemicals. Getting us all on the same page at the beginning will facilitate the next steps.

Betsy and Tina, I have you guys as optional.

Thanks,
Samantha

→ Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

Toll number: Ex. 6 Personal Privacy (PP)
English (United States)

Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)
Forgot your dial-in PIN? | Help

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/28/2019 7:41:07 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: TSCA comments GenX

Thanks!

From: Miller, Gregory
Sent: Tuesday, May 28, 2019 2:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: TSCA comments GenX

Is this what you are looking for?

1.6 PFAS Uses and TSCA	
1.6.1	EPA-HQ-OW-2018-0614-0040 Silent Spring Institute
1.6.2	EPA-HQ-OW-2018-0614-0024 Environmental Working Group
1.6.3	EPA-HQ-OW-2018-0614-0042 Toxic Use Reduction Institute, University of Massachusetts-Lowell
1.6.4	EPA-HQ-OW-2018-0614-0020 New Jersey Department of Environmental Protection

From: Strong, Jamie
Sent: Tuesday, May 28, 2019 1:42 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: TSCA comments GenX

We should pull the comments that make up the basis for the summaries in section 1.6 on TSCA and send to OPPT to respond to…can one of you do that?

Here they are summarized:

1.1 PFAS USES AND TSCA

1.6.1 Comment: One commenter noted that because of the extreme persistence, mobility and toxicity of PFAS, EPA should ban all production and limits on importing PFAS to prevent further environmental PFAS contamination.

EPA Response:

1.6.2 Comment: A commenter requested that EPA block any new PFAS chemicals from the market until complete toxicity testing information for these chemicals becomes available. EPA's draft GenX toxicity assessment reinforces a major concern of scientists that a PFAS chemical that is not either PFOA or PFOS does not indicate that such a chemical is safe. EPA should assume that any new PFAS has the potential to be as toxic as the most potent PFAS studied to date.

EPA Response:

1.6.3 Comment: One commenter noted that in the case of PFAS chemicals, a prevention-oriented approach is relevant because many communities face contaminated drinking water and cleanup costs from past PFAS contamination. Toxics use reduction can help prevent additional contamination for occurring in the future.

EPA Response:

1.6.4 Comment: One commenter mentioned that it is clear that it cannot be assumed that short-chain PFAS with non-PFAA structures, such as GenX, are "safe" replacements for phased out long-chain PFAAs. An example of the potential toxicity of a replacement PFAS already approved by EPA based on minimal toxicity data is a substance referred to as "Solvay's Product" (CAS 329238-24-6) (Wang et al. 2013), a mixture of fluorinated polyether congeners with greater than 7 carbons; multiple congeners of the product have been tentatively identified in environmental media in New Jersey. The commenter noted that the toxicological effects of GenX are similar to those of PFOA and subsequent to EPA's approval, GenX was found to cause reproductive, developmental and carcinogenic effects. The commenter further noted that GenX has been found in ground water, surface water, and drinking water in the United States and overseas. The commenter noted that it is unfortunate that EPA did not develop toxicity values for GenX until after this widespread contamination was discovered and became a public concern.

EPA Response:

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/29/2019 7:06:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GENX CHEMICALS TRIAGE

I think its fine to reach out to Kris.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, October 29, 2019 1:53 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GENX CHEMICALS TRIAGE

Things to work on/chat about tomorrow (10/30)

- Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, October 16, 2019 10:06 AM
To: Strong, Jamie; Jacobs, Brittany; Miller, Gregory
Subject: GENX CHEMICALS TRIAGE
When: Wednesday, October 30, 2019 10:00 AM-11:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Work on UFs rationale

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/6/2020 9:53:57 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]
CC: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for your review of revised GenX assessment
Attachments: Draft GenX Assessment Resp to Public Comments 06 30 20bb.docx

Only one or two suggestions. You have addressed my comments. On to the next thing! Very nice job on this.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 01, 2020 8:05 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

Betsy,
Have you heard back from Tala? Can you ping her before you leave?

Thanks,
Jamie

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, June 18, 2020 10:01 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Request for your review of revised GenX assessment
Importance: High

Tala,
Attached is a draft of the GenX chemicals assessment. It has not yet been through a tech edit and has not been shared with our Office Director or the OW IO, so we ask that you not distribute this document. We would like your opinion on a few areas that have changed in response to new data, the public comments and NTP PWG review of the DuPont 90-day and repro/dev studies. We have allotted a week for your review, and would appreciate your comments by COB June 26.

To use your time most efficiently, we would like to request that you please focus your input on Section 6. The main topic areas where we would like OPPT's review are:

1. the selection of the critical study and effect (section 6.1; the critical study is still the DuPont repro/dev study, but endpoint has changed to a constellation of liver lesions in females based on the NTP PWG conclusions).
2. Several uncertainty factors have changed (section 6.3), and
3. We updated the systematic review (section 3.3) to include the work we have done since the draft went out for public comment. This includes the work we briefed you on in November 2019.

As always, we value your opinion and appreciate OPPT's support!

Thanks,

Betsy

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 7/7/2020 12:57:43 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Miller, Gregory shared "Draft GenX Assessment Resp to Public Comments 07 7 20bb" with you.

This is the most recent draft RTC including Betsy's responses to our most recent edits. I'm going to start cleaning it up now.

This link only works for the direct recipients of this message.

Draft GenX Assessment Resp to Public Comments 07 7 20bb

Open

Microsoft OneDrive

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 12/27/2018 7:15:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX

From: Mclain, Jennifer
Sent: Thursday, December 27, 2018 2:12 PM
To: Bahadori, Tina <Bahadori.Tina@epa.gov>
Cc: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Lape, Jeff <lape.jeff@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Dennis, Allison <Dennis.Allison@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>
Subject: Re: GenX

Tina
This is the final agency decision from the AO as I understand it.

We will convey the Agency's desire to move forward quickly to provide final assessments to states and local communities and also that the assessments have undergone scientific peer review.

Jennifer

On Dec 27, 2018, at 11:55 AM, Bahadori, Tina <Bahadori.Tina@epa.gov> wrote:

> No, we had not – thanks for sending, Jennifer. Do you know who denied these requests and on what basis? We don't want to formulate a response to the requestor without knowing what the appropriate talking points are.
>
> Thanks,
> Tina
>
> ---
>
> **From:** Mclain, Jennifer
> **Sent:** Thursday, December 27, 2018 1:52 PM
> **To:** Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
> **Subject:** Fwd: GenX
>
> FYI - assuming you've heard this too re: PFBS.
>
> Jennifer
>
> Begin forwarded message:
>
> > **From:** Mclain.Jennifer@epa.gov
> > **Date:** December 27, 2018 at 11:33:41 AM MST
> > **To:** Behl.Betsy@epa.gov, Nagle.Deborah@epa.gov, Strong.Jamie@epa.gov, Eric Burneson <Burneson.Eric@epa.gov>, Joe Tiago <Tiago.Joseph@epa.gov>,

Albert.Ryan@epa.gov, lape.jeff@epa.gov, Christina Wadlington <Wadlington.Christina@epa.gov>, Flaharty.Stephanie@epa.gov
Subject: GenX

All,

I'm not sure if you received this message already - EPA is not going to extend the comment period on the tox assessments.

OST - please let us know if you would like OGWDW to prepare the responses to the commenters that requested an extension or if you will handle this. Joe is in the office @ OGWDW.

Thanks
Jennifer

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 1/28/2019 12:54:59 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
Subject: FW: Joint comments by AWWA and NAWC regarding PFBS and GenX toxicity assessments
Attachments: 2019 01 22 AWWA NAWC Comments PFBS GenX Tox Assessments Submission.pdf

---

From: Steve Via <SVia@awwa.org>
Sent: Tuesday, January 22, 2019 5:53 PM
To: Sawyers, Andrew <Sawyers.Andrew@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Ross, David P <ross.davidp@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Rik Hull (Rik@nawc.com) <Rik@nawc.com>; Tracy Mehan <tmehan@awwa.org>
Subject: Joint comments by AWWA and NAWC regarding PFBS and GenX toxicity assessments

Good afternoon,

This afternoon the American Water Works Association and the National Association of Water Companies submitted the attached comment letter on the Agency's "Request for Public Review and Comment: Draft Human Health Toxicity Assessments for Hexafluoropropylene Oxide Dimer Acid and Its Ammonium Salt (GenX Chemicals) and for Perfluorobutane Sulfonic Acid (PFBS) and Related Compound Potassium Perfluorobutane Sulfonate (Docket ID No. EPA–HQ–OW–2018–0614)." Thank you for the opportunity to provide input to the Agency on this matter.

Best regards,
Steve Via

Steve Via
Director of Federal Relations
American Water Works Association
1300 Eye Street NW, Suite 701W
Washington, DC 20005-3314
Office 202.628.8303 | **Direct** 202.326.6130
svia@awwa.org | www.awwa.org

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 12/28/2018 6:52:01 PM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX
Attachments: Reade -- Denial letter2018-12-28-093057.pdf; Risotto -- Denial letter2018-12-28-092951.pdf

FYI, the Admin decided to deny the requests for extension of the public comment period.

From: Tiago, Joseph
Sent: Friday, December 28, 2018 10:22 AM
To: Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Dennis, Allison <Dennis.Allison@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Lape, Jeff <lape.jeff@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>
Subject: RE: GenX

Hi everyone,

Please find attached the signed letters. OW was fine with Deborah signing the letters.

The letters were emailed to the requestors this morning.

Thank you all for your help with this!

Joe.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/1/2019 2:51:06 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX docket has been updated

I will check in with Tim today. Sorry to keep bothering you guys. I know this is annoying, cant make it go faster.

From: Strong, Jamie
Sent: Friday, February 01, 2019 9:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: GenX docket has been updated

It says 37, but still only lists 22. Nothing from ACC, Chemours or NRDC outside of extension requests. I am getting daily pressure to ensure all comments submitted are uploaded any indication from docket when this will be complete?

Thanks,
Jamie

From: Miller, Gregory
Sent: Wednesday, January 30, 2019 3:43 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: GenX docket has been updated

It now contains 22 entries.

https://www.regulations.gov/docketBrowser?rpp=50&so=DESC&sb=commentDueDate&po=0&dct=PS&D=EPA-HQ-OW-2018-0614

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 2/4/2019 6:49:34 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX public comment screening spreadsheet + G: Pub Comment pdfs

Here are the links in the same email...

Ex. 6 Personal Privacy (PP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 1:34:16 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: finalizing GenX and PFBS

Call in Ex. 6 Personal Privacy (PP)
Conf c

-----Original Appointment-----
From: Behl, Betsy
Sent: Wednesday, February 06, 2019 4:33 PM
To: Behl, Betsy; Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Cc: Bahadori, Tina; Champlin, Anna
Subject: finalizing GenX and PFBS
When: Tuesday, February 12, 2019 8:30 AM-9:30 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

1. Touch base on awards for GenX and PFBS
2. Summary of public comments
3. Schedule: past and future

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 2/11/2019 8:13:00 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]

Subject: finalizing GenX and PFBS
Location: DCRoomWest5231M/DC-CCW-OST

Start: 2/12/2019 1:30:00 PM
End: 2/12/2019 2:30:00 PM
Show Time As: Tentative

Required Attendees: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Jones, Samantha; Lambert, Jason; Lavoie, Emma
Optional Attendees: Bahadori, Tina; Champlin, Anna

1. Touch base on awards for GenX and PFBS
2. Summary of public comments
3. Schedule: past and future

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/11/2019 8:35:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

Okay good.

From: Jacobs, Brittany
Sent: Monday, February 11, 2019 3:26 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

They also submitted to the docket. That's the Chemours lawyer, so he is accounted for in our summary.

From: Strong, Jamie
Sent: Monday, February 11, 2019 3:21 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: FW: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

This is the other request for extension.

From: Behl, Betsy
Sent: Monday, February 04, 2019 3:52 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

Sent to Deborah for response

From: Strong, Jamie
Sent: Monday, February 04, 2019 3:05 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: FW: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

FYI

From: Israel, Brian D. <Brian.Israel@arnoldporter.com>
Sent: Monday, February 04, 2019 3:02 PM
To: Ross, David P <ross.davidp@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Raines, Chase <Chase.Raines@arnoldporter.com>
Subject: RE: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

Greetings all; I am writing to request the date by which risk assessment comments will be due. I understood there would be an extension during the shutdown however the website is no longer accepting comments. We reiterate our request for a 30 day extension so that we can complete on-going efforts to collect information and data relevant to the GenX analysis.

I am happy to discuss.

Many thanks, Brian

Brian D. Israel
Arnold & Porter
601 Massachusetts Ave., NW
Washington, DC 20001-3743

Office: +1 202.942.6546
Mobile: +1 301.717.5876
brian.israel@arnoldporter.com
www.arnoldporter.com

From: Israel, Brian D.
Sent: Wednesday, January 16, 2019 12:07 PM
To: Ross.DavidP@epa.gov
Cc: Nagle.Deborah@epa.gov; Mclain.Jennifer@epa.gov; Bahadori.Tina@epa.gov; Strong.Jamie@epa.gov; Raines, Chase
Subject: Request for extension to comment period for GenX and PFBS, 83 Fed Reg. 58768

Dear Assistant Administrator Ross –

On behalf of Chemours, please see the attached request for an extension to provide comments.

In addition, I will be submitting this request via the online portal.

Please let me know if you would like to discuss. I look forward to hearing from you.

Thank you very much,

Brian

Brian D. Israel
Arnold & Porter
601 Massachusetts Ave., NW
Washington, DC 20001-3743

Office: +1 202.942.6546
Mobile: +1 301.717.5876
brian.israel@arnoldporter.com
www.arnoldporter.com

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/19/2019 1:07:50 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

I am frustrated to say the least.

From: Jacobs, Brittany
Sent: Tuesday, February 19, 2019 8:07 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

The ToxStrategies comments have been updated to include a reanalysis of the liver slides from our critical study (previously submitted a reanalysis of the 90 day mouse study) and Klaunig has more to say about how we reported the liver enzymes. Both provide additional comments.

From: Strong, Jamie
Sent: Tuesday, February 19, 2019 7:49 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

From: Chad Thompson <cthompson@toxstrategies.com>
Sent: Friday, February 15, 2019 6:20 PM
To: Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

To Whom It May Concern

Please see the attached letter, which includes additional public comments on the draft document *"Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'"* Thank you for your consideration of these comments.

Thank you,
Chad Thompson

Chad Thompson, Ph.D.
Managing Scientist

ToxStrategies, Inc.
23501 Cinco Ranch Blvd.
Suite B226
Katy, TX 77494

Direct Dial: 281.769.2195
Corporate Phone: 281.712.2062 Ext. 2002

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/19/2019 1:08:40 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

We will need to give Betsy a better sense of the content of the comments. I think we have a lot to deal with related to comments that are going after the crit study and effect and the MOA. Not easy.

From: Jacobs, Brittany
Sent: Tuesday, February 19, 2019 8:07 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

The ToxStrategies comments have been updated to include a reanalysis of the liver slides from our critical study (previously submitted a reanalysis of the 90 day mouse study) and Klaunig has more to say about how we reported the liver enzymes. Both provide additional comments.

From: Strong, Jamie
Sent: Tuesday, February 19, 2019 7:49 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

From: Chad Thompson <cthompson@toxstrategies.com>
Sent: Friday, February 15, 2019 6:20 PM
To: Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Additional public comments on the draft document "Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'

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Please see the attached letter, which includes additional public comments on the draft document *"Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3), also Known as 'GenX Chemicals.'"* Thank you for your consideration of these comments.

Thank you,
Chad Thompson

Chad Thompson, Ph.D.
Managing Scientist

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Direct Dial: 281.769.2195
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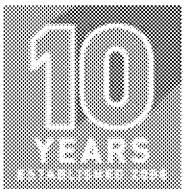

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Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 2/26/2019 9:48:48 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi all,

I'll be out of the office tomorrow and will not be able to attend or call in. Sorry to miss our next meeting.

Samantha

Samantha J. Jones, PhD
NCEA Associate Director
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
RRB 51214
(o) 202-564-6794; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy
Sent: Wednesday, February 6, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, February 27, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/27/2019 11:43:54 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: response to comments

Okay. So let me just confirm with Betsy that she wants something like we did for Rec Cyano. Ill then write up a TD to have them start. Will need to send all comments, I think I uploaded them to share drive? Are the two late ones there too?

From: Jacobs, Brittany
Sent: Wednesday, March 27, 2019 7:37 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: response to comments

I support TT summarizing main points too.

As an FYI, Barbara and I have started addressing ToxStrategies comments sort of point by point. It's still a bit of a hodgepodge of thoughts, but it is up on sharepoint here:

Ex. 6 Personal Privacy (PP)

My plan is to do the same with Klaunig's comments, then I will feel like we will have responses to most of the industry criticisms.

From: Miller, Gregory
Sent: Tuesday, March 26, 2019 10:08 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: response to comments

I'd support TT doing the summarizing of main points. Save Barbara's efforts for helping with the response to comments.

From: Strong, Jamie
Sent: Tuesday, March 26, 2019 10:05 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: response to comments

Or we could have TT do the summaries

From: Strong, Jamie
Sent: Tuesday, March 26, 2019 9:26 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: response to comments

So I am starting to get antsy about putting pen to paper. I know you both have been doing a lot work to develop approaches to respond to comments on specific issues and that's half the battle. I think we need to sit down and divvy out topics to start summarizing comments in a RTC document on Sharepoint. This can involve you two, Barbara and myself. For example, Barbara is familiar enough with the liver endpoint comments, maybe she can take the first crack and going through all comments and pulling comments out on endpoints and summarizing main points. Thoughts?

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/1/2019 1:53:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: TD for TT

I think we do want a RTC doc right?

From: Jacobs, Brittany
Sent: Monday, April 01, 2019 9:49 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: TD for TT

Here are some responses. I do not have the TT contract, so I'm not sure which subtasks under WA 4-15 should be used for this. The PFAS Document Technical Editing subtask seems more appropriate to me, but I'm not sure what is actually included in that subtask .

- By when you would want us to develop a draft Response to Comment Document for GenX Chemicals Assessment for your review?
    - EPA is asking for a summary of the public comments for the GenX Chemicals Assessment, not a Response to Comment Document. EPA asks that the summary document is completed in 2 weeks.
- We noticed that there are some comments related to the Perfluorobutane Sulfonic Acid (PFBS) and Related Compound Potassium Perfluorobutane Sulfonate Assessment available in the docket. Should we plan on developing a separate Response to Comment document for this assessment as well, or just develop one for GenX at this time?
    - No, EPA does not need a summary of public comments document for PFBS at this time, just develop a summary of public comments document for the GenX chemicals assessment.
- Also, it looks like this TD could be categorized under several existing subtasks under WA 4-15, Task 3. Please let us know if we should use the HH-AWQC Development subtask or the PFAS Document Technical Editing subtask for this TD.
    - ??

From: Strong, Jamie
Sent: Monday, April 01, 2019 8:31 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: TD for TT

Please help here.

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Wednesday, March 27, 2019 5:00 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: John Hochheimer <john.hochheimer@tetratech.com>
Subject: RE: TD for TT

Hi Shamima and Jamie,

We have a few initial questions below.

- By when you would want us to develop a draft Response to Comment Document for GenX Chemicals Assessment for your review?
- We noticed that there are some comments related to the Perfluorobutane Sulfonic Acid (PFBS) and Related Compound Potassium Perfluorobutane Sulfonate Assessment available in the docket. Should we plan on developing a separate Response to Comment document for this assessment as well, or just develop one for GenX at this time?
- Also, it looks like this TD could be categorized under several existing subtasks under WA 4-15, Task 3. Please let us know if we should use the HH-AWQC Development subtask or the PFAS Document Technical Editing subtask for this TD.

Thank you,

Sue

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Wednesday, March 27, 2019 3:34 PM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: TD for TT

Hi Sue, Please see the technical directions below from Jamie and let us now if you have any questions.

Thanks,
Shamima

TDs:
EPA is requesting that TT develop the Response to Comment Document for GenX Chemicals Assessment. Specifically, TT shall review all public comments (available at https://www.regulations.gov, docket EPA-HQ-OW-2018-0614) and summarize these comments based on the categories/topics presented in the attached outline. Attached is an outline with the major topic areas identified in the public comments and the two comments we received after the docket closed. TT shall also identify, and summarize upon approval by EPA, substantive categories/topics in addition to the categories/topics listed on EPA's outline. TT shall provide summaries that present the essence of all comments on a particular topic, including quotations from specific commenters as needed. TT will not develop EPA responses to these summaries. This TD is requesting work similar to what was done in the Response to Comment for the HHC Update in 2015.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Soares, Barbara [soares.barbara@epa.gov]
Sent: 4/4/2019 12:31:57 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Re: Options

Could we request a pre-publication copy of the "forthcoming" Chemours manuscript? May save us some time even if it will be published soon.

From: Jacobs, Brittany
Sent: Thursday, April 4, 2019 8:23:25 AM
To: Strong, Jamie; Miller, Gregory; Soares, Barbara
Subject: Options

Hi,

In prepping for our meeting with Tala next week and talking with Betsy the following week, I've put together some options for a path forward with the GenX chemicals assessment. The document begins with talking points to discuss with Tala, then lays out options for dealing with the main issues, and also goes into some tasks we would need to complete. I put it up on sharepoint here:

Ex. 6 Personal Privacy (PP)

Please edit and add any tasks that are missing.

Best,
Britt

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/15/2019 11:18:17 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: options for GenX comment responses/revisions

I am going to need to call into this. I have a refrigerator repairman coming between 2:30 and 5. Can you add a call in number. I cant make it at 2 as I need to drive home. Can we start at 2:30? Not sure when the guy will come in the 2:30-5 window, but I hope I am available

-----Original Appointment-----
From: Strong, Jamie
Sent: Wednesday, April 03, 2019 12:27 PM
To: Strong, Jamie; Miller, Gregory; Jacobs, Brittany; Behl, Betsy
Subject: options for GenX comment responses/revisions
When: Tuesday, April 16, 2019 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Betsy,
We need to talk to you about how to revise the document in response to comments and reanalysis of the critical endpoints.

Jamie

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2019 12:25:29 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
Subject: Re: Options

Awesome Brittany, thank you. I will look at this today or tomorrow.

From: Jacobs, Brittany
Sent: Thursday, April 4, 2019 8:23 AM
To: Strong, Jamie; Miller, Gregory; Soares, Barbara
Subject: Options

Hi,

In prepping for our meeting with Tala next week and talking with Betsy the following week, I've put together some options for a path forward with the GenX chemicals assessment. The document begins with talking points to discuss with Tala, then lays out options for dealing with the main issues, and also goes into some tasks we would need to complete. I put it up on sharepoint here:

Ex. 6 Personal Privacy (PP)

Ex. 5 Deliberative Process (DP)

Options for GenX Chemicals Assessment

Shared via SharePoint

Talking Points for Tala (OPPT) Meeting ... We received many comments asking why the GenX chemicals assessment had a different systematic review process than PFBS ...

Please edit and add any tasks that are missing.

Best,

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/16/2019 3:17:40 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: TD for TT
Attachments: Crosswalk for GenX Comment Numbers to Comment Letters.docx; Draft GenX Assessment Resp to Public Comments.docx

---

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Tuesday, April 16, 2019 8:13 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: John Hochheimer <john.hochheimer@tetratech.com>
Subject: RE: TD for TT

Jamie and Shamima,

Attached is the crosswalk file that shows the comment letter identifiers associated with each comment. I also reattached the draft comments summary document from yesterday. Please let us know if you have any questions.

Thank you,

Sue

From: Lanberg, Susan
Sent: Monday, April 15, 2019 2:53 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Akhter, Shamima <Akhter.Shamima@epa.gov>
Cc: Hochheimer, John <John.Hochheimer@tetratech.com>
Subject: RE: TD for TT

Jamie and Shamima,

Attached please find a draft version of the comment summaries for the Response to Comment Document for GenX Chemicals Assessment for your review. We didn't identify any substantive categories/topics in addition to the categories/topics listed on EPA's outline.

We did identify a "1.3.1 Limited Data Uncertainty" subcategory under the "1.3 Uncertainty Factors" category that includes the more detailed comments on uncertainty in the analyses. We also identified some relatively minor categories of "2.3 Implementation Tools," "3.1 General Support," and "4.1 Request for Extension." If you think it is better to move the comments from the additional categories to an existing section category from EPA's outline, that would be fine with us as well. We could also group some of the summarized comments together further after you've had a chance to review them.

We're in the process of finalizing the crosswalk showing the comment letter identifiers associated with each comment. We'll make sure to send the crosswalk to you by later today or tomorrow.

Please let us know if you have any comments or questions.

Thank you,

Sue

Susan Adair Lanberg | Environmental Scientist
Direct: (703) 385-1906, (703) 385-6000 ext.1906 | Fax: (703)385-6007
susan.lanberg@tetratech.com

Environmental Sciences
Innovative Solutions for Clean Water

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From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Monday, April 01, 2019 10:04 AM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: TD for TT

Hi Sue, Please see the responses below.

Thanks,
Shamima

From: Strong, Jamie
Sent: Monday, April 1, 2019 9:55 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>
Subject: FW: TD for TT

- By when you would want us to develop a draft Response to Comment Document for GenX Chemicals Assessment for your review?
    - EPA asks that the summary document is completed in 2 weeks.
- We noticed that there are some comments related to the Perfluorobutane Sulfonic Acid (PFBS) and Related Compound Potassium Perfluorobutane Sulfonate Assessment available in the docket. Should we plan on developing a separate Response to Comment document for this assessment as well, or just develop one for GenX at this time?
    - No, EPA does not need a summary of public comments document for PFBS at this time, just develop a summary of public comments document for the GenX chemicals assessment.
- Also, it looks like this TD could be categorized under several existing subtasks under WA 4-15, Task 3. Please let us know if we should use the HH-AWQC Development subtask or the PFAS Document Technical Editing subtask for this TD.
    - Yes under the PFAS tech edit subtask.

From: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Sent: Wednesday, March 27, 2019 5:00 PM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: John Hochheimer <john.hochheimer@tetratech.com>
Subject: RE: TD for TT

Hi Shamima and Jamie,

We have a few initial questions below.

- By when you would want us to develop a draft Response to Comment Document for GenX Chemicals Assessment for your review?
- We noticed that there are some comments related to the Perfluorobutane Sulfonic Acid (PFBS) and Related Compound Potassium Perfluorobutane Sulfonate Assessment available in the docket. Should we plan on developing a separate Response to Comment document for this assessment as well, or just develop one for GenX at this time?
- Also, it looks like this TD could be categorized under several existing subtasks under WA 4-15, Task 3. Please let us know if we should use the HH-AWQC Development subtask or the PFAS Document Technical Editing subtask for this TD.

Thank you,

Sue

From: Akhter, Shamima <Akhter.Shamima@epa.gov>
Sent: Wednesday, March 27, 2019 3:34 PM
To: Lanberg, Susan <Susan.Lanberg@tetratech.com>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: TD for TT

Hi Sue, Please see the technical directions below from Jamie and let us now if you have any questions.

Thanks,
Shamima

TDs:
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U.S. Environmental Protection Agency
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☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2019 12:28:29 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; DCRoomWest5231M/DC-CCW-OST [DCRoomWest5231M@epa.gov]

Subject: discuss public comments on GenX chemicals
Attachments: ToxStrategies on behalf of Chemours.pdf; Klaunig Indiana Univ.pdf
Location: DCRoomWest5231M/DC-CCW-OST

Start: 4/9/2019 4:00:00 PM
End: 4/9/2019 5:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Henry, Tala; DCRoomWest5231M/DC-CCW-OST

Sorry to do this over lunch, but it's the only time that appears to work for Betsy and Tala.

Attached comments pertaining to the critical endpoint and MOA.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/26/2019 11:42:57 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Good question.

From: Miller, Gregory
Sent: Wednesday, June 26, 2019 7:42 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Should we give them a heads up on the pathology slide situation for GenX?

From: Strong, Jamie
Sent: Wednesday, June 26, 2019 7:40 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Look at last sentence...GenX. Wonder what study/endpt they are using?

From: Strong, Jamie
Sent: Wednesday, June 26, 2019 7:31 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Greene, Sophie <Greene.Sophie@epa.gov>
Subject: FW: FYI only: Status of Michigan's PFAS MCL Development

FYI

From: Donohue, Joyce
Sent: Wednesday, June 26, 2019 7:30 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: FYI only: Status of Michigan's PFAS MCL Development

None of you are on this distribution list. Thus I am forwarding the communication.

From: Harris, Kimberly
Sent: Tuesday, June 25, 2019 6:21 PM
To: Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Cc: Donohue, Joyce <Donohue.Joyce@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Impellitteri, Christopher <Impellitteri.Christopher@epa.gov>; Allenbach, Becky <Allenbach.Becky@epa.gov>; Anderson-Carnahan, Linda <Anderson-Carnahan.Linda@epa.gov>; Ash, Christine <Ash.Christine@epa.gov>; Bahrman, Sarah <Bahrman.Sarah@epa.gov>; Cassidy, Meghan <Cassidy.Meghan@epa.gov>; DAgostino, Daniel <DAgostino.Daniel@epa.gov>; Morton, Michael <Morton.Michael@epa.gov>; Pabst, Douglas <Pabst.Douglas@epa.gov>; Rogers, Rick <rogers.rick@epa.gov>; Shields, Amy <Shields.Amy@epa.gov>; Small, Matthew <Small.Matthew@epa.gov>
Subject: FYI only: Status of Michigan's PFAS MCL Development

Hi Hannah,

I wanted to make OGWDW aware of the following.

On Thursday from 1-3pm ET, the Michigan PFAS Action Response Team (MPART) Science Advisory Workgroup will make recommendations on health-based values for PFAS in drinking water at a joint meeting of MPART and the state's Environmental Rules Review Committee. MPART member agencies will review the recommendations and consider referring them to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as part of EGLE's rulemaking process to establish state drinking water standards for PFAS. Meeting registration is available here: https://register.gotowebinar.com/register/7938087324058082049

The Science Advisory Workgroup is under a July 1, 2019, deadline to develop PFAS health-based recommendations for the EGLE and is expected to release recommendations for 5-7 PFAS chemicals, including PFOA, PFOS and GenX.

Thanks,
Kim

Kimberly M. Harris
U.S. EPA Region 5
PFAS Regional Coordinator

(312) 886-4239 Work
harris.kimberly@epa.gov

Water Division/OnOWB
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/26/2019 11:55:50 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: FYI only: Status of Michigan's PFAS MCL Development

FYI

From: Strong, Jamie
Sent: Wednesday, June 26, 2019 7:55 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Just as an update to you…OW sent a letter to Chemours officially requesting the slides. Betsy (my DD) reached out to them informally also to let them know the request is coming. Additionally, my OW sent a memo to NTP formally requesting a PWG be convened, we also talked to them beforehand to let them know that we needed help. So that's moving. Will know more on time frame once Chemours and NTP weigh in. Fingers crossed.

From: Kraft, Andrew
Sent: Wednesday, June 26, 2019 7:53 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

All things PFAS are crazy these days. It'll be useful to see where they land on the histo.

From: Strong, Jamie
Sent: Wednesday, June 26, 2019 7:51 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Yeah I wasn't either and it looks like they are developing a GenX number!

From: Kraft, Andrew
Sent: Wednesday, June 26, 2019 7:50 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: FYI only: Status of Michigan's PFAS MCL Development

Thank you, Jamie, I was not aware. It will be interesting to see where they fall out.
-Andrew

From: Strong, Jamie
Sent: Wednesday, June 26, 2019 7:42 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: FW: FYI only: Status of Michigan's PFAS MCL Development

Not sure if you are aware so passing along…they are developing values for several PFAS.

From: Harris, Kimberly
Sent: Tuesday, June 25, 2019 6:21 PM
To: Holsinger, Hannah <Holsinger.Hannah@epa.gov>

Cc: Donohue, Joyce <Donohue.Joyce@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Impellitteri, Christopher <Impellitteri.Christopher@epa.gov>; Allenbach, Becky <Allenbach.Becky@epa.gov>; Anderson-Carnahan, Linda <Anderson-Carnahan.Linda@epa.gov>; Ash, Christine <Ash.Christine@epa.gov>; Bahrman, Sarah <Bahrman.Sarah@epa.gov>; Cassidy, Meghan <Cassidy.Meghan@epa.gov>; DAgostino, Daniel <DAgostino.Daniel@epa.gov>; Morton, Michael <Morton.Michael@epa.gov>; Pabst, Douglas <Pabst.Douglas@epa.gov>; Rogers, Rick <rogers.rick@epa.gov>; Shields, Amy <Shields.Amy@epa.gov>; Small, Matthew <Small.Matthew@epa.gov>
Subject: FYI only: Status of Michigan's PFAS MCL Development

Hi Hannah,

I wanted to make OGWDW aware of the following.

On Thursday from 1-3pm ET, the Michigan PFAS Action Response Team (MPART) Science Advisory Workgroup will make recommendations on health-based values for PFAS in drinking water at a joint meeting of MPART and the state's Environmental Rules Review Committee. MPART member agencies will review the recommendations and consider referring them to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as part of EGLE's rulemaking process to establish state drinking water standards for PFAS. Meeting registration is available here: https://register.gotowebinar.com/register/7938087324058082049

The Science Advisory Workgroup is under a July 1, 2019, deadline to develop PFAS health-based recommendations for the EGLE and is expected to release recommendations for 5-7 PFAS chemicals, including PFOA, PFOS and GenX.

Thanks,
Kim

Kimberly M. Harris
U.S. EPA Region 5
PFAS Regional Coordinator

(312) 886-4239 Work
harris.kimberly@epa.gov

Water Division/OWDW
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/28/2019 12:59:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee

Thanks...perfect

-----Original Message-----
From: Jacobs, Brittany
Sent: Thursday, June 27, 2019 3:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee

Depends on the PFAS...PFNA, PFOA, PFOS and PFHxS used that MN toxicokinetic model for breastfeeding infants which makes the water intake vary by age and a 50% RSC; PFBS used water intake for children less than 1 year old and 20% RSC; PFHxA and GenX used adult DWI and 20%

-----Original Message-----
From: Strong, Jamie
Sent: Thursday, June 27, 2019 3:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee

And were all values for kids? Or gen pop?

-----Original Message-----
From: Strong, Jamie
Sent: Thursday, June 27, 2019 3:17 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee

Whats the RSC for GenX?

-----Original Message-----
From: Jacobs, Brittany
Sent: Thursday, June 27, 2019 3:13 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee

Hi Betsy,

Today we listened to a webinar on the Michigan PFAS Action Response Team's (MPART) recommended health-based drinking water values. These values were voted to become the draft MCLGs in an upcoming PFAS rulemaking (final rule adoption is targeted for April 2020). MPART recommended values for: PFNA (6 ppt), PFOA (8 ppt), PFHxA (400,000 ppt), PFOS (16 ppt), PFHxS (51 ppt), PFBS (420 ppt) and GenX (370 ppt). For PFBS and Genx, MPART used our draft toxicity values as the basis for their health-based values. I think we should probably give them a head's up about what's going on with those assessments since they voted today that those numbers should proceed to rulemaking. For PFOA they used ATSDR's draft assessment as the basis and for PFOS they used New Jersey and Minnesota Department of Health's assessments. I have attached the links to the slides presented today and the report for more details. Let me know if you have any questions!

https://www.michigan.gov/documents/pfasresponse/Health-Based_Drinking_Water_Value_Recommendations_for_PFAS_in_Michigan_Report_659258_7.pdf

https://www.michigan.gov/documents/pfasresponse/Michigan_Science_Advisory_Workgroup_Health_Based_Drinking_Water_Values_for_PFAS_in_Michigan_Presentation_659261_7.pdf

Britt

-----Original Appointment-----
From: ostrowskij2@michigan.gov <ostrowskij2@michigan.gov>
Sent: Wednesday, June 26, 2019 8:06 AM
To: ostrowskij2@michigan.gov
Subject: GoToWebinar - Joint Meeting of Michigan PFAS Action Response Team and Environmental Rules Review Committee
When: Thursday, June 27, 2019 1:00 PM-3:00 PM America/New_York.
Where: GoToWebinar - See conference call information below

1. Click and join at the specified time and date:
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The Michigan PFAS Action Response Team (MPART) Science Advisory Workgroup will make recommendations on health-based values for PFAS in drinking water at a joint meeting of MPART and the state's Environmental Rules Review Committee. MPART member agencies will review the recommendations and consider referring them the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as part of EGLE's rulemaking process to establish state drinking water standards for PFAS.

Appointment

From: Barr, Jacqui (DHHS) [BarrJ3@michigan.gov]
Sent: 9/24/2019 6:50:20 PM
To: Bailey, Jordan (DHHS-Contractor) [BaileyJ17@michigan.gov]; Jennifer Gray [GrayJ@michigan.gov]; mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) [MussaA@michigan.gov]; Vant Erve, Joost (DHHS-Contractor) [vantErveJ@michigan.gov]; slivers@michigan.gov; Wildfang, Eric (EGLE) [WILDFANGE@michigan.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: MDHHS-SouthGrand-Room-1H [MDHHS-SouthGrand-Room-1H@michigan.gov]; Keatley, Andrea (DHHS-Contractor) [KeatleyA1@michigan.gov]; Groetsch, Kory J. (DHHS) [GroetschK@michigan.gov]

Subject: Re-evaluation of GenX study discussion
Location: MDHHS-DEH-Conference-Line

Start: 9/30/2019 6:00:00 PM
End: 9/30/2019 7:00:00 PM
Show Time As: Tentative

Recurrence: (none)

Call-in information:

Ex. 6 Personal Privacy (PP)

Mobile participants:

Ex. 6 Personal Privacy (PP)

Tentative agenda:

1. Background on re-evaluation of the GenX DuPont study liver pathology slides
    a. Trigger for re-evaluation
    b. Any findings to date? Speculation on impact to US EPA draft toxicity value?
2. Timeline for final or sharable report

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/12/2019 3:43:58 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: re-evaluation of GenX study discussion?

FYI.

From: Gray, Jennifer (DHHS) <GrayJ@michigan.gov>
Sent: Wednesday, September 11, 2019 4:53 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Harris, Kimberly <harris.kimberly@epa.gov>
Subject: re-evaluation of GenX study discussion?

Dr. Strong,

Hello! I'm a toxicologist with the Michigan Department of Health and Human Services (MDHHS). Kim Harris, US EPA Region 5, contacted me today regarding the liver pathology slides from DuPont GenX study that were being re-evaluated. She said that you were the contact for discussion of the re-evaluation.

Based on your availability, I'd to set up a meeting with you and toxicologists in Michigan (MDHHS and Department of Environment, Great Lakes, and Energy [formerly Department of Environmental Quality]) in the next couple of weeks. If you would prefer

Thank you,
Jennifer

Jennifer Gray, Ph.D.
Toxicologist
Division of Environmental Health
Michigan Department of Health and Human Services
Phone: 517-281-3483
grayj@michigan.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/26/2019 12:04:43 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: call with MI

I would not share it just with them. we need to make it available to everyone, after we have been able to fully digest the content.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, September 24, 2019 3:06 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: call with MI

This is the agenda MI sent in advance of the discussion on the 30th...I don't know that we can share NTP report with them and no one else.

Tentative agenda:

1. Background on re-evaluation of the GenX DuPont study liver pathology slides
    a. Trigger for re-evaluation
    b. Any findings to date? Speculation on impact to US EPA draft toxicity value?
2. Timeline for final or sharable report

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Gray, Jennifer (DHHS) [GrayJ@michigan.gov]
Sent: 9/30/2019 5:24:42 PM
To: Barr, Jacqui (DHHS) [BarrJ3@michigan.gov]; Bailey, Jordan (DHHS-Contractor) [BaileyJ17@michigan.gov]; mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) [MussaA@michigan.gov]; Vant Erve, Joost (DHHS-Contractor) [vantErveJ@michigan.gov]; slivers@michigan.gov; Wildfang, Eric (EGLE) [WILDFANGE@michigan.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Keatley, Andrea (DHHS-Contractor) [KeatleyA1@michigan.gov]; Groetsch, Kory J. (DHHS) [GroetschK@michigan.gov]
Subject: RE: Re-evaluation of GenX study discussion

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-----Original Appointment-----
From: Barr, Jacqui (DHHS)
Sent: Monday, September 23, 2019 10:50 AM
To: Barr, Jacqui (DHHS); Bailey, Jordan (DHHS-Contractor); Gray, Jennifer (DHHS); MacKenzie-Taylor, Deb (DHHS); Mussa, Abiy (DHHS-Contractor); Vant Erve, Joost (DHHS-Contractor); Sliver, Steve (EGLE); Wildfang, Eric (EGLE); harris.kimberly@epa.gov; behl.betsy@epa.gov; strong.jamie@epa.gov; jacobs.brittany@epa.gov; miller.gregory@epa.gov
Cc: MDHHS-SouthGrand-Room-1H; Keatley, Andrea (DHHS-Contractor); Groetsch, Kory J. (DHHS)
Subject: Re-evaluation of GenX study discussion
When: Monday, September 30, 2019 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: MDHHS-DEH-Conference-Line

Tentative agenda:

1. Background on re-evaluation of the GenX DuPont study liver pathology slides

a. Trigger for re-evaluation
b. Any findings to date? Speculation on impact to US EPA draft toxicity value?

2. Timeline for final or sharable report

Appointment

From: Barr, Jacqui (DHHS) [BarrJ3@michigan.gov]
Sent: 9/30/2019 5:45:17 PM
To: Bailey, Jordan (DHHS-Contractor) [BaileyJ17@michigan.gov]; Jennifer Gray [GrayJ@michigan.gov]; mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) [MussaA@michigan.gov]; Vant Erve, Joost (DHHS-Contractor) [vantErveJ@michigan.gov]; slivers@michigan.gov; Wildfang, Eric (EGLE) [WILDFANGE@michigan.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: MDHHS-SouthGrand-Room-1H [MDHHS-SouthGrand-Room-1H@michigan.gov]; Keatley, Andrea (DHHS-Contractor) [KeatleyA1@michigan.gov]; Groetsch, Kory J. (DHHS) [GroetschK@michigan.gov]

Subject: Re-evaluation of GenX study discussion
Location: MDHHS-DEH-Conference-Line

Start: 9/30/2019 6:00:00 PM
End: 9/30/2019 7:00:00 PM
Show Time As: Tentative

Recurrence: (none)

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    a. Trigger for re-evaluation
    b. Any findings to date? Speculation on impact to US EPA draft toxicity value?
2. Timeline for final or sharable report

Message

From: Groetsch, Kory J. (DHHS) [GroetschK@michigan.gov]
Sent: 10/1/2019 10:23:36 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Harris, Kimberly [harris.kimberly@epa.gov]; Jennifer Gray [GrayJ@michigan.gov]; Barr, Jacqui (DHHS) [BarrJ3@michigan.gov]; Bailey, Jordan (DHHS-Contractor) [BaileyJ17@michigan.gov]; mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) [MussaA@michigan.gov]; Vant Erve, Joost (DHHS-Contractor) [vantErveJ@michigan.gov]; slivers@michigan.gov; Wildfang, Eric (EGLE) [WILDFANGE@michigan.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Keatley, Andrea (DHHS-Contractor) [KeatleyA1@michigan.gov]
Subject: Re: Re-evaluation of GenX study discussion

Good morning Brittany,

Thank you and your colleagues for the time, and I agree it was a good and helpful conversation. Thank you for providing the attachments.

Best Regards
Kory Groetsch

Get Outlook for iOS

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, October 1, 2019 6:06 AM
To: Harris, Kimberly; Gray, Jennifer (DHHS); Barr, Jacqui (DHHS); Bailey, Jordan (DHHS-Contractor); MacKenzie-Taylor, Deb (DHHS); Mussa, Abiy (DHHS-Contractor); Vant Erve, Joost (DHHS-Contractor); Sliver, Steve (EGLE); Wildfang, Eric (EGLE); Behl, Betsy; Strong, Jamie; Miller, Gregory
Cc: Keatley, Andrea (DHHS-Contractor); Groetsch, Kory J. (DHHS)
Subject: RE: Re-evaluation of GenX study discussion

Good Morning,

It was great to talk with you all yesterday. I am following up with some resources we discussed during our call. The first four PDFs are the public comments which prompted us to go to NTP to get an independent pathology review of the slides from DuPont's 84/85 day developmental/reproductive mouse study and the 90 day mouse study. The slides from both of these studies were re-evaluated in the ToxStrategies public comments and their conclusions were supported in Damien Shea's and James Klaunig's public comments. Also attached is the publication from the ToxStrategies re-evaluation of the slides (Thompson et al., 2019; published in the Journal of Applied Toxicology). Hopefully this information will be helpful!

All the best,

Brittany

From: Harris, Kimberly <harris.kimberly@epa.gov>

Sent: Monday, September 30, 2019 2:26 PM

To: Jennifer Gray <GrayJ@michigan.gov>; Barr, Jacqui (DHHS) <BarrJ3@michigan.gov>; Bailey, Jordan (DHHS-Contractor) <BaileyJ17@michigan.gov>; mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) <MussaA@michigan.gov>; Vant Erve, Joost (DHHS-Contractor) <vantErveJ@michigan.gov>; slivers@michigan.gov; Wildfang, Eric (EGLE) <WILDFANGE@michigan.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>

Cc: Keatley, Andrea (DHHS-Contractor) <KeatleyA1@michigan.gov>; Groetsch, Kory J. (DHHS) <GroetschK@michigan.gov>

Subject: RE: Re-evaluation of GenX study discussion

For the MI folks:

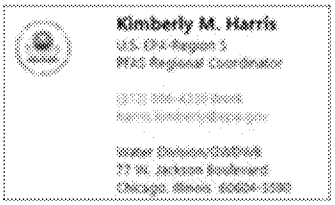
Questions regarding EPA's draft PFBS tox. value can be directed to Samantha Jones, ORD-NCEA Assoc Director

contact info: jones.samantha@epa.gov, phone 202-564-6794.

Andrew Kraft's contact info:kraft.andrew@epa.gov, phone: 202-564-0286.

Thanks,

Kim



From: Gray, Jennifer (DHHS) <GrayJ@michigan.gov>

Sent: Monday, September 30, 2019 12:25 PM

To: Barr, Jacqui (DHHS) <BarrJ3@michigan.gov>; Bailey, Jordan (DHHS-Contractor)

<BaileyJ17@michigan.gov>;mackenzie-taylord@michigan.gov; Mussa, Abiy (DHHS-Contractor) <MussaA@michigan.gov>; Vant Erve, Joost (DHHS-Contractor) <vantErveJ@michigan.gov>;slivers@michigan.gov; Wildfang, Eric (EGLE) <WILDFANGE@michigan.gov>; Harris, Kimberly <harris.kimberly@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>

Cc: Keatley, Andrea (DHHS-Contractor) <KeatleyA1@michigan.gov>; Groetsch, Kory J. (DHHS) <GroetschK@michigan.gov>

Subject: RE: Re-evaluation of GenX study discussion

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.....

-----Original Appointment-----

From: Barr, Jacqui (DHHS)

Sent: Monday, September 23, 2019 10:50 AM

To: Barr, Jacqui (DHHS); Bailey, Jordan (DHHS-Contractor); Gray, Jennifer (DHHS); MacKenzie-Taylor, Deb (DHHS); Mussa, Abiy (DHHS-Contractor); Vant Erve, Joost (DHHS-Contractor); Sliver, Steve (EGLE); Wildfang, Eric (EGLE);harris.kimberly@epa.gov; behl.betsy@epa.gov; strong.jamie@epa.gov;jacobs.brittany@epa.gov; miller.gregory@epa.gov

Cc: MDHHS-SouthGrand-Room-1H; Keatley, Andrea (DHHS-Contractor); Groetsch, Kory J. (DHHS)

Subject: Re-evaluation of GenX study discussion

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/17/2020 8:58:40 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: PFAS NC Update

Importance: High

OMG LOOK WHAT SHE ADDED

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, August 17, 2020 4:58 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: PFAS NC Update
Importance: High

Deborah,
Here are draft bullets for David Risley for the administrator. They wanted bullets on the toxicity assessment and work with NC.

- EPA is conducting toxicity assessments for two GenX chemicals (Hexafluoropropylene oxide (HFPO) dimer acid and its ammonium salt).
- The toxicity assessments identify and characterize the health hazards of these chemicals. These assessments include information that will help identify a particular hazard and the concentration that could cause health effects which is presented as a toxicity value or oral Reference Dose.
- RfDs are non-enforceable values that can be used by our state partners to address contamination concerns in a variety of exposure scenarios including drinking water, soil, or air. These values may also be used by EPA to determine any next steps that will be taken at the national level.

- In November 2018, EPA published a draft toxicity assessment for hexafluoropropylene oxide (HFPO) dimer acid HFPO dimer acid ammonium salt or GenX chemicals for public comment.
- The toxicity assessments present toxicity values (i.e., reference doses or RfDs) that when finalized can be combined with exposure information (e.g., for drinking water, ambient water, soil, air) to help characterize potential public health risks.
- The public comment period ended January 2019.
- Based on public comment and more recent publications, EPA requested the National Toxicology Program (NTP) Pathology Working Group (PWG) conduct an independent review of liver lesions observed in the two pertinent studies. That review took approximately one year.
- Currently, work is underway to address the public comments and NTP PWG results to revise the assessment.
- A final assessment will be ready for interagency review in December 2020.

- EPA is committed to protecting public health and working collaboratively with states to ensure that together, we are prepared to respond to findings of GenX chemicals in our Nation's waters.
- EPA is working closely with and supporting North Carolina and their public water systems to address GenX chemicals in the Cape Fear River.
- EPA provided technical expertise and consultation to North Carolina as they developed their provisional health goal. EPA continues to coordinate with North Carolina as we develop toxicity values for GenX chemicals.

From: Risley, David <Risley.David@epa.gov>
Sent: Monday, August 17, 2020 3:51 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lalley, Cara

<Lalley.Cara@epa.gov>
Subject: FW: PFAS NC Update

Jamie, this provides some context for the request. Thanks so much for your help.

Best,
David

David Risley
EPA Office of Water Communications
Office 202-343-9177
Cell 202-731-3068

From: Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Sent: Monday, August 17, 2020 9:36 AM
To: Risley, David <Risley.David@epa.gov>
Subject: FW: PFAS NC Update

Do you have some specific TPs that we could provide to Bill on the GenX work that we're doing? Just a quick update, why it's important to NC, etc. These can be rough.

From: Hoverman, Taylor <hoverman.taylor@epa.gov>
Sent: Monday, August 17, 2020 11:15 AM
To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Cc: Kolb, John (JohnMark) <kolb.john@epa.gov>; Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>; Washam, Todd <Washam.Todd@epa.gov>; Jenkins, Brandi <Jenkins.Brandi@epa.gov>
Subject: Re: PFAS NC Update

All of this sounds good. Thanks team!

Taylor Meredith
202-494-3662

Sent from my iPhone. Please excuse typos or brevity.

> On Aug 17, 2020, at 10:40 AM, Drinkard, Andrea <Drinkard.Andrea@epa.gov> wrote:
>
> Adding Brandi, who I just chatted with, to the chain. Brandi talked to Mary on Friday and our suggestion for the state is that Mary reach out to the secretary and talk through the event and see who the secretary would think would be best. JohnMark, Brandi will need the updated agenda or at least participants for the run of show so that Mary can share that with the Secretary. I know you're working on it, but Mary would like to reach out before she leaves for PR/USVI on Wednesday.
>
> Secondly, Taylor, as far as remarks I've asked Brandi to pull together some talking points on specific GenX/NC actions, so that we can slot those into the remarks. Brandi should have those together tomorrow. For now, we can include a placeholder. I'm also going to ask OW for an update on the GenX tox value process so that we can slot that in as well. Let me know if there's anything else we need to track down.
>
> Lastly, Brandi could you share the links to the two press releases that you noted while we were chatting? I should have asked you for them while we were talking ☹

Thanks!

From: Hoverman, Taylor <hoverman.taylor@epa.gov>
Sent: Friday, August 14, 2020 4:02 PM
To: Kolb, John (JohnMark) <kolb.john@epa.gov>; Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>
Cc: Washam, Todd <Washam.Todd@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Subject: RE: PFAS NC Update

You beat me to it – I've had a draft reply all to this group CC'ing Andrea that I hadn't sent yet. Andrea put together some draft remarks too that I'm taking a look at it and will get to Bill.

Taylor Meredith
Senior Advisor to the Administrator
U.S. Environmental Protection Agency
C: 202-494-3662
O: 202-566-2705

From: Kolb, John (JohnMark) <kolb.john@epa.gov>
Sent: Friday, August 14, 2020 4:01 PM
To: Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>; Hoverman, Taylor <hoverman.taylor@epa.gov>
Cc: Washam, Todd <Washam.Todd@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Subject: RE: PFAS NC Update

Looping in Drinkard.

So I just spoke to Hudson's office and they are going to confirm with him that a closed-press roundtable would be the best option, so we should know that early next week.

Also Andrea is going to reach out to R4 to see who from NCDEQ makes sense to invite. The Congressman will not reach out to them until they hear from us.

Sincerely,

JohnMark Kolb
Congressional Affairs
U.S. Environmental Protection Agency
C: (202) 713-0825

From: Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>
Sent: Friday, August 14, 2020 1:25 PM
To: Hoverman, Taylor <hoverman.taylor@epa.gov>; Kolb, John (JohnMark) <kolb.john@epa.gov>
Cc: Washam, Todd <Washam.Todd@epa.gov>
Subject: RE: PFAS NC Update

Taylor – Let us know if we should work on filling out a speaker engagement form or working with the region on talking points.

Thanks,

Abbey

From: Hoverman, Taylor <hoverman.taylor@epa.gov>
Sent: Friday, August 14, 2020 12:52 PM
To: Kolb, John (JohnMark) <kolb.john@epa.gov>
Cc: Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>; Washam, Todd <Washam.Todd@epa.gov>
Subject: RE: PFAS NC Update

JohnMark,

Happy to hear that went well! Thanks for sharing their plans for NC. Going to call you real quick to discuss a few things.

Taylor Meredith
Senior Advisor to the Administrator
U.S. Environmental Protection Agency
C: 202-494-3662
O: 202-566-2705

From: Kolb, John (JohnMark) <kolb.john@epa.gov>
Sent: Friday, August 14, 2020 12:46 PM
To: Hoverman, Taylor <hoverman.taylor@epa.gov>
Cc: Linsk, Abigail (Abbey) <Linsk.Abbey@epa.gov>; Washam, Todd <Washam.Todd@epa.gov>
Subject: PFAS NC Update

Hey Taylor,

Happy Friday! Wisconsin/Gallagher went great. I am going to raise this on the 1pm but can we find a time later this afternoon to touch base. I am copying what Hudson's office sent to me – Molina approved and said "reach out to Taylor to get things rolling."

For Tuesday, August 25th:

Hey JohnMark,

So we were able to flesh things out a little bit more. What do you think of the outline below? I will send over a much more detailed product as details firm up but wanted to give you something to work off of as we move forward. Let me know your thoughts or if there are changes y'all would like to see.

-Shaun

10:00 – 10:45 PFAS Action Plan Roundtable
Location: TBD
Confirmed Attendees: Administrator Wheeler, Rep. Hudson
Plan on inviting: State Rep John Szoka, Up to 2 County Commissioners, NCDEQ Secretary or Representative
Format: Roundtable Discussion of PFAS Action Plan. We'd like to start at a high level and then work towards NC specific concerns. The most prominent chemical in this area is GenX and will definitely come up so any specific updates y'all can provide there would be great. Rep. Hudson would likely kick things off and Introduce Administrator Wheeler to provide the update. Then go around the room to allow other parties to speak/ask questions.

10:45 – 11:00

Press Availability

Sincerley,

JohnMark Kolb
Congressional Affairs
U.S. Environmental Protection Agency
C: (202) 713-0825

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/22/2018 4:10:20 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX and NC

Okay hold off, meeting with NC Monday…you both will be invited. Let's see what they are interested in. Sorry to freak out.

From: Strong, Jamie
Sent: Thursday, March 22, 2018 11:56 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: GenX and NC
Importance: High

So we need to pull together a list of endpoints with dose-response ASAP. Betsy and I talked to John V in ORD (he's on the NC SAB) and then NC branch chief in charge of the assessment they are doing. NC is putting together a list of effects to BMD model.

What I need is a list for each study (28d, 90d, 2 yr, one gen and devel) that includes endpoints where there is stat sig dose response beginning at the low or mid dose. So no instances where you just see stat sig at high dose. Britt do you have this handy and can you pull together ASAP?

Come by and chat.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/22/2018 12:27:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: FW: Inside EPA: Science board backs North Carolina's GenX health goal

fyi

From: Burneson, Eric
Sent: Wednesday, August 22, 2018 8:24 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: Inside EPA: Science board backs North Carolina's GenX health goal

Betsy
Just in case you did not see this.

From: Flaharty, Stephanie
Sent: Wednesday, August 22, 2018 7:00 AM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Rodgers-Jenkins, Crystal <Rodgers-Jenkins.Crystal@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>
Subject: Inside EPA: Science board backs North Carolina's GenX health goal

Science board backs North Carolina's GenX health goal

August 21, 2018

North Carolina's science advisory board is endorsing the state health department's drinking water health goal and reference dose for GenX, the perfluorinated chemical, setting a marker for EPA just weeks before the agency is slated to unveil its own toxicity value.

North Carolina's science board Aug. 20 announced its findings endorsing the North Carolina Department of Health and Human Services' (DHHS) drinking water health goal of 140 parts per trillion (ppt), much more stringent than a health goal of 70,000 ppt proposed by the chemical's manufacturer, Chemours Co., the *Associated Press* (AP) reported.

While the board endorsed the values, it also advised that its recommendations be reviewed within three years to ensure health protection in light of ongoing research on the chemical world-wide.

GenX, a per- and polyfluoroalkyl substance (PFAS), has been used by manufacturers as a replacement for older PFAS, such as perfluorooctanoic acid (PFOA), that have been phased out. PFAS, some of which have been linked to adverse health effects including certain cancers, ulcerative colitis and thyroid disease, are comprised of thousands of perfluorinated chemicals known for their non-stick qualities used in a variety of commercial and industrial applications but are now raising alarm bells among communities across the country for their presence in drinking water systems.

In a new report, the science advisory board to DHHS and the state's Department of Environmental Quality (DEQ) notes GenX is an "emerging hazard" for which new studies are ongoing, but says it finds "the available evidence is adequate to inform the adoption of the [state's] reference dose and the provisional health goal." The board "commends" the reference dose of 1x10^-4 milligram/kilogram/day "by DHHS to DEQ as the foundation for establishing health-protective environmental standards."

"As additional validated studies to address long-term exposure concerns become . . . available for GenX and other PFAS, this value should be re-evaluated and modified as needed to protect sensitive populations and the environment," the board says in the report.

The *AP* reports that the state's provisional health goal cannot be enforced because it was not adopted through the process for setting enforceable limits. “The state health agency set the GenX mark for drinking water 'using the best available science as federal and state standards were not available,' spokeswoman Kelly Haight said Monday,” according to the *AP* story.

In North Carolina, citizens have fought Chemours' releases of GenX into the environment, pressing the state into action. The chemical has been found in the Cape Fear River, a source of drinking water for four counties in the state. Chemours manufactures the substance at a facility near Fayetteville, where concerns about levels of runoff and air emissions from the facility have led to monitoring and other actions from the state's environmental regulator.

A national coalition of citizens groups has called for regulators to set a 1 ppt level for combined PFAS in drinking water, much lower than existing health advisory levels for any PFAS.

Chemours did not respond by press time for comment on the board's report.

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/16/2018 4:56:21 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Fwd: For awareness - NC DEQ presentations on GenX from the EPA community meeting this week in Fayetteville

Sent from my iPhone

Begin forwarded message:

From: "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>
Date: August 16, 2018 at 7:23:47 AM PDT
To: "Behl, Betsy" <Behl.Betsy@epa.gov>, "Strong, Jamie" <Strong.Jamie@epa.gov>
Subject: For awareness - NC DEQ presentations on GenX from the EPA community meeting this week in Fayetteville

Hi Betsy, Jamie – in case you have not seen these, NC DEQ gave some good talks this week on their sampling for GenX in the area around Chemours in Fayetteville. I found the air talk particularly interesting (I have already shared with OAR). Figured you might be interested as well.

I suspect there will be a lot of interest in your assessment when it goes public…

Here are the links to the talks, with presenters names.

Linda Culpepper – water - https://files.nc.gov/ncdeq/GenX/epa-comm-mtg/Culpepper-EPA-Science-Panel-PFAS-Mtg-8-14-18.pdf

Mike Scott – private wells - https://files.nc.gov/ncdeq/GenX/epa-comm-mtg/Culpepper-EPA-Science-Panel-PFAS-Mtg-8-14-18.pdf

Mike Abraczinskas – air - https://files.nc.gov/ncdeq/GenX/epa-comm-mtg/Abraczinskas-EPA-PFAS-Stakeholder-mtg-Aug14-2018.pdf

NC PFAS web site: https://deq.nc.gov/news/hot-topics/genx-investigation

Regards, Andy

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/NERL
ORD Executive Lead for PFAS R&D

Office 919 541 3655 Cell 614 330 2226

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/22/2018 3:13:13 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: FW: GenX article

Hi, I'm guessing you already have this but wanted to share just in case.

https://insideepa.com/sites/insideepa.com/files/documents/2018/aug/epa2018_1498.pdf

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/23/2018 12:14:25 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: tox values

From the FRN: The subchronic RfD for GenX chemicals is 0.0002 mg/kg-day and the chronic RfD is 0.00008 mg/kg-d

From inside epa: In a new report, the science advisory board to DHHS and the state's Department of Environmental Quality (DEQ) notes GenX is an "emerging hazard" for which new studies are ongoing, but says it finds "the available evidence is adequate to inform the adoption of the [state's] reference dose and the provisional health goal." The board "commends" the reference dose of 1x10^-4 milligram/kilogram/day (0.0001 mg/kg-d).

Any idea why we have different values, given we are both doing bmd modeling and have the same endpoint?

Lets discuss

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Owens, Beth [Owens.Beth@epa.gov]
Sent: 8/5/2021 7:24:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: Monthly GenX Meeting
Attachments: PFBS final tox assessment_fact sheet 4-8-21 508.pdf; PFBS Comms Plan Roll Out 4-7-21 AD (002).docx; PFBS final tox assessment_tech fact sheet_ 4-7-21.docx; PFBS final tox assessment_fact sheet 4-7-21.docx

Hi Brittany-

You bet. Here are the closest to final versions that I have for our comms plan. There was a last minute change to the fact sheet that I don't have a word version for, it was language around the PFAS Action Plan, so I sent you the slightly older fact sheet in word. I honestly don't think we did a FRN for the final release.

Beth

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, August 5, 2021 3:07 PM
To: Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Monthly GenX Meeting

Hi Jason and Beth,

Hope you both are having a good week. I am beginning to work on the FRN and comms materials for finalizing GenX. I was going to dig up the old FRN and comms info from the draft release, but thought a better place to start would be the FRN and comms materials you used to finalize PFBS. Do you all have word versions of these items that you'd be willing to share with me?

Thanks in advance!
Britt

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, April 22, 2021 10:43 AM
To: Behl, Betsy; Jones, Samantha; Miller, GregoryG; Jacobs, Brittany; Lambert, Jason; Owens, Beth; Lavoie, Emma
Subject: Monthly GenX Meeting
When: Wednesday, August 4, 2021 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Microsoft Teams meeting

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Message

From: Liguori, Krista [liguori.krista@epa.gov]
Sent: 4/6/2018 6:16:39 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]
Subject: GenX News Updates Week April 6
Attachments: Gomis_2018_PFAAS.pdf

Hi all,

Here are the GenX updates this week:

PubMed/GoogleScholar March 30 - April 6

1. April 2018 – Comparing the toxic potency in vivo of long-chain perfluoroalkyl acids and fluorinated alternatives – Gomis, M., Vestergren, R., Borg, D., Cousins, I.T. Environment International [ATTACHED]
    a. https://www.sciencedirect.com/science/article/pii/S0160412017320020?via%3Dihub

Google News March 30 - April 6

1. April 3 – "UNCW Submits GenX Report to Environmental Review Commission" WWAY News
    a. https://www.wwaytv3.com/2018/04/03/uncw-submits-genx-report-to-environmental-review-commission/
2. April 3 - "Brunswick County Releases Latest GenX Numbers" WECT6
    a. http://www.wect.com/story/37871428/brunswick-county-releases-latest-genx-numbers
3. April 4 – "County Releases GenX Test Results from March Samples" Brunswick Beacon
    a. http://www.brunswickbeacon.com/content/county-releases-genx-test-results-march-samples
4. April 4 – "UNCW Researchers Release Initial Report of GenX Findings" WECT-TV6
    a. http://www.wect.com/story/37878952/uncw-researchers-release-initial-report-of-genx-findings
5. April 3 – "Little Hocking: GenX Found in Untreated Water" Parkersburg News
    a. http://www.newsandsentinel.com/news/local-news/2018/04/little-hocking-genx-found-in-untreated-water/
6. April 3 – "GenX Found in Ohio Town's Water Supply" The Fayetteville Observer
    a. http://www.fayobserver.com/news/20180403/genx-found-in-ohio-towns-water-supply
7. April 5 – "Hold the GenX: Leland Restaurant Switches to Bottled Water for Cooking" WECT6
    a. http://www.wect.com/story/37889732/hold-the-genx-leland-restaurant-switches-to-bottled-water-for-cooking
8. April 4 – "UNCW Researchers: GenX is in the Cape Fear's Sediment" StarNews Online
    a. http://www.starnewsonline.com/news/20180404/uncw-researchers-genx-is-in-cape-fears-sediment
9. April 4 – "UNCW Researchers: GenX Builds up in River Sediment, May Release Later into Drinking Water" WECT 6
    a. http://www.wect.com/story/37878952/uncw-researchers-genx-builds-up-in-river-sediment-may-release-later-into-drinking-water

Krista Liguori, MSPH
ORISE Participant
US Environmental Protection Agency
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division | Human Health Risk Assessment Branch

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/19/2018 7:32:07 PM
To: Harper, Ashley [harper.ashley@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Media inquiry from Fortune magazine re: GenX

I don't think we can answer 4.

From: Harper, Ashley
Sent: Thursday, April 19, 2018 3:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: Media inquiry from Fortune magazine re: GenX

Okay, I finally cleaned up there multiple emails and have concluded that we are supposed to answer the green highlighted questions below. I put in answers as I had them. Please send to me by COB Monday.

I wrote the answer for 6 so please look at that closely Jamie.

Ash

From: Wadlington, Christina
Sent: Thursday, April 19, 2018 11:30 AM
To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: Media inquiry from Fortune magazine re: GenX

Sounds good. Think this is where we are? I answered all our parts.

***

Q1. Just to confirm. Currently, there is no standard for release of GenX chemicals in the air or water?

A1. There are no drinking water regulations for GenX chemicals.

Q2. The below two items in BOLD are mentioned in the EPA Fact sheet (see attached):

A2. EPA has initiated an investigation into Chemours' compliance with a 2009 order issued under the Toxic Substances Control Act for the production of GenX to determine if the company is in compliance with the order to control releases at the Fayetteville facility.

Q3. Has this investigation been completed? If not, where is the process at this point? And why is it taking so long? Separately, the fact sheet mentions this:

A3. EPA has received the data from Chemours and is using it to update its risk assessment.

Q4. To that point. Help me understand risk assessment in the context of GenX. What do we know and what don't we know. Is this class of chemicals somehow more problematic? How does EPA help cut through the fear and uncertainty in

the public's mind? What is the challenge of modeling long-term, low dose exposure to emerging contaminants? Are there ways to speed up that process?

A4. OST

Q5. This is mentioned on this page: https://www.epa.gov/pfas/epa-actions-address-pfas (also attached) Developing human health toxicity values for GenX and PFBS (July 2018) Is that deadline on track? In laymen's terms, what does it mean to develop human health toxicity values.

A5. EPA is developing toxicity assessments for a select number of PFAS. These PFAS were chosen due to a number of factors including, including occurrence in the environment. Expected publication of these values is July 2018.

Toxicity assessment documents identify and characterize the health hazards of chemicals. These assessments include information to address the first two steps of the risk assessment process: hazard identification and dose-response. They also include descriptions of the health effects associated with each chemical and provide a Reference Dose. A Reference Dose, or RfD, is the amount of chemical someone can be exposed to for a lifetime and is not anticipated to cause harmful health effects.

Q6. How is that different from regulatory standards?

A6. . EPA is developing these toxicity values to provide tools our state partners can use to address contamination concerns in a variety of exposure scenarios. States and Tribes could use these non-regulatory toxicity values to develop their own concentration in water, soil, or air that is not expected to cause adverse effects over a certain length of time and level of exposure.

Q8. Related to this, is EPA conducting its own toxicity assessments? Or is it relying solely on existing research?

A8. EPA is using publicly available data to develop these toxicity assessments which will undergo an independent, contractor led letter peer-review.

Q9. Do these chemicals need to be regulated? Does EPA consider them unregulated at the present? Why or why not?

A9. EPA is currently conducting the scientific data collection and analysis called for under the Safe Drinking Water Act to evaluate PFOA and PFOS.

Q10. The Lautenberg amendments to TSCA were passed in a rare bipartisan moment. Is that spirit of cooperation/consensus still present as stakeholders work through the rulemaking/implementation process?

A10. OPPT

From: Drinkard, Andrea
Sent: Thursday, April 19, 2018 11:19 AM
To: Harper, Ashley <harper.ashley@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: Media inquiry from Fortune magazine re: GenX

That timing works for me. Yes, we'll get the full set. I'll loop you three into the larger email that Enesta sent so that we're all on the same page.

From: Harper, Ashley
Sent: Wednesday, April 18, 2018 4:34 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: Media inquiry from Fortune magazine re: GenX

Thanks for passing this on. Will we be able to review the other response and we are just leading 3 and 5 that I highlighted? What is the deadline, I see he says the 27th, I was thinking our initial draft COB Monday?

Ashley

From: Wadlington, Christina
Sent: Wednesday, April 18, 2018 4:19 PM
To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: Media inquiry from Fortune magazine re: GenX

Adding OST for their lead on the tox values part.

From: Drinkard, Andrea
Sent: Wednesday, April 18, 2018 4:13 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>
Subject: FW: Media inquiry from Fortune magazine re: GenX

From: Drinkard, Andrea
Sent: Tuesday, April 17, 2018 4:32 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>
Subject: FW: Media inquiry from Fortune magazine re: GenX

Can you track this one when you're back tomorrow?

From: Maguire, Megan
Sent: Monday, April 16, 2018 5:08 PM
To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Strauss, Linda <Strauss.Linda@epa.gov>; Millett, John <Millett.John@epa.gov>; Senn, John <Senn.John@epa.gov>; Hull, George <Hull.George@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Cc: Grantham, Nancy <Grantham.Nancy@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Jones, Enesta <Jones.Enesta@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: FW: Media inquiry from Fortune magazine re: GenX

Hi all- Fortune Magazine sent questions for ORD that Andrea, Nancy, Carolyn and I have discussed previously, and they should be finalized soon. Today, the reporter sent additional questions for the rest of the Agency, see below. Copying Enesta so she can help track this one.

Thanks,
Megan

Megan Maguire
US EPA, Office of Research and Development
RRB 41261
O: (202)564-6636
C: (202)731-9378

From: Ken Otterbourg [mailto:kenotterbourg@gmail.com]
Sent: Monday, April 16, 2018 4:49 PM
To: Maguire, Megan <Maguire.Megan@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>
Subject: Re: Media inquiry from Fortune magazine re: GenX

Megan, et al.

Hi. Here are the questions I would like answered by EPA. My deadline is 4/27. A week from Friday. That seems sufficient. I've attached several documents from EPA's website as reference information for some of the questions.

My basic aim here is to understand EPA's response to the GenX controversy to date.

1. Just to confirm. Currently, there is no standard for release of GenX chemicals in the air or water?

2. The below two items in BOLD are mentioned in the EPA Fact sheet (see attached):

EPA has initiated an investigation into Chemours' compliance with a 2009 order issued under the Toxic Substances Control Act for the production of GenX to determine if the company is in compliance with the order to control releases at the Fayetteville facility.

Has this investigation been completed? If not, where is the process at this point? And why is it taking so long?

Separately, the fact sheet mentions this:

EPA has received the data from Chemours and is using it to update its risk assessment.

Can you explain what this means?

To that point. Help me understand risk assessment in the context of GenX. What do we know and what don't we know. Is this class of chemicals somehowmore problematic? How does EPA help cut through the fear and uncertainty in the public's mind? What is the challenge of modeling long-term, low dose exposure to emerging contaminants? Are there ways to speed up that process?

3) This is mentioned on this page: https://www.epa.gov/pfas/epa-actions-address-pfas (also attached)

- Developing human health toxicity values for GenX and PFBS **(July 2018)**

Is that deadline on track? In laymen's terms, what does it mean to develop human health toxicity values. How is that different from regulatory standards?

Related to this, is EPA conducting its own toxicity assessments? Or is it relying solely on existing research?

4) Do these chemicals need to be regulated? Does EPA consider them unregulated at the present? Why or why not?

5) The Lautenberg amendments to TSCA were passed in a rare bipartisan moment. Is that spirit of cooperation/consensus still present as stakeholders work through the rulemaking/implementation process?

Is there anything else I need to know?

Thank you.

Ken

> On Mon, Apr 2, 2018, 3:58 PM Ken Otterbourg <kenotterbourg@gmail.com> wrote:
>
> Megan. I hope this helps.
>
> Thanks,
>
> Ken
>
> 1) Walk me through the science of finding minute amounts of chemicals in the water. How is technology changing this process. What does it mean that we can pinpoint smaller and smaller amounts of chemicals at the PPT level.
>
> Was the Cape Fear chosen for your original research mainly out of proximity?
>
> 2) How did all this come into play with the discovery of GenX in the Cape Fear First, is the forensics/process of finding chemicals -- particularly novel chemicals -- in the water. How has it changed. What does that mean.

3) I think I read somewhere that it can be difficult to identify what gets found in the water. Why is that so? and how does it get resolved. Was that the case with GenX

4) Why are these chemicals referred to as GenX, as opposed to HFPO-Dimer Acid. My understanding is that GenX covers a wide range of chemicals?

5) What do we know about GenX from a toxicology standpoint?

6) How do we keep up in a world where new chemicals are being created at a rapid pace? is there a better way to test and assess the safety of chemicals in a fast-changing world.

7) What are the next steps in your research in this area?

On Mon, Mar 26, 2018 at 4:43 PM, Maguire, Megan <Maguire.Megan@epa.gov> wrote:

Hi Ken- Your request to speak with Mark was shared with me. Can you send me the questions you plan to ask Mark?

Thanks,
Megan

Megan Maguire

Office of Research and Development, US EPA

From: Ken Otterbourg [mailto:kenotterbourg@gmail.com]
Sent: Monday, March 26, 2018 11:32 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: Journalist needs some help.

Mark: Hi. I'm a writer with Fortune magazine. I'm starting work on a piece about Chemours and GenX. I'm wondering if it might be possible to come down to the Triangle and meet with you. I live in Winston-Salem, so it's an easy drive.

Let me know. I'm on a fairly short deadline, so sooner is better than later. Thanks for your help. Call me if you want to discuss more in advance.

Best,

Ken Otterbourg

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Ken Otterbourg / 336.529.5939 / kenotterbourg.com / @otterbourg

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Ken Otterbourg / 336.529.5939 / kenotterbourg.com / @otterbourg

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Ken Otterbourg / 336.529.5939 / kenotterbourg.com / @otterbourg

Message

From: Liguori, Krista [liguori.krista@epa.gov]
Sent: 7/23/2018 12:22:30 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: GenX News Updates July 20

Hi all,

Here are the news updates on GenX for last week!

PubMed / Google Scholar Updates July 14th-20th:

- none

Google News Updates July 14th-20th:

- July 20th
  - Local leaders send letter to Chemours; NHC commissioner Watkins 'sick and tired' of company's silence: http://www.wect.com/story/38687158/wilmington-mayor-nhc-board-of-commissioners-chair-send-letter-to-chemours
  - Wilmington, New Hanover officials ask Chemours to hold public meeting: http://www.starnewsonline.com/news/20180719/wilmington-new-hanover-officials-ask-chemours-to-hold-public-meeting
  - Officials seek meeting with Chemours: https://www.coastalreview.org/2018/07/officials-seek-meeting-with-chemours/
  - Chemours 'fix-it man' faces daunting task: https://www.coastalreview.org/2018/07/chemours-fix-it-man-faces-daunting-task/
- July 19th
  - Residents Hope Carbon Units can get Rid of GenX: http://spectrumlocalnews.com/nc/triangle-sandhills/news/2018/07/19/residents-hope-carbon-units-can-get-rid-of-genx
  - DEQ doesn't recommend carbon filters, says Chemours jumped the gun: https://www.bladenjournal.com/news/19109/deq-doesnt-recommend-carbon-filters-says-chemours-jumped-the-gun
  - Residents near Chemours plant will get blood test: https://www.northcarolinahealthnews.org/2018/07/19/residents-near-chemours-plant-will-get-blood-tested/
- July 18th
  - State not consulted before Chemours offered 'quick fix' to tainted well homeowners: https://www.wwaytv3.com/2018/07/18/state-not-consulted-before-chemours-offered-quick-fix-to-tainted-well-homeowners/
  - Chemours offers filters to owners of tainted water wells: http://wcti12.com/news/state-news/chemours-offers-filters-to-owners-of-tainted-water-wells
    - "will install and maintain granular activated carbon filtration systems at homes with levels above state's health goal"
- July 17th
  - Health officials to begin testing Chemours neighbors for GenX: https://www.wral.com/health-officials-to-begin-testing-chemours-neighbors-for-genx/17703707/
  - Residents' blood, urine to get tested for GenX: https://www.robesonian.com/news/113233/residents-blood-urine-to-get-tested-for-genx
- July 16th
  - Lawsuit filed to halt GenX emissions: https://www.coastalreview.org/2018/07/lawsuit-filed-to-halt-genx-emissions/

- July 14th
    - Residents: GenX contamination must be stopped: http://www.fayobserver.com/news/20180714/residents-genx-contamination-must-be-stopped
    - Correction of the false/misleading titles from last week's google news was published by Calgon:
        - CALGON CARBON ADDRESSES INACCURACIES IN MEDIA REPORTS SURROUNDING PFAS & GenX CONTAMINATION: https://globenewswire.com/news-release/2018/07/13/1537287/0/en/CALGON-CARBON-ADDRESSES-INACCURACIES-IN-MEDIA-REPORTS-SURROUNDING-PFAS-GenX-CONTAMINATION.html
        - Essentially, news outlets were saying Calgon was partially responsible for releasing GenX, which they say is untrue they just share a wastewater output

Krista Liguori, MSPH
ORISE Participant
US Environmental Protection Agency
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division | Human Health Risk Assessment Branch

Message

From: Lalley, Cara [Lalley.Cara@epa.gov]
Sent: 9/18/2018 2:38:01 PM
To: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: please save any GenX comms you are working on in Sharepoint and close them now

Importance: High

Against my suggestion, Andrea is pulling the docs out of Sharepoint to clean them up the next two hours. She says she'll save them back when she's done.

I will have to keep an eye on version control and delete any old versions once I see what she uploads.

Cara Lalley
Communications Coordinator
Office of Science & Technology
U.S. EPA Office of Water
(202) 566-0372 (desk)
(202) 288-9435 (cell)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/24/2018 2:10:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Comments on Comms Materials
Attachments: GenX PFBS Draft Tox Assess_tech fact sheet.9.24.18. jbsDOCX.DOCX

My comments

From: Strong, Jamie
Sent: Monday, September 24, 2018 10:04 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Comments on Comms Materials

Take a look.

From: Wadlington, Christina
Sent: Monday, September 24, 2018 9:44 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: Comments on Comms Materials

Morning!

Can you take a look at the attached. This includes edits from OCSPP and OGC. (Note, the engagement one is included for completeness, no comments to address).

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/24/2018 2:03:55 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Comments on Comms Materials
Attachments: GenX PFBS Draft Tox Assess_tech fact sheet.9.24.18.DOCX; Public Fact Sheet_9.24.18.docx; PressRelease_GenXPFBStoxicityassessments_9.24.18.docx; Engagement Process Draft Tox Assessments_9.24.18.DOCX

Take a look.

From: Wadlington, Christina
Sent: Monday, September 24, 2018 9:44 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: Comments on Comms Materials

Morning!

Can you take a look at the attached. This includes edits from OCSPP and OGC. (Note, the engagement one is included for completeness, no comments to address).

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/24/2018 4:01:53 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Comments on Comms Materials
Attachments: Public Fact Sheet_9.24.18 jbs_blj_gMiller.docx; GenX PFBS Draft Tox Assess_tech fact sheet.9.24.18. jbs_blj_gMiller.docx; PressRelease_GenXPFBStoxicityassessments_9.24.18_blj_gMiller.docx

Comments attached.

From: Strong, Jamie
Sent: Monday, September 24, 2018 10:34 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Comments on Comms Materials

So they want comments by 1pm today. Send me what you have on both by noon.

Thanks and sorry for short turn around.

From: Strong, Jamie
Sent: Monday, September 24, 2018 10:16 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Comments on Comms Materials

This one too…its evident these comments are from nancy.

From: Strong, Jamie
Sent: Monday, September 24, 2018 10:10 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Comments on Comms Materials

My comments

From: Strong, Jamie
Sent: Monday, September 24, 2018 10:04 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Comments on Comms Materials

Take a look.

From: Wadlington, Christina
Sent: Monday, September 24, 2018 9:44 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: Comments on Comms Materials

Morning!

Can you take a look at the attached. This includes edits from OCSPP and OGC. (Note, the engagement one is included for completeness, no comments to address).

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/11/2018 4:03:02 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Any further comments from the comms folks?
Attachments: RE: [Non-DoD Source] Draft Communications Materials for Draft Toxicity Assessments (UNCLASSIFIED); RE: Draft Communications Materials for Draft Toxicity Assessments; NASA comments, EPA draft Comm documents, PFBS and GenX; RE: Time to check in today? EOM

Yikes!

From: Drinkard, Andrea
Sent: Thursday, October 11, 2018 11:37 AM
To: Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Cc: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Any further comments from the comms folks?

Here are the full set of comments. After looking through them, I'm wondering if it would make sense for someone on this chain to take a first pass at reviewing the comments and suggesting edits. There are some that are relatively straightforward, while others raises science questions and specifics about risk that I'm not sure how best to handle. If someone is willing to take a short out that, let me know. Otherwise I will start working my way through the docs and will share track changes versions as they're ready.

Thanks.

ATSDR

RE: Time to check in today? EOM

NASA

NASA comments, EPA draft Comm ...

OMB

RE: Draft Communications...

DoD

RE: [Non-DoD Source] Draft Co...

From: Mattas-Curry, Lahne
Sent: Thursday, October 11, 2018 10:14 AM

To: Drinkard, Andrea <Drinkard.Andrea@epa.gov>
Cc: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: Any further comments from the comms folks?

Ok sounds good. Please copy Anna Champlin on the comments since I am out tomorrow and Monday.
Thank you!

From: Drinkard, Andrea
Sent: Thursday, October 11, 2018 10:13 AM
To: Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Cc: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: Re: Any further comments from the comms folks?

I will send an email with all the comments. I was planning on working through them today.

On Oct 11, 2018, at 10:12 AM, Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov> wrote:

Should I start working on the ATSDR comments or did we get more from other agencies?

Lahne Mattas-Curry
U.S. EPA
Office of Research and Development
Communications
Office: 202.564.3165
cell: 202.573.0346

Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 10/16/2018 6:08:02 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Lalley, Cara [Lalley.Cara@epa.gov]
Subject: RE: single cell necrosis
Attachments: GenX PFBS Draft Tox Assess_tech fact sheet.10.16.18 revised.DOCX

OK, I've gone through all the comments and tried to fix the best I could. I've highlighted ones where I need your help. I think these are all pretty easily addressed actually. Re: the critical effect, I'm interpreting their comments as simply wanting more justification/rationale. See what you think. When we're done with this we need to send to ORD so they can plug in the stuff on PFBS.

THANKS!

From: Jacobs, Brittany
Sent: Tuesday, October 16, 2018 12:55 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

For liver effects in the parental mice (this was a developmental/reproductive study) the NOAEL = 0.1 mg/kg-day and the LOAEL = 0.5 mg/kg-day

---

From: Flaherty, Colleen
Sent: Tuesday, October 16, 2018 12:50 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

Excellent! I think I'll use a lot of that.

What's the NOAEL and LOAEL from that study?

From: Jacobs, Brittany
Sent: Tuesday, October 16, 2018 12:43 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

Here is some language from our assessment (in 6.1 Study and Endpoint Selection) :

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Flaherty, Colleen
Sent: Tuesday, October 16, 2018 12:29 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: single cell necrosis

Hi - Can one of you guys point me to the text in the assessment that justifies the selection of single cell necrosis as an adverse effect? I'm working on the tech fact sheet. Thanks.

Colleen M. Flaherty | Associate Director
Health and Ecological Criteria Division
U.S. EPA Office of Water

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/16/2018 3:16:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Request for Formal Recommendations

Can you send this to Colleen as attachment?

From: Jacobs, Brittany
Sent: Monday, October 15, 2018 5:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for Formal Recommendations

Hi Jamie,

Greg and I worked on the public fact sheet for a bit today. We uploaded it to the sharepoint so we could both work on it:

Ex. 6 Personal Privacy (PP)

Britt

From: Strong, Jamie
Sent: Monday, October 15, 2018 1:20 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: Request for Formal Recommendations

Take a look, this is maddening.

From: Flaherty, Colleen
Sent: Monday, October 15, 2018 9:17 AM
To: Strong, Jamie
Subject: FW: Request for Formal Recommendations

Can you add the health effects info?

From: Hautman, Dan
Sent: Friday, October 12, 2018 5:18 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: RE: Request for Formal Recommendations

See attached draft responses to the questions from Dupage Co. I've pasted the questions (w/ draft redline responses) into the attached Word file and have included the incoming letter for completeness.
Even though no recommendations are included for subsequent well monitoring, I've included some draft response fodder under question 4, for completeness and recognizing some aspects might have application in the final response.

Colleen – see the flagged areas associated with health effects.

I'm available next week to continue the discussion and assist with refining the final response.

From: Burneson, Eric
Sent: Friday, October 12, 2018 3:07 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hautman, Dan <Hautman.Dan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: RE: Request for Formal Recommendations

All:
Based on commitments made by the Office of Air we need to have a response to OAR by next Thursday so that they can send by Friday.

Thanks for your work on this.
Eric

From: Burneson, Eric
Sent: Thursday, October 11, 2018 2:05 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hautman, Dan <Hautman.Dan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: FW: Request for Formal Recommendations

Christina:
Thank you for starting preparation of a draft response to the attached letter from Dupage County. Per our discussion with the office of Air we will be drafting a response to the questions posed.
Please work with Greg and Dan on the technical responses regarding monitoring for ethylene oxide and ethylene glycol. I have also asked them to coordinate with OST on oral toxicity for ethylene glycol. Once drafted we will be coordinating with the Office of Air to assure consistency with their communications on this site.

Eric Burneson, P.E.
Director of Standards and Risk Management
Office of Ground Water and Drinking Water

U.S. Environmental Protection Agency
202 564 5250

From: Poy, Thomas
Sent: Thursday, October 04, 2018 12:41 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Holst, Linda <holst.linda@epa.gov>; Stepp, Cathy <stepp.cathy@epa.gov>; Johnson, Mark <johnson.mark@epa.gov>
Subject: FW: Request for Formal Recommendations

Peter/Eric: I sent you both an email on Tuesday about a HQ response to questions from DuPage County Health Department about ethylene oxide in drinking water. It looks like ethylene glycol is also a concern. Attached is a formal request for recommendations for the health department.

Tom

Tom Poy
Chief, Ground Water and Drinking Water Branch
USEPA - Region 5
(312) 886-5991

From: Karen J. Ayala [mailto:kayala@dupagehealth.org]
Sent: Thursday, October 04, 2018 10:59 AM
To: Johnson, Mark <johnson.mark@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>; Stepp, Cathy <stepp.cathy@epa.gov>
Subject: FW: Request for Formal Recommendations

Good Morning, All,
I am re-sending this document to all. I would very much appreciate an acknowledgement of receipt, as well as if there is any time frame that I can expect a reply to these pressing concerns. Again, I very much appreciate all of the support you have provided to our community, and look forward to resolving this matter quickly.

Thanks again, Karen

Karen J. Ayala
Executive Director
DuPage County Health Department
Phone: (630) 221-7401
Email: kayala@dupagehealth.org

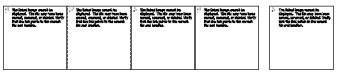
From: Karen J. Ayala
Sent: Tuesday, October 2, 2018 1:36 PM
To: 'Stepp.cathy@Epa.gov' <Stepp.cathy@Epa.gov>
Subject: Request for Formal Recommendations

Administrator Stepp,
Please find the attached letter outlining our formal request for recommendations regarding groundwater concerns in Willowbrook, IL. I very much appreciate your office's ongoing support in addressing issues with our community, and would further appreciate your assistance with these concerns.

Thank you, Karen

Karen J. Ayala
Executive Director
DuPage County Health Department
Phone: (630) 221-7401
Email: kayala@dupagehealth.org

For up to date news and information on the DuPage County Health Department, please follow us on Twitter @DuPageHD and become a fan on Facebook.



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DuPage County Health Department

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 10/15/2018 11:48:34 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Miller, Gregory shared "GenX Chem Comms material _ Interagency Review comments 10 11 18" with you.

Ok. The document has been relocated to this address on our HHRAB sharepoint. Use this link instead of the other I sent.

Ex. 6 Personal Privacy (PP)

From: Strong, Jamie
Sent: Friday, October 12, 2018 7:03 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Miller, Gregory shared "GenX Chem Comms material _ Interagency Review comments 10 11 18" with you.

Okay, lets stop here and I will talk to BB. She pushed back.

From: Jacobs, Brittany
Sent: Thursday, October 11, 2018 5:12 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Miller, Gregory shared "GenX Chem Comms material _ Interagency Review comments 10 11 18" with you.

Didn't get too far. The DOD comments are really frustrating.

From: Miller, Gregory
Sent: Thursday, October 11, 2018 1:28 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Miller, Gregory shared "GenX Chem Comms material _ Interagency Review comments 10 11 18" with you.

Drafting list of Comms GenX technical comments underway...

This link only works for the direct recipients of this message.

GenX Chem Comms material _ Interagency Review comments 10 11 18

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 10/16/2018 3:24:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Request for Formal Recommendations

Thanks. I'm working on the technical fact sheet now so will give you a call with questions in a bit.

From: Jacobs, Brittany
Sent: Tuesday, October 16, 2018 11:22 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for Formal Recommendations

Hi Colleen,

Greg and I provided some edits/thoughts on the General Public Fact Sheet for the GenX chemicals assessment (attached).

Thanks,
Britt

From: Strong, Jamie
Sent: Monday, October 15, 2018 1:20 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: Request for Formal Recommendations

Take a look, this is maddening.

From: Flaherty, Colleen
Sent: Monday, October 15, 2018 9:17 AM
To: Strong, Jamie
Subject: FW: Request for Formal Recommendations

Can you add the health effects info?

From: Hautman, Dan
Sent: Friday, October 12, 2018 5:18 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: RE: Request for Formal Recommendations

See attached draft responses to the questions from Dupage Co. I've pasted the questions (w/ draft redline responses) into the attached Word file and have included the incoming letter for completeness.
Even though no recommendations are included for subsequent well monitoring, I've included some draft response fodder under question 4, for completeness and recognizing some aspects might have application in the final response.

Colleen – see the flagged areas associated with health effects.

I'm available next week to continue the discussion and assist with refining the final response.

From: Burneson, Eric
Sent: Friday, October 12, 2018 3:07 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hautman, Dan <Hautman.Dan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: RE: Request for Formal Recommendations

All:
Based on commitments made by the Office of Air we need to have a response to OAR by next Thursday so that they can send by Friday.

Thanks for your work on this.
Eric

From: Burneson, Eric
Sent: Thursday, October 11, 2018 2:05 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Hautman, Dan <Hautman.Dan@epa.gov>; Carroll, Gregory <Carroll.Gregory@epa.gov>
Cc: Huff, Lisa <Huff.Lisa@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>
Subject: FW: Request for Formal Recommendations

Christina:
Thank you for starting preparation of a draft response to the attached letter from Dupage County. Per our discussion with the office of Air we will be drafting a response to the questions posed.
Please work with Greg and Dan on the technical responses regarding monitoring for ethylene oxide and ethylene glycol. I have also asked them to coordinate with OST on oral toxicity for ethylene glycol. Once drafted we will be coordinating with the Office of Air to assure consistency with their communications on this site.

Eric Burneson, P.E.
Director of Standards and Risk Management
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency

202 564 5250

From: Poy, Thomas
Sent: Thursday, October 04, 2018 12:41 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Holst, Linda <holst.linda@epa.gov>; Stepp, Cathy <stepp.cathy@epa.gov>; Johnson, Mark <johnson.mark@epa.gov>
Subject: FW: Request for Formal Recommendations

Peter/Eric: I sent you both an email on Tuesday about a HQ response to questions from DuPage County Health Department about ethylene oxide in drinking water. It looks like ethylene glycol is also a concern. Attached is a formal request for recommendations for the health department.

Tom

Tom Poy
Chief, Ground Water and Drinking Water Branch
USEPA - Region 5
(312) 886-5991

From: Karen J. Ayala [mailto:kayala@dupagehealth.org]
Sent: Thursday, October 04, 2018 10:59 AM
To: Johnson, Mark <johnson.mark@epa.gov>; Poy, Thomas <poy.thomas@epa.gov>; Stepp, Cathy <stepp.cathy@epa.gov>
Subject: FW: Request for Formal Recommendations

Good Morning, All,
I am re-sending this document to all. I would very much appreciate an acknowledgement of receipt, as well as if there is any time frame that I can expect a reply to these pressing concerns. Again, I very much appreciate all of the support you have provided to our community, and look forward to resolving this matter quickly.

Thanks again, Karen

Karen J. Ayala
Executive Director
DuPage County Health Department
Phone: (630) 221-7401
Email: kayala@dupagehealth.org

From: Karen J. Ayala
Sent: Tuesday, October 2, 2018 1:36 PM
To: 'Stepp.cathy@Epa.gov' <Stepp.cathy@Epa.gov>
Subject: Request for Formal Recommendations

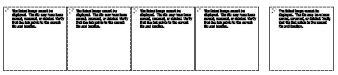
Administrator Stepp,

Please find the attached letter outlining our formal request for recommendations regarding groundwater concerns in Willowbrook, IL. I very much appreciate your office's ongoing support in addressing issues with our community, and would further appreciate your assistance with these concerns.

Thank you, Karen

Karen J. Ayala
Executive Director
DuPage County Health Department
Phone: (630) 221-7401
Email: kayala@dupagehealth.org

For up to date news and information on the DuPage County Health Department, please follow us on Twitter @DuPageHD and become a fan on Facebook.



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DuPage County Health Department

Message

From: Liguori, Krista [liguori.krista@epa.gov]
Sent: 10/19/2018 5:25:33 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: GenX News Updates for October 12-19th

Hi all,

Here are the news updates on GenX for October 12th through the 19th!

PubMed/ Google Scholar:

- Positive ionization and electron attachment of hexafluoropropylene oxide in different cluster environments: https://www.sciencedirect.com/science/article/pii/S1387380618303154

Google News

- October 19
  - GenX undetected in Bloodstreams of North Carolina Chemical Plant Neighbors: https://www.insurancejournal.com/news/southeast/2018/10/19/505077.htm
- October 18
  - DHHS Announces Results of Chemours Neighbors' Blood, Urine Tests: https://www.northcarolinahealthnews.org/2018/10/18/dhhs-announces-results-of-chemours-neighbors-blood-urine-tests/
  - Sludge from Chemours plant dumped in Sampson County landfill: https://www.fayobserver.com/news/20181018/sludge-from-chemours-plant-dumped-in-sampson-county-landfill
- October 17
  - City was proactive about contaminants: https://www.greensboro.com/opinion/letters_to_editor/city-was-proactive-about-contaminants/article_d2395061-52f7-56ea-b19c-526285e5dd4a.html
- October 16
  - Tests find man-made chemicals, but not GenX, in blood of residents near Chemours plant: https://www.wral.com/tests-find-pfas-but-not-genx-in-blood-near-chemours/17920408/
    - Tested for 17 PFAS, several were found but not GenX specifically.
- October 15
- October 14
- October 13
  - Documentary stirs up thoughts of GenX at Indigo Moon: https://www.fayobserver.com/news/20181013/documentary-stirs-up-thoughts-of-genx-at-indigo-moon
- October 12
  - Brunswick's $100-million treatment plant will concentrate contaminants, discharge them back into Cape Fear River: https://portcitydaily.com/local-news/2018/10/12/brunswicks-100-million-treatment-plant-will-concentrate-contaminants-discharge-them-back-into-cape-fear-river/
  - CFPUA announces public hearings for emerging-contaminants plan: https://portcitydaily.com/local-news/2018/10/11/cfpua-announces-public-hearings-for-emerging-contaminants-plan/
  - Class action lawsuit takes aim at US PFAS manufacturers: https://chemicalwatch.com/70961/class-action-lawsuit-takes-aim-at-us-pfas-manufacturers

Krista Liguori, MSPH
ORISE Participant
US Environmental Protection Agency

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/23/2018 5:45:08 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: single cell necrosis
Attachments: GenX PFBS Draft Tox Assess_tech fact sheet--bb.10.17.18.DOCX

FYI at this pt.

From: Flaherty, Colleen
Sent: Tuesday, October 23, 2018 12:47 PM
To: Harper, Ashley ; Lalley, Cara ; Strong, Jamie
Subject: FW: single cell necrosis

Betsy's comments on the technical fact sheet!

From: Behl, Betsy
Sent: Tuesday, October 23, 2018 12:41 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: single cell necrosis

From: Flaherty, Colleen
Sent: Wednesday, October 17, 2018 1:18 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: single cell necrosis

Betsy, here is the technical fact sheet in track changes for your review. We've added some text to clarify a few things, but we haven't substantively changed anything in the fact sheet (or the assessment). I think we've been responsive, but have not caved one bit on the science.

Thanks, Brittany, Greg, and Jamie for your help on this.

Thanks,
Colleen

From: Behl, Betsy
Sent: Wednesday, October 17, 2018 12:47 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: single cell necrosis

I would like to see the document in track changes. Greg sent the sharepoint to me. Is that what I should look at or is there something else?

From: Strong, Jamie
Sent: Wednesday, October 17, 2018 8:19 AM

To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: single cell necrosis

I thought we were not responding to their technical comments on the assessment? That was the plan as of yesterday. I do not agree with responding to these.

From: Flaherty, Colleen
Sent: Tuesday, October 16, 2018 2:08 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: single cell necrosis

OK, I've gone through all the comments and tried to fix the best I could. I've highlighted ones where I need your help. I think these are all pretty easily addressed actually. Re: the critical effect, I'm interpreting their comments as simply wanting more justification/rationale. See what you think. When we're done with this we need to send to ORD so they can plug in the stuff on PFBS.

THANKS!

From: Jacobs, Brittany
Sent: Tuesday, October 16, 2018 12:55 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

For liver effects in the parental mice (this was a developmental/reproductive study) the NOAEL = 0.1 mg/kg-day and the LOAEL = 0.5 mg/kg-day

---

From: Flaherty, Colleen
Sent: Tuesday, October 16, 2018 12:50 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

Excellent! I think I'll use a lot of that.

What's the NOAEL and LOAEL from that study?

From: Jacobs, Brittany
Sent: Tuesday, October 16, 2018 12:43 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: single cell necrosis

Here is some language from our assessment (in 6.1 Study and Endpoint Selection) :

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Flaherty, Colleen
Sent: Tuesday, October 16, 2018 12:29 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: single cell necrosis

Hi - Can one of you guys point me to the text in the assessment that justifies the selection of single cell necrosis as an adverse effect? I'm working on the tech fact sheet. Thanks.

Colleen M. Flaherty | Associate Director
Health and Ecological Criteria Division
U.S. EPA Office of Water

Message

From: Harper, Ashley [harper.ashley@epa.gov]
Sent: 10/29/2018 8:26:42 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: Question

Found my answer in the technical fact sheet!

GenX is a trade name for a processing aid technology used to make high-performance fluoropolymers without the use of perfluorooctanoic acid (PFOA). HFPO dimer acid and its ammonium salt are the major chemicals associated with GenX processing aid technology. GenX chemicals have been found in surface water, groundwater, finished drinking water, rainwater, and air emissions in some areas.

Thanks!

From: Harper, Ashley
Sent: Monday, October 29, 2018 4:13 PM
To: Brittany Jacobs (Jacobs.Brittany@epa.gov) <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Question

Draft Deliberative:

This is a QA from the public fact sheet, Brittany and Greg, can you please let me know if this is true or if it should be reworked?

How are people exposed to GenX chemicals and PFBS?

Ex. 5 Deliberative Process (DP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/6/2018 6:41:58 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]
Subject: FW: final phase for GenX and PFBS assessments

FYI, tell me if I am bombarding you…just trying to keep you guys in loop.

From: Behl, Betsy
Sent: Tuesday, November 06, 2018 1:39 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: final phase for GenX and PFBS assessments

Peter,

We have a few questions about the next stage for these assessments. We are unclear about what the next steps are and who is responsible. We understand if we don't have a date yet.

Ex. 5 Deliberative Process (DP)

We are all excited about the pending release and want to ensure it goes as smoothly as possible. Happy to help with the next steps as needed.

Best, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Harper, Ashley [harper.ashley@epa.gov]
Sent: 11/5/2018 2:13:54 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Harper, Ashley shared "GenX-PFBS Draft Assess_Internal Q&A" with you.

You are welcome to rephrase any of these questions if they don't make sense or if you think there is a better way to ask. These are a rough draft.

This link only works for the direct recipients of this message.

GenX-PFBS Draft Assess_Internal Q&A

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Message

From: Harper, Ashley [harper.ashley@epa.gov]
Sent: 11/6/2018 8:23:59 PM
To: Lalley, Cara [Lalley.Cara@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Re: final phase for GenX and PFBS assessments

ORD AA, Dave Ross equivalent

From: Lalley, Cara
Sent: Tuesday, November 6, 2018 3:23:25 PM
To: Harper, Ashley; Strong, Jamie; Miller, Gregory; Jacobs, Brittany
Subject: RE: final phase for GenX and PFBS assessments

Thanks. Jamie- who is David Dunlap in ORD, and who would be his OW equivalent?

From: Harper, Ashley
Sent: Tuesday, November 06, 2018 3:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: Re: final phase for GenX and PFBS assessments

I am working Thursday and Friday. They should need you guys early next week but Betsy and I can handle a meeting with Andrea on Thursday or Friday.

From: Strong, Jamie
Sent: Tuesday, November 6, 2018 3:03:49 PM
To: Lalley, Cara; Miller, Gregory; Jacobs, Brittany; Harper, Ashley
Subject: RE: final phase for GenX and PFBS assessments

This is why we should sit down, they need to communicate with us and develop a schedule that works with both our staff and ORD to ensure those that need to be involved can be. Not just dictate a date. We have been waiting for 45 days. Another two weeks shouldn't matter. My two cents.

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 3:02 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Brittany and Greg are both compressed and I am working from home.

From: Lalley, Cara
Sent: Tuesday, November 06, 2018 3:00 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Thanks. I'm out on Thursday and Friday- will anyone else on this thread be working then?

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 2:50 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: FW: final phase for GenX and PFBS assessments

From: Drinkard, Andrea
Sent: Tuesday, November 06, 2018 2:01 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Thanks, Betsy.

Ex. 5 Deliberative Process (DP)

I am happy to meet on comms this week to make sure we're all on the same page. Maybe Thursday or Friday so that we can get a sense of whether the Acting Administrator is ok with the package?

From: Behl, Betsy
Sent: Tuesday, November 06, 2018 1:39 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: final phase for GenX and PFBS assessments

Peter,

We have a few questions about the next stage for these assessments. We are unclear about what the next steps are and who is responsible. We understand if we don't have a date yet.

1.

Ex. 5 Deliberative Process (DP)

2.

3.

Ex. 5 Deliberative Process (DP)

We are all excited about the pending release and want to ensure it goes as smoothly as possible. Happy to help with the next steps as needed.

Best, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Lalley, Cara [Lalley.Cara@epa.gov]
Sent: 11/6/2018 9:12:05 PM
To: Harper, Ashley [harper.ashley@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: final phase for GenX and PFBS assessments

Ex. 5 Deliberative Process (DP)

From: Harper, Ashley
Sent: Tuesday, November 06, 2018 3:48 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Re: final phase for GenX and PFBS assessments

Thank Cara. In the roll out it says that Peter is leading a media call with technical experts from OW and ORD. We need to coordinate to make sure that we have those experts (whomever that may be) and they are available (which was partially why Betsy sent the email) because it seems funny to have a roll out, which necessitates having people participate, but not ensuring that they are available or aware.

From: Lalley, Cara
Sent: Tuesday, November 6, 2018 3:37:23 PM
To: Jacobs, Brittany; Miller, Gregory; Harper, Ashley; Strong, Jamie
Subject: RE: final phase for GenX and PFBS assessments

Thanks, all. Ashley- if there is a call this week, my two cents is that Peter Grevatt would be the appropriate OW spokesperson for a media call-in, and it shouldn't be a big deal for him to be accompanied by a technical expert to whom he can refer especially technical questions on GenX. In fact, given Peter's special role for the Agency as PFAS czar, it shouldn't be a big deal for an ORD technical expert to accompany him as well, to answer especially technical questions on PFBS. It would seem strange to have David Dunlap be a spokesperson if Dave Ross will not also be one.

From: Jacobs, Brittany
Sent: Tuesday, November 06, 2018 3:25 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

I'm also teleworking Thursday (so can call in) and off Friday.

From: Miller, Gregory
Sent: Tuesday, November 06, 2018 3:24 PM
To: Harper, Ashley <harper.ashley@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Lalley, Cara

<Lalley.Cara@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

I'm teleworking Thursday, off Friday.

Greg

From: Harper, Ashley
Sent: Tuesday, November 6, 2018 3:23 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: Re: final phase for GenX and PFBS assessments

I am working Thursday and Friday. They should need you guys early next week but Betsy and I can handle a meeting with Andrea on Thursday or Friday.

From: Strong, Jamie
Sent: Tuesday, November 6, 2018 3:03:49 PM
To: Lalley, Cara; Miller, Gregory; Jacobs, Brittany; Harper, Ashley
Subject: RE: final phase for GenX and PFBS assessments

This is why we should sit down, they need to communicate with us and develop a schedule that works with both our staff and ORD to ensure those that need to be involved can be. Not just dictate a date. We have been waiting for 45 days. Another two weeks shouldn't matter. My two cents.

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 3:02 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Brittany and Greg are both compressed and I am working from home.

From: Lalley, Cara
Sent: Tuesday, November 06, 2018 3:00 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Thanks. I'm out on Thursday and Friday- will anyone else on this thread be working then?

From: Strong, Jamie
Sent: Tuesday, November 06, 2018 2:50 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: FW: final phase for GenX and PFBS assessments

From: Drinkard, Andrea
Sent: Tuesday, November 06, 2018 2:01 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>
Subject: RE: final phase for GenX and PFBS assessments

Thanks, Betsy.

Ex. 5 Deliberative Process (DP)

I am happy to meet on comms this week to make sure we're all on the same page. Maybe Thursday or Friday so that we can get a sense of whether the Acting Administrator is ok with the package?

From: Behl, Betsy
Sent: Tuesday, November 06, 2018 1:39 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: final phase for GenX and PFBS assessments

Peter,

We have a few questions about the next stage for these assessments. We are unclear about what the next steps are and who is responsible. We understand if we don't have a date yet.

1.

2. Ex. 5 Deliberative Process (DP)

3.

b.

c.

d.

e.

Ex. 5 Deliberative Process (DP)

We are all excited about the pending release and want to ensure it goes as smoothly as possible. Happy to help with the next steps as needed.

Best, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Wadlington, Christina [Wadlington.Christina@epa.gov]
Sent: 11/8/2018 7:45:40 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Hubbard, Carolyn [Hubbard.Carolyn@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: DETAILED ROLL OUT: Toxicity values
Attachments: Tox Assessment Press Release and Public Fact Sheet_11.8.18.docx

Afternoon everyone,

Updated based on our discussion today. Please add to/edit/comment as needed.

TICK TOCK

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- Ex. 5 Deliberative Process (DP)

11/14

- Ex. 5 Deliberative Process (DP)

MATERIALS

Ex. 5 Deliberative Process (DP)

Tox Assessment
Press Release a...

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 11/8/2018 7:18:13 PM
To: Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Hubbard, Carolyn [Hubbard.Carolyn@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: ROLL OUT: Toxicity values

Hi Andrea,

Regarding your second question about OMB, yes, I updated to be consistent with our agreement with OMB and the language we incorporated into the PFBS assessment, the FRN, and the various communications materials. So, yes, this is good. ☺

Samantha J. Jones, PhD
NCEA Associate Director
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
RRB 51214
(o) 202-564-6794; (m) 703-943-7990

From: Drinkard, Andrea
Sent: Thursday, November 8, 2018 2:03 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: ROLL OUT: Toxicity values

Also, I think I've captured all of the last round of comments. Here's what I think is final (capturing edits from David D, Samantha and the Administrator). Could someone take a really quick look at the two comment bubbles and let me know if we're good to go?

Thanks!

From: Wadlington, Christina
Sent: Thursday, November 08, 2018 1:55 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: ROLL OUT: Toxicity values

TICK TOCK, Pending approval

11/13

- Ex. 5 Deliberative Process (DP)

11/14

- Ex. 5 Deliberative Process (DP)

STAKEHOLDER NOTIFICATION LIST

- Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Wadlington, Christina
Sent: Thursday, November 08, 2018 11:39 AM
To: Wadlington, Christina; Jones, Samantha; Drinkard, Andrea; Lalley, Cara; Mattas-Curry, Lahne; Hubbard, Carolyn; Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Harper, Ashley; Bahadori, Tina; Lambert, Jason; Owens, Beth; Champlin, Anna; Strong, Jamie
Subject: ROLL OUT: Toxicity values
When: Thursday, November 08, 2018 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Skype Meeting

Materials:

Ex. 5 Deliberative Process (DP)

→ Join Skype Meeting

Trouble Joining? Try Skype Web App

Help

Message

From: Drinkard, Andrea [Drinkard.Andrea@epa.gov]
Sent: 11/8/2018 7:03:02 PM
To: Wadlington, Christina [Wadlington.Christina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Hubbard, Carolyn [Hubbard.Carolyn@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: ROLL OUT: Toxicity values
Attachments: Tox Assessment Press Release and Public Fact Sheet_11.8.18.DOCX

Also, I think I've captured all of the last round of comments. Here's what I think is final (capturing edits from David D, Samantha and the Administrator). Could someone take a really quick look at the two comment bubbles and let me know if we're good to go?

Thanks!

From: Wadlington, Christina
Sent: Thursday, November 08, 2018 1:55 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Lalley, Cara <Lalley.Cara@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: ROLL OUT: Toxicity values

TICK TOCK, Pending approval

11/13

- Ex. 5 Deliberative Process (DP)

11/14

- Ex. 5 Deliberative Process (DP)

STAKEHOLDER NOTIFICATION LIST

- Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Wadlington, Christina
Sent: Thursday, November 08, 2018 11:39 AM
To: Wadlington, Christina; Jones, Samantha; Drinkard, Andrea; Lalley, Cara; Mattas-Curry, Lahne; Hubbard, Carolyn; Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Harper, Ashley; Bahadori, Tina; Lambert, Jason; Owens, Beth; Champlin, Anna; Strong, Jamie
Subject: ROLL OUT: Toxicity values
When: Thursday, November 08, 2018 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Skype Meeting

Materials:

Ex. 5 Deliberative Process (DP)

→ Join Skype Meeting
Trouble Joining? Try Skype Web App

Help

Message

From: Wadlington, Christina [Wadlington.Christina@epa.gov]
Sent: 11/8/2018 6:55:28 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Hubbard, Carolyn [Hubbard.Carolyn@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: ROLL OUT: Toxicity values

TICK TOCK, Pending approval

11/13

- Ex. 5 Deliberative Process (DP)

11/14

- Ex. 5 Deliberative Process (DP)

STAKEHOLDER NOTIFICATION LIST

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-----Original Appointment-----
From: Wadlington, Christina
Sent: Thursday, November 08, 2018 11:39 AM
To: Wadlington, Christina; Jones, Samantha; Drinkard, Andrea; Lalley, Cara; Mattas-Curry, Lahne; Hubbard, Carolyn; Behl, Betsy; Jacobs, Brittany; Miller, Gregory; Harper, Ashley; Bahadori, Tina; Lambert, Jason; Owens, Beth; Champlin, Anna; Strong, Jamie
Subject: ROLL OUT: Toxicity values
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Trouble Joining? Try Skype Web App

Help

Message

From: Wadlington, Christina [Wadlington.Christina@epa.gov]
Sent: 11/8/2018 7:52:01 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Lalley, Cara [Lalley.Cara@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Hubbard, Carolyn [Hubbard.Carolyn@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: FW: DETAILED ROLL OUT: Toxicity values
Attachments: Tox Assessment Press Release and Public Fact Sheet_11.8.18.docx

Adding the most recent version to this email so it's all in one place.

Tox Assessment Press Release a...

Afternoon everyone,

Updated based on our discussion today. Please add to/edit/comment as needed.

TICK TOCK

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- Ex. 5 Deliberative Process (DP)

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- Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/27/2018 7:20:04 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Technical Fact Sheet

Persistence pays off.

From: Harper, Ashley
Sent: Tuesday, November 27, 2018 2:19 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Technical Fact Sheet

Great news! Thank you!

From: Strong, Jamie
Sent: Tuesday, November 27, 2018 2:16 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Subject: RE: Technical Fact Sheet

Wow! Thanks Betsy!

From: Behl, Betsy
Sent: Tuesday, November 27, 2018 2:12 PM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Technical Fact Sheet

I think it should be posted this week. Just had a conversation with Christina

---

From: Flaherty, Colleen
Sent: Tuesday, November 27, 2018 8:55 AM
To: Harper, Ashley <harper.ashley@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Technical Fact Sheet

They'll probably just save it for the final at this point. I think it would just create confusion.

From: Harper, Ashley
Sent: Tuesday, November 27, 2018 8:49 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Technical Fact Sheet

Should we ask Deborah to nudge Dave on the technical fact sheet for GenX chemicals? I don't think Andrea even showed it to him based on the emails.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/20/2019 3:49:49 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Fw: PFAS HEARING: Fact Sheet Request Due By 2/22 @10am

Importance: High

FYI, requested access for you both. Right now I don't have access.

From: Wadlington, Christina
Sent: Wednesday, February 20, 2019 10:37 AM
To: Henry, Tala; Scheifele, Hans; Gillespie, Andrew; Mattas-Curry, Lahne; Raffaele, Kathleen; Foster, Stiven; Dombrowski, John; Vasu, Amy; Behl, Betsy; Strong, Jamie
Cc: Wehling, Carrie; Klasen, Matthew; Spraul, Greg; Corr, Elizabeth; Albert, Ryan; Holsinger, Hannah; Lan, Alexis; Flynn, Aspen
Subject: PFAS HEARING: Fact Sheet Request Due By 2/22 @10am

Good Morning HQ PFAS team,

As you may (or may not) be aware, the House Oversight Committee's Subcommittee on the Environment has requested that EPA participate in a hearing on PFAS. To assist with hearing prep, request your support on the following actions by **Friday, February 22, 2019 at 10am.**

1. Review and update the Q&A (note the last column that identifies the reviewer): **CLICK HERE for Q&A document**
2. Review and update the Fact Sheets: **CLICK HERE for Fact Sheets.** Please update the upper right hand corner with the "Last Reviewed By" and "Date" when complete.

NOTE: If there are topics that we have missed, please let us know and we can work to add other fact sheets: **CLICK HERE for a complete list of materials being developed.**

GenX Chemours/TSCA Consent Order	OPPT
PFOA/S TSCA Approval, phase out	OPPT
PFAS SNURs	OPPT
Clean up goals background	OLEM
Hazardous substance background/update	OLEM
Relationship with DoD	OLEM
NPL sites with PFAS contamination overview	OLEM
Science transparency rulemaking	ORD
Ongoing PFAS research work	ORD
PFAS emissions and air deposition	OAR
GenX and PFBS	OST

If you have any questions, please let me or Hannah Holsinger know asap.

Thank you, as always, for your assistance.

Christina

Message

From: Liguori, Krista [liguori.krista@epa.gov]
Sent: 11/16/2018 9:47:45 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: GenX News Updates November 2nd - 9th

Hi all,

Congrats on publishing! I was out last week, so I combined the past two weeks of news. Here are the news updates for GenX from Nov 2nd through the 16th:

Google Scholar / PubMed

- Abstract from student researchers @ University of California (but no attached paper or publication available yet); Treatment of AFFF Contaminated Water Using Hydrated Electron: https://www.sccur.org/sccur/FALL_2018_CONFERENCE/ENGR_COMP_TALKS/15/

Google News

- Nov 16
  - EPA finds replacements for toxic 'Teflon' chemicals toxic: https://www.ecowatch.com/epa-finds-replacements-for-toxic-teflon-chemicals-toxic-2620083129.html
  - Some orgs criticize EPA's PFAS standard: https://www.cadillacnews.com/news/some-orgs-critcize-epa-s-pfas-standard/article_bed7e4f5-bfe1-5c96-8f9f-ba01455d6592.html
  - New compounds found in blood of those near Cape Fear river: http://www.wunc.org/post/new-compounds-found-blood-those-near-cape-fear-river#stream/0
- Nov 15
  - EPA releases 1st toxicity study on GenX: http://www.wect.com/video/2018/11/15/epa-releases-st-toxicity-study-genx/
  - EPA releases draft toxicological profiles for two PFASs: https://chemicalwatch.com/71998/epa-releases-draft-toxicological-profiles-for-two-pfass
  - EPA releases draft safe daily dose for Chemours's GenX chemical: https://cen.acs.org/environment/persistent-pollutants/EPA-releases-draft-safe-daily/96/i46
  - Health highlights: Nov 15, 2018 (Newer Nonstick Coating May Pose Health Threat: EPA): https://health.usnews.com/health-care/articles/2018-11-15/health-highlights-nov-15-2018
  - EPA report on GenX toxicity suggestive to cancer: http://spectrumlocalnews.com/nc/coastal/news/2018/11/15/epa-report-on-genx-toxicity-suggestive-to-cancer
  - Group says GenX replacement non-stick chemicals pose health risks: https://www.floridatoday.com/story/news/local/environment/2018/11/15/group-says-replacement-non-stick-chemical-poses-health-risks/2010096002/
  - NC: 'Little-to-no' research about new chemicals found by UNCW: https://www.starnewsonline.com/news/20181115/nc-little-to-no-research-about-new-chemicals-found-by-uncw
  - Update: public input sought on GenX toxicity: https://www.thenewscenter.tv/content/news/New-report-shows-GenX-not-found-in-treated-water--480872601.html
  - Blood tests show 4 PFAS, but no GenX: https://www.coastalreview.org/2018/11/blood-tests-show-4-pfas-but-no-genx/
  - CFPUA expects to reduce PFAS levels in drinking water by end of month: https://www.wect.com/2018/11/15/cfpua-expects-reduce-pfas-levels-drinking-water-by-end-month/
- Nov 14
  - EPA: GenX nearly as toxic as notorious non-stick chemicals it replaced: https://www.ewg.org/release/epa-genx-nearly-toxic-notorious-non-stick-chemicals-it-replaced

    - EPA seeks input on draft GenX guidelines: https://www.fayobserver.com/news/20181114/epa-seeks-input-on-draft-genx-guidelines
    - EPA releases first-ever toxicity assessments for GenX, related chemicals: http://www.wect.com/2018/11/15/epa-flags-new-fears-about-nonstick-coatings/
    - Tests show no GenX in blood but other chemicals present: http://spectrumlocalnews.com/nc/coastal/news/2018/11/14/tests-show-no-gen-x-in-blood-to-other-chemical-present
    - 'I was livid all over again': blood tests in GenX exposure study come back positive for PFAS: http://www.wect.com/2018/11/14/i-was-livid-all-over-again-blood-tests-genx-exposure-study-come-back-positive-pfas-pfoa-is-four-times-national-average/
    - Researchers find 4 new PFAS in Wilmington blood, no GenX: https://www.starnewsonline.com/news/20181114/researchers-find-4-new-pfas-in-wilmington-blood-no-genx
    - Tests show no GenX in blood but other chemicals present: http://spectrumlocalnews.com/nc/triangle-sandhills/news/2018/11/14/tests-show-no-gen-x-in-blood-to-other-chemical-present
    - Draft EPA study finds GenX may be harmful: https://www.wral.com/epa-flags-new-fears-about-nonstick-coatings/17995242/
- Nov 13
    - GenX study leads to more questions than answers: https://www.wwaytv3.com/2018/11/13/genx-study-leads-to-more-questions-than-answers/
    - Researchers: Blood samples don't detect GenX, but do find newly identified compounds: https://www.cbs17.com/news/north-carolina-news/researchers-blood-samples-don-t-detect-genx-but-do-find-newly-identified-compounds/1595692001
- Nov 12
    - Researchers to hold public meeting about GenX blood test results in New Hanover Co: http://www.wect.com/2018/11/12/researchers-hold-public-meeting-about-genx-blood-test-results-new-hanover-co/
    - Opinion: Environmental policy is more than just an added bonus: http://www.technicianonline.com/opinion/article_71ebb39e-e6e3-11e8-b3c4-87d32f1a904f.html
- Nov 11
    - Letters, Nov 11: reader says GenX in water is no problem: https://www.starnewsonline.com/opinion/20181111/letters-nov-11-reader-says-genx-in-water-is-no-problem
- Nov 10
- Nov 9
    - Brunswick seeks EPA loan fro H2O upgrades: https://www.coastalreview.org/2018/11/brunswick-seeks-epa-loan-for-h2o-upgrades/
- Nov 8
    - Higher rates of birth defects found in four southeastern countries; link to PFAS uncertain: http://pulse.ncpolicywatch.org/2018/11/08/higher-rates-of-birth-defects-found-in-four-southeastern-counties-link-to-pfas-uncertain/
    - CFPUA holding final community meeting about GenX, other PFAS: http://www.wect.com/2018/11/08/cfpua-holding-final-community-meeting-about-genx-other-pfas/
- Nov 7
    - Sen. Trudy Wade: her loss, shout it stand, could be a win for the environment: https://pulse.ncpolicywatch.org/2018/11/07/sen-trudy-wade-her-loss-should-it-stand-could-be-a-win-for-the-environment/
- Nov 6
- Nov 5
    - UNCW mass spectrometers "appear unscathed" after Florence, but GenX testing will be delayed: https://portcitydaily.com/local-news/2018/11/05/uncw-mass-spectrometers-appear-unscathed-after-florence-but-genx-testing-will-be-delayed/

    - Replacement chemicals raise new concerns: https://rapidcityjournal.com/news/local/replacement-chemicals-raise-new-concerns/article_5adcc367-e30f-5b0e-9e76-464a0535332f.html
- Nov 4
- Nov 3
- Nov 2

Krista Liguori, MSPH
ORISE Participant
US Environmental Protection Agency
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division | Human Health Risk Assessment Branch

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/20/2019 3:58:12 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: Fw: PFAS HEARING: Fact Sheet Request Due By 2/22 @10am

Importance: High

Brittany and/or Greg, can you take a crack at the fact sheet if you can get in? Not sure why OGWDW is reinventing the wheel here...we have a fact sheet already. This one is awful.

If you don't have access bug Christina. She isn't being responsive to me.

From: Wadlington, Christina
Sent: Wednesday, February 20, 2019 10:37 AM
To: Henry, Tala; Scheifele, Hans; Gillespie, Andrew; Mattas-Curry, Lahne; Raffaele, Kathleen; Foster, Stiven; Dombrowski, John; Vasu, Amy; Behl, Betsy; Strong, Jamie
Cc: Wehling, Carrie; Klasen, Matthew; Spraul, Greg; Corr, Elizabeth; Albert, Ryan; Holsinger, Hannah; Lan, Alexis; Flynn, Aspen
Subject: PFAS HEARING: Fact Sheet Request Due By 2/22 @10am

Good Morning HQ PFAS team,

As you may (or may not) be aware, the House Oversight Committee's Subcommittee on the Environment has requested that EPA participate in a hearing on PFAS. To assist with hearing prep, request your support on the following actions by **Friday, February 22, 2019 at 10am.**

1. Review and update the Q&A (note the last column that identifies the reviewer): **CLICK HERE for Q&A document**
2. Review and update the Fact Sheets: **CLICK HERE for Fact Sheets.** Please update the upper right hand corner with the "Last Reviewed By" and "Date" when complete.

NOTE: If there are topics that we have missed, please let us know and we can work to add other fact sheets: **CLICK HERE for a complete list of materials being developed.**

GenX Chemours/TSCA Consent Order	OPPT
PFOA/S TSCA Approval, phase out	OPPT
PFAS SNURs	OPPT
Clean up goals background	OLEM
Hazardous substance background/update	OLEM
Relationship with DoD	OLEM
NPL sites with PFAS contamination overview	OLEM
Science transparency rulemaking	ORD
Ongoing PFAS research work	ORD

PFAS emissions and air deposition	OAR
GenX and PFBS	OST

If you have any questions, please let me or Hannah Holsinger know asap.
Thank you, as always, for your assistance.

Christina

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 2/20/2019 5:14:59 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: pfas fact sheet plan?

Ok, well, I'm taking clarifying material out of the old fact sheet and adding it to the new fact sheet.

From: Strong, Jamie
Sent: Wednesday, February 20, 2019 12:12 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: pfas fact sheet plan?

I don't know, per usual not much info or time was given. And duh I am an idiot.

From: Jacobs, Brittany
Sent: Wednesday, February 20, 2019 12:02 PM
To: Strong, Jamie; Miller, Gregory
Subject: RE: pfas fact sheet plan?

We are on sharepoint so we won't be duplicating. These factsheets aren't going to be publicly release right? Just for purposes of the hearing?

From: Strong, Jamie
Sent: Wednesday, February 20, 2019 11:58 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: Re: pfas fact sheet plan?

So Christina just told me she started with this and trimmed it down. I agree its current state is awful and we are creating work but here we are. I don't know the best approach. My suggestion is to take what she has and correct it. Make sure you and Brittany aren't duplicating each other.

From: Miller, Gregory
Sent: Wednesday, February 20, 2019 11:46 AM
To: Jacobs, Brittany; Strong, Jamie
Subject: pfas fact sheet plan?

What's the strategy here? I'm currently correcting wrong information in the fact sheet. But maybe we should be starting with the old fact sheet (attached) and add in any new information from the draft that Christina

sent. Then trim whatever we can to slim it down. I am not really happy with doing the same task twice. There was a reason that the original fact sheet took the shape it did.

Thoughts?

From: Wadlington, Christina
Sent: Wednesday, February 20, 2019 11:02 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Wadlington, Christina shared "Q-A_PFAS_2.20.19_Hearing" with you.

Yes, just did. We took the fact sheet and just weaned it down a bit so it's easier to read. Happy to adjust as needed.

From: Strong, Jamie
Sent: Wednesday, February 20, 2019 11:01 AM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: Wadlington, Christina shared "Q-A_PFAS_2.20.19_Hearing" with you.

Also please provide Brittany and Greg access to the fact sheet. Question, why are we doing a new fact sheet for GenX and PFBS, why not use the one we have?

From: Wadlington, Christina
Sent: Wednesday, February 20, 2019 10:59 AM
To: Strong, Jamie; Jacobs, Brittany; Flaherty, Colleen; Miller, Gregory
Subject: Wadlington, Christina shared "Q-A_PFAS_2.20.19_Hearing" with you.

Here's the document that Wadlington, Christina shared with you.

This link only works for the direct recipients of this message.

Q-A_PFAS_2.20.19_Hearing

Open

Microsoft OneDrive

Microsoft respects your privacy. To learn more, please read our Privacy Statement.
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/29/2018 3:15:10 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Akhter, Shamima [Akhter.Shamima@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
Subject: RE: Presentation Slides_Special FSTRAC Webinar_Nov 28, 2018
Attachments: FSTRAC Briefing on GenX Chemicals PFBS Toxicity Assessments 11-28-18.pdf

Here is the pdf version of yesterday's presentation. Good job everybody!

Greg Miller, Senior Environmental Health Scientist

Team Lead, Human Health Risk Assessment Branch

Office of Science and Technology, Health and Ecological Criteria Division

US Environmental Protection Agency, Office of Water

1200 Pennsylvania Ave, NW (MC 4304T)

Washington, DC 20460

phone: (202) 566-2310

From: Strong, Jamie
Sent: Thursday, November 29, 2018 10:10 AM
To: Akhter, Shamima <Akhter.Shamima@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: RE: Presentation Slides_Special FSTRAC Webinar_Nov 28, 2018

You have the slides already, they have not changed.

From: Akhter, Shamima
Sent: Thursday, November 29, 2018 10:10 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Presentation Slides_Special FSTRAC Webinar_Nov 28, 2018

All,

Thank you for giving such an interesting presentation to the FSTRAC members yesterday.

Several FSTRAC members have expressed to see the slides. Please provide me your presentation slides at your earliest convenience so that we can post a PDF version to the FSTRAC share point site.

Thanks,

Shamima

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/29/2018 4:07:02 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: FW: Attendee Log from Yesterday's GenX & PFBS FSTRAC Webinar
Attachments: FSTRAC Webinar on GenX and PFBS Attendee Log.docx

FYI, lots of states.

From: Akhter, Shamima
Sent: Thursday, November 29, 2018 9:44 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Attendee Log from Yesterday's GenX & PFBS FSTRAC Webinar

Hi Betsy,
Attached please find the attendee log from yesterday's special FSTRAC Webinar on GenX chemicals and PFBS. A total of 87 people logged into the system. Please note that some attendees did not provide their full names or affiliations when logging in and let us know if you have any questions.

Thanks,
Shamima

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/5/2018 5:43:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Fw: PFAS stakeholder slides for OW and ORD management review

If we get comments from betsy, here is the version to work from. I hear from ORD Bruce Rodan had comments on our part. Ex. 6 Personal Privacy (PP) So far I have been able to work. I don't know what I am going to do about tomorrow.

Jamie

From: Lavoie, Emma
Sent: Friday, March 2, 2018 4:47 PM
To: Owens, Beth; Gillespie, Andrew; Strong, Jamie
Cc: Behl, Betsy; Lambert, Jason; Jacobs, Brittany; Miller, Gregory
Subject: RE: PFAS stakeholder slides for OW and ORD management review

I'm suggesting to Beth that we put a draft watermark and add EPA to the footer for ownership. E.g., EPA/ORD or EPA/OW.
Otherwise we'll go ahead and send for clearance.

-Emma

Tel: 202 564 7091

From: Owens, Beth
Sent: Friday, March 02, 2018 2:24 PM
To: Lavoie, Emma <Lavoie.Emma@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFAS stakeholder slides for OW and ORD management review

Apologies for the delay. I've attached the PFBS bibliography.

From: Lavoie, Emma
Sent: Friday, March 02, 2018 12:09 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFAS stakeholder slides for OW and ORD management review

Thanks Andy. I have been reading emails even if not adding my voice.

I reviewed the slides last night as did Tina and we gave Beth some feedback that she incorporated. And I looked at the most recent version that has been in emails. But I haven't seen bibliography document. So I'll keep eye out for final versions.

-Emma

Tel: 202 564 7091

From: Gillespie, Andrew
Sent: Friday, March 02, 2018 12:05 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Subject: RE: PFAS stakeholder slides for OW and ORD management review

Thanks. NCEA will be mgt review handling for ORD, so as soon as I get the updated bibliography I will forward that, plus Jamie's last ppt and the GenX bibliography and send to Emma and Tina (copy Beth and Jason) for clearance.

Andrew J. R. Gillespie, Ph. D.
Associate Director, US EPA/ORD/NERL
ORD Executive Lead for PFAS R&D

From: Strong, Jamie
Sent: Friday, March 02, 2018 12:02 PM
To: Owens, Beth <Owens.Beth@epa.gov>
Cc: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Subject: RE: PFAS stakeholder slides for OW and ORD management review

Yeah I think that's okay. I think Andy is sending through ORD and Betsy is sending through OW.

From: Owens, Beth
Sent: Friday, March 02, 2018 12:01 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Subject: Re: PFAS stakeholder slides for OW and ORD management review

Thanks Jamie. I can send the PFBS bibliography this afternoon if that would work.

Sent from my iPhone

On Mar 2, 2018, at 11:55 AM, Strong, Jamie <Strong.Jamie@epa.gov> wrote:

Sorry, I just got another edit based on Chris Lau's comment on placental transfer. USE THIS VERSION.

Jamie

From: Strong, Jamie
Sent: Friday, March 02, 2018 11:53 AM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>
Subject: PFAS stakeholder slides for OW and ORD management review
Importance: High

Andy and Betsy,
Attached are revised (per our meeting with the Tox Wkgp) slides for the ECOS state and federal partner calls next Friday. These are ready to go to OW and ORD management for review. Beth and I have edited content slightly. I also added a footer that indicates these are draft deliberative and changed the next steps slide to say stakeholder not federal or state partners. I have also attached the bibliography for GenX.

I am grabbing my laptop and going home. If you need anything I can be reached by email.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

<ECOS FED PART GENX PFBS PRESENTATION 03 02 18 FINAL.pptx>

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/6/2018 1:27:11 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: URGENT: PFAS stakeholder slides for OW and ORD management review
Attachments: ATT00001.htm; GENX BIBLIO 03 02 18.DOCX; ATT00002.htm; ECOS FED PART GENX PFBS PRESENTATION 03 05 18_BLJbb.PPTX

FYI

From: Behl, Betsy
Sent: Monday, March 05, 2018 5:05 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Subject: URGENT: PFAS stakeholder slides for OW and ORD management review

We have incorporated comments received into the slides above. We need any additional comments before noon tomorrow to be able to have a version to send to state and federal stakeholders by VOB on 3/6.

How would you like to transmit the final materials? Attach to meeting invite?

Thanks, Betsy

From: Behl, Betsy
Sent: Friday, March 02, 2018 2:22 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Fwd: PFAS stakeholder slides for OW and ORD management review

Peter and Deborah, please find attached the updated slides for the state and fed presentations for your review. Jamie and the team made slight modifications after our presentation yesterday to the toxicity workgroup.

Please let us know if you would like us to make additional changes. These slides were also sent to ORD for their review.

The second file attached below is the GenX bibliography.

We need to incorporate your changes to send to stakeholders by cob Tuesday 3/6.

Many thanks, Betsy

Sent from my iPhone

Begin forwarded message:

> **From:** "Strong, Jamie" <Strong.Jamie@epa.gov>
> **Date:** March 2, 2018 at 11:52:54 AM EST
> **To:** "Gillespie, Andrew" <Gillespie.Andrew@epa.gov>, "Behl, Betsy" <Behl.Betsy@epa.gov>
> **Cc:** "Lambert, Jason" <Lambert.Jason@epa.gov>, "Owens, Beth" <Owens.Beth@epa.gov>, "Jacobs, Brittany" <jacobs.brittany@epa.gov>, "Miller, Gregory" <Miller.Gregory@epa.gov>, "Lavoie, Emma"

<Lavoie.Emma@epa.gov>
Subject: PFAS stakeholder slides for OW and ORD management review

Andy and Betsy,
Attached are revised (per our meeting with the Tox Wkgp) slides for the ECOS state and federal partner calls next Friday. These are ready to go to OW and ORD management for review. Beth and I have edited content slightly. I also added a footer that indicates these are draft deliberative and changed the next steps slide to say stakeholder not federal or state partners. I have also attached the bibliography for GenX.

I am grabbing my laptop and going home. If you need anything I can be reached by email.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Appointment

From: Mason, Paula [Mason.Paula@epa.gov]
Sent: 3/7/2018 2:44:23 PM
To: chanson@ecos.org; slongsworth@ecos.org; Layne Piper [lpiper@ecos.org]; Roberson, Alan [aroberson@asdwa.org]; Deirdre Mason [dmason@asdwa.org]; ron.falco@state.co.us; benzier@michigan.gov; ruchs@michigan.gov; sandeep.burman@state.mn.us; Freise, Clark [Clark.Freise@des.nh.gov]; Kernen, Brandon [Brandon.Kernen@des.nh.gov]; Pillsbury, Sarah [Sarah.Pillsbury@des.nh.gov]; amy.klei@epa.ohio.gov; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Behrsing, Tracy [behrsing.tracy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Sinks, Tom [Sinks.Tom@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Matthews, Lisa [Matthews.Lisa@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]
CC: Rodan, Bruce [rodan.bruce@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Ellingboe, Randy (MDH) [randy.ellingboe@state.mn.us]; Owens, Beth [Owens.Beth@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]

Subject: PFAS Toxicity Discussion - States
Attachments: ECOS FED PART GENX PFBS PRESENTATION 03 06 18.pptx; PFBS BIBLIO 03 02 18.docx; GENX BIBLIO 03 02 18.docx
Location: DCRoomEast2123/DC-ICC-OW-OGWDW - Ex. 6 Personal Privacy (PP)

Start: 3/9/2018 6:00:00 PM
End: 3/9/2018 7:00:00 PM
Show Time As: Tentative

Required Attendees: chanson@ecos.org; Sarah Grace Longsworth; lpiper@ecos.org; Roberson, Alan; dmason@asdwa.org; ron.falco@state.co.us; benzier@michigan.gov; ruchs@michigan.gov; sandeep.burman@state.mn.us; Freise, Clark; Kernen, Brandon; Pillsbury, Sarah; amy.klei@epa.ohio.gov; Mclain, Jennifer; Holsinger, Hannah; Wadlington, Christina; Tiago, Joseph; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Donohue, Joyce; Miller, Gregory; Behrsing, Tracy; Babcock, Amy; Aubee, Catherine; Henry, Tala; Orme-Zavaleta, Jennifer; Gillespie, Andrew; Bahadori, Tina (Bahadori.Tina@epa.gov); Jones, Samantha; Lambert, Jason; Lavoie, Emma; Sinks, Tom; Harper, Ashley; Matthews, Lisa; Burneson, Eric
Optional Attendees: Rodan, Bruce; Mattas-Curry, Lahne; Ellingboe, Randy (MDH); Owens, Beth; Drinkard, Andrea; Raffaele, Kathleen

Please note that meeting materials will be provided next week prior to the meeting.

Adobe Connect link Ex. 6 Personal Privacy (PP)

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/18/2018 6:29:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Strong, Jamie has shared 'ECOS FED PART GENX PFBS PRESENTATION 2'

I made some edits to the slides. I was a little more protective about what we are sharing at this stage. I put the

Ex. 5 Deliberative Process (DP)

Greg

From: Strong, Jamie [mailto:no-reply@sharepointonline.com]
Sent: Wednesday, April 18, 2018 11:29 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Strong, Jamie has shared 'ECOS FED PART GENX PFBS PRESENTATION 2'

So here is what I have, please edit and add!

Jamie

Open ECOS FED PART GENX PFBS PRESENTATION 2.pptx

See more related to Strong, Jamie in Delve.

Get the SharePoint mobile app!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/24/2018 5:11:15 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: draft slides for engagement #2
Attachments: ECOS FED PART GENX PFBS PRESENTATION 2 04 24 18.pptx

Importance: High

FYI

From: Behl, Betsy
Sent: Tuesday, April 24, 2018 12:59 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: draft slides for engagement #2
Importance: High

Peter and Deborah,

this is a draft of the slide set for GenX chemicals we are proposing to share this Friday. ORD is still developing their slides on PFBS. We wanted to get this to you early for your feedback. There are a couple of gaps we still need to fill (ORD research on monitoring and HERO link). At the very end of the presentation we have the charge questions, so we are prepared to include those if you think it is helpful. We can also take them out of slides and just do a word doc as attachment.

The team is working hard now to get the documents ready for peer review. We had staff comments on GenX that were very positive, but understand Tala has more comments. We are also working on this presentation and still wrestling with OPPT to get all the documents into HERO. It's a lot to do in the next two weeks.

Thanks for your feedback.

Betsy

Appointment

From: Grevatt, Peter [Grevatt.Peter@epa.gov]
Sent: 4/27/2018 7:26:07 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Sandra Howard [Sandra.Howard@HHS.GOV]; Suzanne_Fitzpatrick [Suzanne.Fitzpatrick@fda.hhs.gov]; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; fjh1@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Jim.kim@omb.eop.gov; Grevatt, Peter [Grevatt.Peter@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Behrsing, Tracy [behrsing.tracy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Moore, Alexa [moore.alexa@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Rodan, Bruce [rodan.bruce@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Gervais, Gregory [Gervais.Gregory@epa.gov]; Leonard, Paul [leonard.paul@epa.gov]; James H [Kim@omb.eop.gov]; James_H_Kim@omb.eop.gov; Devito, Michael (NIH/NIEHS) [E] [michael.devito@nih.gov]
CC: South, Paul [Paul.South@fda.hhs.gov]; Glover, Sam (CDC/NIOSH/DART) [seg3@cdc.gov]; Corack, Jennifer M CIV NAVFAC Atlantic, EV [jennifer.corack@navy.mil]; Anita.K.Meyer@usace.army.mil; Smith, James Stanley CIV USN NAVMCPUBHLTHCEN PORS (US) [james.s.smith454.civ@mail.mil]; Soares, Barbara [soares.barbara@epa.gov]; Speth, Thomas [Speth.Thomas@epa.gov]

Subject: PFAS Toxicity Discussion-Federal Briefing #2
Attachments: ECOS FED PART GENX PFBS PRESENTATION 4.27.18A.pdf
Location: 2123 EPA East - Peter Grevatt's conference line - Ex. 6 Personal Privacy (PP)

Start: 5/2/2018 7:00:00 PM
End: 5/2/2018 8:30:00 PM
Show Time As: Tentative

Required Attendees: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Sandra.Howard@hhs.gov; Suzanne_Fitzpatrick; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; fjh1@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP) Grevatt, Peter; Mclain, Jennifer; Holsinger, Hannah; Wadlington, Christina; Tiago, Joseph; Burneson, Eric; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Donohue, Joyce; Miller, Gregory; Harper, Ashley; Drinkard, Andrea; behrsing.tracy@epa.gov; Babcock, Amy; Aubee, Catherine; Henry, Tala; Orme-Zavaleta, Jennifer; Gillespie, Andrew; Bahadori, Tina; Jones, Samantha; Lambert, Jason; Lavoie, Emma; Owens, Beth; Moore, Alexa; Champlin, Anna; Rodan, Bruce; Mattas-Curry, Lahne; Raffaele, Kathleen; Gervais, Gregory; Leonard, Paul; James H; James_H_Kim@omb.eop.gov; Devito, Michael (NIH/NIEHS) [E]
Optional Attendees: South, Paul; Glover, Sam (CDC/NIOSH/DART); Corack, Jennifer M CIV NAVFAC Atlantic, EV; Anita.K.Meyer@usace.army.mil; Smith, James Stanley CIV USN NAVMCPUBHLTHCEN PORS (US); Soares, Barbara; Speth, Thomas

If you are planning to participate here on site at EPA, inform Hanna Holsinger. If you come in person, please enter EPA at the 1201 Constitution Avenue, NW entrance. Please make sure that you have a valid photo ID. After you complete the security clearance, have the security guard call Paula at 564-3773 to be escorted to conference room 2123.

Adobe Connect Link: Ex. 6 Personal Privacy (PP)
Meeting materials will be provided prior to the meeting.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/15/2018 2:59:23 PM
To: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

From: Grevatt, Peter
Sent: Tuesday, May 15, 2018 10:57 AM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Sandra Howard <Sandra.Howard@HHS.GOV>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; fjh1@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Paul.South@fda.hhs.gov; seg3@cdc.gov; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; birnbaumls@niehs.nih.gov; barry.marcel@us.af.mil; mfocazio@usgs.gov; Michael.devito@nih.gov; Ex. 6 Personal Privacy (PP) erra.irons@va.gov
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Apologies to all that I of course had intended our due dates those we had discussed at our last meeting:

Comments on the toxicity assessments by MAY 25

Comments on the draft charge questions by Thursday MAY 17

From: Grevatt, Peter
Sent: Monday, May 14, 2018 5:12 PM
To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <James_H_Kim@omb.eop.gov>; 'Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov)

<behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
Subject: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Please see attached to this message copies of the draft toxicity assessment documents for GenX and PFBS. We will very much appreciate your providing high-level comments to these drafts no later than June 25th, as we discussed on our last meeting. In addition, it will be very helpful if reviewers from the same organization are able to consolidate their comments to help us to understand your organization's most important perspectives and to facilitate our responsiveness to any concerns you may identify with these drafts. Please note that Appendix B has not been included in the draft document for GenX. We are hoping to be able to provide this in the next day or so, and will send this at the earliest opportunity. I apologize for any inconvenience this may cause.

I have also attached again the draft peer review charge questions, and I request that you provide any comments you have no later than this Thursday, June 17th.

Please send all of your comments to Hannah Holsinger on my staff, who is copied on this message.

Thanks again to each of your for all of your assistance in this effort. We are very much looking forward to your input on these drafts. As we have discussed previously, please do not share these documents beyond your review group; these are internal deliberative documents and should be treated as such!

Thanks, P. Grevatt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/17/2018 11:49:19 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX systematic review appendix and updated timing for comments on peer review charge for GenX and PFBS
Attachments: Appendix B_GenX_version051518.pdf

FYI

From: Grevatt, Peter
Sent: Wednesday, May 16, 2018 4:16 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Sandra Howard <Sandra.Howard@HHS.GOV>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; fjh1@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Paul.South@fda.hhs.gov; seg3@cdc.gov; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; birnbaumls@niehs.nih.gov; barry.marcel@us.af.mil; mfocazio@usgs.gov; Michael.devito@nih.gov; [redacted] Ex. 6 Personal Privacy (PP) [redacted] erra.irons@va.gov
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Cooperstein, Sharon <Cooperstein.Sharon@epa.gov>; Nickerson, William <Nickerson.William@epa.gov>
Subject: GenX systematic review appendix and updated timing for comments on peer review charge for GenX and PFBS

Folks, please see attached to this message the Appendix B systematic review for the DuPont/Chemours studies on GenX. This appendix presents both the process and the study-specific evaluations, which are included in the latter part of the document. Apologies again for the delay in getting this to you.

Thanks also to all who have provided your perspectives on the challenging timing for comments on the draft peer review charge questions for GenX and PFBS. I have confirmed that we can work with comments that are provided along with your comments on the draft GenX and PFBS assessments on May 25.

Thanks again to all for your assistance in reviewing these documents.

P. Grevatt

From: Grevatt, Peter
Sent: Tuesday, May 15, 2018 10:57 AM
To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>;

Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <j Ex. 6 Personal Privacy (PP) Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov) <behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
Subject: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Apologies to all that I of course had intended our due dates those we had discussed at our last meeting:

Comments on the toxicity assessments by MAY 25

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From: Grevatt, Peter
Sent: Monday, May 14, 2018 5:12 PM
To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <James_H_Kim@omb.eop.gov>; 'Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov) <behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
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Thanks, P. Grevatt

Message

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Sent: 5/18/2018 12:58:22 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX systematic review appendix and updated timing for comments on peer review charge for GenX and PFBS
Attachments: GenX PFBS_External Peer Review_Requested expertise and charge questions_5-04-18.docx

FYI

From: Fenton, Suzanne (NIH/NIEHS) [E] [mailto:suzanne.fenton@nih.gov]
Sent: Thursday, May 17, 2018 4:08 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Birnbaum, Linda (NIH/NIEHS) [E] <birnbaumls@niehs.nih.gov>; Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>; Miller, Mark (NIH/NIEHS) [E] <mark.miller2@nih.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Mamta (NIH/NIEHS) [E] <mamta.behl@nih.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Subject: RE: GenX systematic review appendix and updated timing for comments on peer review charge for GenX and PFBS

Peter, sorry for the later response. We were waiting to make sure that all on my end had a chance to respond. Here are a few comments on the charge questions.

Sue

Suzanne E. Fenton, Ph.D.
Group Leader, Reproductive Endocrinology
NTP Labs
Division of the National Toxicology Program
NIEHS/NIH
111 TW Alexander Dr
Bldg 101, MD E1-08
Research Triangle Park, NC 27709

Work: 984-287-4182 - NEW
Work Cell: 919-485-9783
fentonse@niehs.nih.gov

From: Grevatt, Peter [mailto:Grevatt.Peter@epa.gov]
Sent: Wednesday, May 16, 2018 4:16 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Howard, Sandra (OS/OASH) <Sandra.Howard@HHS.GOV>; Fitzpatrick, Suzanne (FDA/CFSAN) <Suzanne.Fitzpatrick@fda.hhs.gov>; Aungst, Jason (FDA/CFSAN) <jason.aungst@fda.hhs.gov>; Rice, Penelope (FDA/CFSAN) <Penelope.Rice@fda.hhs.gov>; Cibulas, William (ATSDR/OADS) <wic1@CDC.GOV>; Forrester, Tina (ATSDR/DCHI/OD) <txf5@CDC.GOV>; Breysse, Patrick N. (CDC/ONDIEH/NCEH) <pjb7@cdc.gov>; Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>; Miller, Aubrey (NIH/NIEHS) [E] <miller.aubrey@nih.gov>; Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>; Hearl, Frank J. (CDC/NIOSH/OD) <fjh1@CDC.GOV>; Protzel Berman, Pamela (CDC/ONDIEH/NCEH) <pxp5@CDC.GOV>; linda.s.wennerberg@nasa.gov; South, Paul (FDA/CFSAN) <Paul.South@fda.hhs.gov>; Glover, Sam (CDC/NIOSH/DART)

<seg3@CDC.GOV>; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; Birnbaum, Linda (NIH/NIEHS) [E] <birnbaumls@niehs.nih.gov>; barry.marcel@us.af.mil; mfocazio@usgs.gov; Devito, Michael (NIH/NIEHS) [E] <michael.devito@nih.gov>; James_H_Kim@omb.eop.gov; Terra.irons@va.gov
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Cooperstein, Sharon <Cooperstein.Sharon@epa.gov>; Nickerson, William <Nickerson.William@epa.gov>
Subject: GenX systematic review appendix and updated timing for comments on peer review charge for GenX and PFBS

Folks, please see attached to this message the Appendix B systematic review for the DuPont/Chemours studies on GenX. This appendix presents both the process and the study-specific evaluations, which are included in the latter part of the document. Apologies again for the delay in getting this to you.

Thanks also to all who have provided your perspectives on the challenging timing for comments on the draft peer review charge questions for GenX and PFBS. I have confirmed that we can work with comments that are provided along with your comments on the draft GenX and PFBS assessments on May 25.

Thanks again to all for your assistance in reviewing these documents.

P. Grevatt

From: Grevatt, Peter
Sent: Tuesday, May 15, 2018 10:57 AM
To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <Ex. 6 Personal Privacy (PP)>; 'Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov) <behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
Subject: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Apologies to all that I of course had intended our due dates those we had discussed at our last meeting:

Comments on the toxicity assessments by MAY 25

Comments on the draft charge questions by Thursday MAY 17

From: Grevatt, Peter
Sent: Monday, May 14, 2018 5:12 PM

To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <Ex. 6 Personal Privacy (PP)>; 'Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov) <behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
Subject: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Please see attached to this message copies of the draft toxicity assessment documents for GenX and PFBS. We will very much appreciate your providing high-level comments to these drafts no later than June 25th, as we discussed on our last meeting. In addition, it will be very helpful if reviewers from the same organization are able to consolidate their comments to help us to understand your organization's most important perspectives and to facilitate our responsiveness to any concerns you may identify with these drafts. Please note that Appendix B has not been included in the draft document for GenX. We are hoping to be able to provide this in the next day or so, and will send this at the earliest opportunity. I apologize for any inconvenience this may cause.

I have also attached again the draft peer review charge questions, and I request that you provide any comments you have no later than this Thursday, June 17th.

Please send all of your comments to Hannah Holsinger on my staff, who is copied on this message.

Thanks again to each of your for all of your assistance in this effort. We are very much looking forward to your input on these drafts. As we have discussed previously, please do not share these documents beyond your review group; these are internal deliberative documents and should be treated as such!

Thanks, P. Grevatt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:32:39 AM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: ATSDR comments: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS
Attachments: EPA GEN X and PFBS Rraft Review_05252018.docx

ATSDR

From: Grevatt, Peter
Sent: Friday, May 25, 2018 3:58 PM
To: Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: FW: ATSDR comments: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

FYI

From: Abadin, Henry (ATSDR/DTHHS/ETB) [mailto:hga0@cdc.gov]
Sent: Friday, May 25, 2018 3:19 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Cibulas, William (ATSDR/OADS) <wic1@cdc.gov>
Subject: ATSDR comments: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Hi Peter,
Attached are our comments for Hexafluoropropylene Oxide and Perfluorobutane Sulfonate. Given the short timeframe, we focused on the RfD derivations. We are in general agreement with EPA's approach. Thanks for the opportunity to review the documents.
Regards,
Henry

Henry G. Abadin, MSPH
Chief, Environmental Toxicology Branch
Division of Toxicology and Human Health Sciences
CDC/ATSDR
1600 Clifton Road, F-57
Atlanta, GA 30333
770 488-3321

From: Cibulas, William (ATSDR/OADS)
Sent: Tuesday, May 15, 2018 9:40 AM
To: Breysse, Patrick N. (CDC/ONDIEH/NCEH) <pjb7@cdc.gov>; Protzel Berman, Pamela (CDC/ONDIEH/NCEH) <pxp5@cdc.gov>
Cc: Abadin, Henry (ATSDR/DTHHS/ETB) <hga0@cdc.gov>; Balluz, Lina (ATSDR/DTHHS/OD) <lib7@cdc.gov>; Moore, Susan (ATSDR/DCHI/SSB) <sym8@cdc.gov>; Forrester, Tina (ATSDR/DCHI/OD) <txf5@cdc.gov>; Calafat, Antonia M. (CDC/ONDIEH/NCEH) <aic7@cdc.gov>
Subject: FW: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

From: Grevatt, Peter < >
Sent: Monday, May 14, 2018 5:12 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Howard, Sandra (OS/OASH) <Sandra.Howard@HHS.GOV>; Fitzpatrick, Suzanne (FDA/CFSAN) <Suzanne.Fitzpatrick@fda.hhs.gov>; Aungst, Jason (FDA/CFSAN) <Jason.Aungst@fda.hhs.gov>; Rice, Penelope (FDA/CFSAN) <Penelope.Rice@fda.hhs.gov>; Cibulas, William (ATSDR/OADS) <wic1@cdc.gov>; Forrester, Tina (ATSDR/DCHI/OD) <txf5@cdc.gov>; Breysse, Patrick N. (CDC/ONDIEH/NCEH) <pjb7@cdc.gov>; Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>; Miller, Aubrey (NIH/NIEHS) [E] <miller.aubrey@nih.gov>; Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>; Hearl, Frank J. (CDC/NIOSH/OD) <fjh1@cdc.gov>; Protzel Berman, Pamela (CDC/ONDIEH/NCEH) <pxp5@cdc.gov>; linda.s.wennerberg@nasa.gov; South, Paul (FDA/CFSAN) <Paul.South@fda.hhs.gov>; Glover, Sam (CDC/NIOSH/DART) <seg3@cdc.gov>; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; Birnbaum, Linda (NIH/NIEHS) [E] <birnbaumls@niehs.nih.gov>; barry.marcel@us.af.mil; mfocazio@usgs.gov; Devito, Michael (NIH/NIEHS) [E] <Michael.Devito@nih.gov>; James_H_Kim@omb.eop.gov; Terra.irons@va.gov
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Please see attached to this message copies of the draft toxicity assessment documents for GenX and PFBS. We will very much appreciate your providing high-level comments to these drafts no later than June 25th, as we discussed on our last meeting. In addition, it will be very helpful if reviewers from the same organization are able to consolidate their comments to help us to understand your organization's most important perspectives and to facilitate our responsiveness to any concerns you may identify with these drafts. Please note that Appendix B has not been included in the draft document for GenX. We are hoping to be able to provide this in the next day or so, and will send this at the earliest opportunity. I apologize for any inconvenience this may cause.

I have also attached again the draft peer review charge questions, and I request that you provide any comments you have no later than this Thursday, June 17th.

Please send all of your comments to Hannah Holsinger on my staff, who is copied on this message.

Thanks again to each of your for all of your assistance in this effort. We are very much looking forward to your input on these drafts. As we have discussed previously, please do not share these documents beyond your review group; these are internal deliberative documents and should be treated as such!

Thanks, P. Grevatt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:48:28 AM
To: Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]
Subject: FW: NIOSH review of Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

From: Holsinger, Hannah
Sent: Thursday, May 24, 2018 3:43 PM
To: Rice, Faye L. (CDC/NIOSH/EID) <flr2@cdc.gov>
Cc: Glover, Sam (CDC/NIOSH/DART) <seg3@cdc.gov>; Hearl, Frank J. (CDC/NIOSH/OD) <fjh1@cdc.gov>; Strickland, Maria (CDC/NIOSH/OD) <kvl9@cdc.gov>; Lentz, Thomas J. (CDC/NIOSH/EID) <tbl7@cdc.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Subject: RE: NIOSH review of Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Thank you for your comments. We appreciate you all taking the time to review.
Thanks!
-Hannah

From: Rice, Faye L. (CDC/NIOSH/EID) [mailto:flr2@cdc.gov]
Sent: Thursday, May 24, 2018 3:29 PM
To: Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Cc: Glover, Sam (CDC/NIOSH/DART) <seg3@cdc.gov>; Hearl, Frank J. (CDC/NIOSH/OD) <fjh1@cdc.gov>; Strickland, Maria (CDC/NIOSH/OD) <kvl9@cdc.gov>; Lentz, Thomas J. (CDC/NIOSH/EID) <tbl7@cdc.gov>
Subject: NIOSH review of Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Hannah,

Sam Glover (NIOSH/DART) received the draft toxicity assessment documents transmitted by Peter Grevatt and distributed them for review by experts within NIOSH.

NIOSH researchers expressed comments similar to those expressed by other federal partners in the working discussions:

-challenges associated with biokinetic difference between species
-challenges for multiple routes of exposure –not just oral (inhalation/absorption) and associated toxicological risks.

Thank you for the opportunity to review the drafts.

Faye

Faye Rice, MPH, RHIA, CCS
NIOSH Policy Response Coordinator
CDC/National Institute for Occupational Safety and Health (NIOSH)

From: Grevatt, Peter <Grevatt.Peter@epa.gov>
Sent: Tuesday, May 15, 2018 10:57 AM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Howard, Sandra (OS/OASH) <Sandra.Howard@HHS.GOV>; Fitzpatrick, Suzanne (FDA/CFSAN) <Suzanne.Fitzpatrick@fda.hhs.gov>; Aungst, Jason (FDA/CFSAN) <Jason.Aungst@fda.hhs.gov>; Rice, Penelope (FDA/CFSAN) <Penelope.Rice@fda.hhs.gov>; Cibulas, William (ATSDR/OADS) <wic1@cdc.gov>; Forrester, Tina (ATSDR/DCHI/OD) <txf5@cdc.gov>; Breysse, Patrick N. (CDC/ONDIEH/NCEH) <pjb7@cdc.gov>; Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>; Miller, Aubrey (NIH/NIEHS) [E] <miller.aubrey@nih.gov>; Fenton, Suzanne (NIH/NIEHS) [E] <suzanne.fenton@nih.gov>; Hearl, Frank J. (CDC/NIOSH/OD) <fjh1@cdc.gov>; Protzel Berman, Pamela (CDC/ONDIEH/NCEH) <pxp5@cdc.gov>; linda.s.wennerberg@nasa.gov; South, Paul (FDA/CFSAN) <Paul.South@fda.hhs.gov>; Glover, Sam (CDC/NIOSH/DART) <seg3@cdc.gov>; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; Birnbaum, Linda (NIH/NIEHS) [E] <birnbaumls@niehs.nih.gov>; barry.marcel@us.af.mil; mfocazio@usgs.gov; Devito, Michael (NIH/NIEHS) [E] <Michael.Devito@nih.gov>; Ex. 6 Personal Privacy (PP) Terra.irons@va.gov
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Apologies to all that I of course had intended our due dates those we had discussed at our last meeting:

Comments on the toxicity assessments by MAY 25

Comments on the draft charge questions by Thursday MAY 17

From: Grevatt, Peter
Sent: Monday, May 14, 2018 5:12 PM
To: 'patricia.m.underwood.civ@mail.mil' ; 'maria.vargas@navy.mil' ; 'greg.berry@navy.mil' ; 'freeman.holifield.mil@mail.mil' ; 'andrew.rak@noblis.org' ; 'andrew.rak2.ctr@mail.mil' ; 'mark.s.johnson.civ@mail.mil' ; 'Sandra.Howard@hhs.gov' ; Suzanne_Fitzpatrick ; 'Jason.Aungst@fda.hhs.gov' ; 'Penelope.Rice@fda.hhs.gov' ; 'wic1@cdc.gov' ; 'txf5@cdc.gov' ; 'pjb7@cdc.gov' ; 'Christopher.Weis@nih.gov' ; 'miller.aubrey@nih.gov' ; 'suzanne.fenton@nih.gov' ; 'fjh1@cdc.gov' ; 'pxp5@cdc.gov' ; 'linda.s.wennerberg@nasa.gov' ; 'Paul.South@fda.hhs.gov' ; 'seg3@cdc.gov' ; 'jennifer.corack@navy.mil' ; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' ; 'birnbaumls@niehs.nih.gov' ; 'barry.marcel@us.af.mil' ; 'mfocazio@usgs.gov' ; 'Michael.devito@nih.gov' ; 'Kim, Jim H. EOP/OMB' ; 'Terra.irons@va.gov'
Cc: Jones, Samantha ; Bahadori, Tina ; Mclain, Jennifer ; Holsinger, Hannah ; Gillespie, Andrew ; Strong, Jamie ; Betsy Behl (behl.betsy@epa.gov) ; Tiago, Joseph ; Burneson, Eric
Subject: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

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Please send all of your comments to Hannah Holsinger on my staff, who is copied on this message.

Thanks again to each of your for all of your assistance in this effort. We are very much looking forward to your input on these drafts. As we have discussed previously, please do not share these documents beyond your review group; these are internal deliberative documents and should be treated as such!

Thanks, P. Grevatt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:33:48 AM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]
Subject: FW: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS
Attachments: FDA_Comments_GenX_PFBS_5_23_18.docx

FDA

From: Grevatt, Peter
Sent: Friday, May 25, 2018 12:09 PM
To: Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

FYI

From: South, Paul [mailto:Paul.South@fda.hhs.gov]
Sent: Friday, May 25, 2018 12:06 PM
To: Grevatt, Peter <Grevatt.Peter@epa.gov>
Cc: Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; Musser, Steven M <Steven.Musser@fda.hhs.gov>; Forfa, Tracey <Tracey.Forfa@fda.hhs.gov>; Sandra Howard <Sandra.Howard@HHS.GOV>; William Jones <William.jones@fda.hhs.gov>
Subject: RE: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Hi Peter,

Attached are FDA comments on the draft toxicity assessment documents and peer review charge for GenX and PFBS.

Please let us know if you have questions.

Thanks, Paul

From: Grevatt, Peter [mailto:Grevatt.Peter@epa.gov]
Sent: Tuesday, May 15, 2018 10:57 AM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; greg.berry@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; Howard, Sandra (OS) <Sandra.Howard@HHS.GOV>; Fitzpatrick, Suzanne <Suzanne.Fitzpatrick@fda.hhs.gov>; Aungst, Jason <Jason.Aungst@fda.hhs.gov>; Rice, Penelope <Penelope.Rice@fda.hhs.gov>; Cibulas, William (ATSDR) <wic1@cdc.gov>; Forrester, Tina (ATSDR) <txf5@cdc.gov>; Breysse, Patrick N (CDC) <pjb7@cdc.gov>; Weis, Christopher P (NIH) <christopher.weis@nih.gov>; Miller, Aubrey K (NIH) <miller.aubrey@nih.gov>; Fenton, Sue E (NIH) <suzanne.fenton@nih.gov>; Hearl, Frank J (CDC) <fjh1@cdc.gov>; Protzel Berman, Pamela (CDC) <pxp5@cdc.gov>; linda.s.wennerberg@nasa.gov; South, Paul <Paul.South@fda.hhs.gov>; Glover, Samuel E (CDC) <seg3@cdc.gov>; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; Birnbaum, Linda S (NIH) <birnbaumls@niehs.nih.gov>; barry.marcel@us.af.mil; mfocazio@usgs.gov; Devito, Michael J (NIH) <michael.devito@nih.gov>; Ex. 6 Personal Privacy (PP) erra.irons@va.gov

Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Subject: CORRECTION ON DATES: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Apologies to all that I of course had intended our due dates those we had discussed at our last meeting:

Comments on the toxicity assessments by MAY 25

Comments on the draft charge questions by Thursday MAY 17

From: Grevatt, Peter
Sent: Monday, May 14, 2018 5:12 PM
To: 'patricia.m.underwood.civ@mail.mil' <patricia.m.underwood.civ@mail.mil>; 'maria.vargas@navy.mil' <maria.vargas@navy.mil>; 'greg.berry@navy.mil' <greg.berry@navy.mil>; 'freeman.holifield.mil@mail.mil' <freeman.holifield.mil@mail.mil>; 'andrew.rak@noblis.org' <andrew.rak@noblis.org>; 'andrew.rak2.ctr@mail.mil' <andrew.rak2.ctr@mail.mil>; 'mark.s.johnson.civ@mail.mil' <mark.s.johnson.civ@mail.mil>; 'Sandra.Howard@hhs.gov' <Sandra.Howard@hhs.gov>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; 'Jason.Aungst@fda.hhs.gov' <Jason.Aungst@fda.hhs.gov>; 'Penelope.Rice@fda.hhs.gov' <Penelope.Rice@fda.hhs.gov>; 'wic1@cdc.gov' <wic1@cdc.gov>; 'txf5@cdc.gov' <txf5@cdc.gov>; 'pjb7@cdc.gov' <pjb7@cdc.gov>; 'Christopher.Weis@nih.gov' <Christopher.Weis@nih.gov>; 'miller.aubrey@nih.gov' <miller.aubrey@nih.gov>; 'suzanne.fenton@nih.gov' <suzanne.fenton@nih.gov>; 'fjh1@cdc.gov' <fjh1@cdc.gov>; 'pxp5@cdc.gov' <pxp5@cdc.gov>; 'linda.s.wennerberg@nasa.gov' <linda.s.wennerberg@nasa.gov>; 'Paul.South@fda.hhs.gov' <Paul.South@fda.hhs.gov>; 'seg3@cdc.gov' <seg3@cdc.gov>; 'jennifer.corack@navy.mil' <jennifer.corack@navy.mil>; Anita.K.Meyer@usace.army.mil; 'james.s.smith454.civ@mail.mil' <james.s.smith454.civ@mail.mil>; 'birnbaumls@niehs.nih.gov' <birnbaumls@niehs.nih.gov>; 'barry.marcel@us.af.mil' <barry.marcel@us.af.mil>; 'mfocazio@usgs.gov' <mfocazio@usgs.gov>; 'Michael.devito@nih.gov' <Michael.devito@nih.gov>; 'Kim, Jim H. EOP/OMB' <James_H_Kim@omb.eop.gov>; 'Terra.irons@va.gov' <Terra.irons@va.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Betsy Behl (behl.betsy@epa.gov) <behl.betsy@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <burneson.eric@epa.gov>
Subject: Draft toxicity assessment documents and draft peer review charge for GenX and PFBS

Please see attached to this message copies of the draft toxicity assessment documents for GenX and PFBS. We will very much appreciate your providing high-level comments to these drafts no later than June 25th, as we discussed on our last meeting. In addition, it will be very helpful if reviewers from the same organization are able to consolidate their comments to help us to understand your organization's most important perspectives and to facilitate our responsiveness to any concerns you may identify with these drafts. Please note that Appendix B has not been included in the draft document for GenX. We are hoping to be able to provide this in the next day or so, and will send this at the earliest opportunity. I apologize for any inconvenience this may cause.

I have also attached again the draft peer review charge questions, and I request that you provide any comments you have no later than this Thursday, June 17th.

Please send all of your comments to Hannah Holsinger on my staff, who is copied on this message.

Thanks again to each of your for all of your assistance in this effort. We are very much looking forward to your input on these drafts. As we have discussed previously, please do not share these documents beyond your review group; these are internal deliberative documents and should be treated as such!

Thanks, P. Grevatt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/29/2018 11:44:09 AM
To: Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Champlin, Anna [Champlin.Anna@epa.gov]
Subject: FW: DoD comments on SAB charge questions for GenX and PFBS
Attachments: DoD_Comments_GenX and PFBS Charge Questions 05172018.pdf; ATT00001.htm

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From: Grevatt, Peter
Sent: Thursday, May 24, 2018 10:08 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Subject: Fwd: DoD comments on SAB charge questions for GenX and PFBS

FYI. Not sure why they are referring to SAB.

Sent from my iPhone

Begin forwarded message:

> **From:** "Underwood, Patricia M CIV (US)" <patricia.m.underwood.civ@mail.mil>
> **Date:** May 17, 2018 at 7:57:50 PM EDT
> **To:** "Grevatt.Peter@epa.gov" <Grevatt.Peter@epa.gov>
> **Cc:** "Sullivan, Maureen SES OSD OUSD ATL (US)" <maureen.sullivan18.civ@mail.mil>, "Anita K HNC@NWO Meyer" <Anita.K.Meyer@usace.army.mil>, "andrew.rak@noblis.org" <andrew.rak@noblis.org>
> **Subject: DoD comments on SAB charge questions for GenX and PFBS**
>
> Peter,
> Thank you for the opportunity to consider the technical reports on the Gen X chemicals and PFBS toxicity assessments prior to providing comment on the SAB charge questions. While the time frame was very constrained, we see this as a significant step forward in the Office of Water led interagency review process. I hope your staff finds our comments and suggestions on the charge questions helpful. We did the best we could provided the time that was available and also appreciate your time constraints. Please do have your staff contact me with any questions.
>
> Best regards,
> Tricia

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/30/2018 3:36:09 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: GenX and PFBS charge interagency and agency comments and revisions
Attachments: GenX PFBS_External Peer Review_Requested expertise and charge questions_5-29-18.docx; NASA charge comments and response.docx

Importance: High

All,
I have incorporated comments from DoD, OMB, and NASA (to come extent, see below) and from OLEM and ORD. There are significant edits and remaining comments/suggestions that we need to resolve as a group. Those are incorporated in comment bubbles in the revised charge. Also, NASA had several charge question suggestions (see attached) that I either disagree with or need help with interpreting/adding text.

Additionally, DoD and NASA are requesting additional expertise on the panel.

I suggest that we set up a quick call to resolve these issues as the charge is due to the contractor no later than June 14th. Let me know what you think and I can set something up or alternatively you can send edits/responses (by COB Friday please) and we can talk during our Tuesday meeting.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/30/2018 3:42:14 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: GenX and PFBS charge interagency and agency comments and revisions
Attachments: GenX PFBS_External Peer Review_Requested expertise and charge questions_5-29-18.docx

Importance: High

Sorry this one...just found two more comments embedded in docs.

From: Strong, Jamie
Sent: Wednesday, May 30, 2018 11:36 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: GenX and PFBS charge interagency and agency comments and revisions
Importance: High

All,
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Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Bahadori, Tina [Bahadori.Tina@epa.gov]
Sent: 5/30/2018 11:50:25 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: GenX and PFBS charge interagency and agency comments and revisions

I agree!

From: Behl, Betsy
Sent: Wednesday, May 30, 2018 7:00 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: GenX and PFBS charge interagency and agency comments and revisions

Excellent idea to set up a call

From: Strong, Jamie
Sent: Wednesday, May 30, 2018 11:36 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: GenX and PFBS charge interagency and agency comments and revisions
Importance: High

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Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Appointment

From: Tiago, Joseph [Tiago.Joseph@epa.gov]
Sent: 6/19/2018 5:03:05 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; Sandra Howard [Sandra.Howard@HHS.GOV]; Suzanne_Fitzpatrick [Suzanne.Fitzpatrick@fda.hhs.gov]; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; birnbaumls@niehs.nih.gov; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; James_H_Kim@omb.eop.gov; mfocazio@usgs.gov; Terra.irons@va.gov; Grevatt, Peter [Grevatt.Peter@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Behrsing, Tracy [behrsing.tracy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Moore, Alexa [moore.alexa@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Rodan, Bruce [rodan.bruce@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Gervais, Gregory [Gervais.Gregory@epa.gov]; Leonard, Paul [leonard.paul@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Speth, Thomas [Speth.Thomas@epa.gov]; Lehman, Rachel [lehman.rachel@epa.gov]; michael.j.quinn104.civ@mail.mil
CC: Albert, Ryan [Albert.Ryan@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Burchette, John [Burchette.John@epa.gov]

Subject: PFAS Toxicity Assessment Discussion
Attachments: GenX PFBS_External Peer Review_charge questions_06 18 18 FINAL.docx
Location: 2203 EPA East - Peter Grevatt's conference line - Ex. 6 Personal Privacy (PP)

Start: 6/20/2018 5:00:00 PM
End: 6/20/2018 6:30:00 PM
Show Time As: Tentative

Required Attendees: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; Sandra.Howard@hhs.gov; Suzanne_Fitzpatrick; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; birnbaumls@niehs.nih.gov; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP) mfocazio@usgs.gov; Terra.irons@va.gov; Grevatt, Peter; Mclain, Jennifer; Holsinger, Hannah; Wadlington, Christina; Tiago, Joseph; Burneson, Eric; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Donohue, Joyce; Miller, Gregory; Harper, Ashley; Drinkard, Andrea; Behrsing, Tracy; Babcock, Amy; Aubee, Catherine; Henry, Tala; Orme-Zavaleta, Jennifer; Gillespie, Andrew; Bahadori, Tina; Jones, Samantha; Lambert, Jason; Lavoie, Emma; Owens, Beth; Moore, Alexa; Champlin, Anna; Rodan, Bruce; Mattas-Curry, Lahne; Raffaele, Kathleen; Gervais, Gregory; Leonard, Paul; Soares, Barbara; Speth, Thomas; Lehman, Rachel; michael.j.quinn104.civ@mail.mil
Optional Attendees: Albert, Ryan; Foster, Stiven; Libelo, Laurence; Cooke, Maryt; Burchette, John

Agenda: PFAS Toxicity Development Updates

1) Brief overview and discussion of significant comments received on the Toxicity Assessments
2) Charge question discussion
3) Schedule and next steps

Appointment

From: Tiago, Joseph [Tiago.Joseph@epa.gov]
Sent: 6/19/2018 9:22:05 PM
To: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; Sandra Howard [Sandra.Howard@HHS.GOV]; Suzanne_Fitzpatrick [Suzanne.Fitzpatrick@fda.hhs.gov]; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; birnbaumls@niehs.nih.gov; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; James_H_Kim@omb.eop.gov; mfocazio@usgs.gov; Terra.irons@va.gov; Grevatt, Peter [Grevatt.Peter@epa.gov]; Mclain, Jennifer [Mclain.Jennifer@epa.gov]; Holsinger, Hannah [Holsinger.Hannah@epa.gov]; Wadlington, Christina [Wadlington.Christina@epa.gov]; Tiago, Joseph [Tiago.Joseph@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Behrsing, Tracy [behrsing.tracy@epa.gov]; Babcock, Amy [babcock.amy@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Moore, Alexa [moore.alexa@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]; Rodan, Bruce [rodan.bruce@epa.gov]; Mattas-Curry, Lahne [Mattas-Curry.Lahne@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Gervais, Gregory [Gervais.Gregory@epa.gov]; Leonard, Paul [leonard.paul@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]; Speth, Thomas [Speth.Thomas@epa.gov]; Lehman, Rachel [lehman.rachel@epa.gov]; michael.j.quinn104.civ@mail.mil; Birchfield, Norman [Birchfield.Norman@epa.gov]
CC: Albert, Ryan [Albert.Ryan@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Cooke, Maryt [Cooke.Maryt@epa.gov]; Burchette, John [Burchette.John@epa.gov]

Subject: PFAS Toxicity Assessment Discussion
Attachments: GenX PFBS_External Peer Review_charge questions_06 18 18 FINAL.docx
Location: 2203 EPA East - Peter Grevatt's conference line - Ex. 6 Personal Privacy (PP)

Start: 6/20/2018 5:00:00 PM
End: 6/20/2018 6:30:00 PM
Show Time As: Tentative

Required Attendees: patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; Sandra.Howard@hhs.gov; Suzanne_Fitzpatrick; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; birnbaumls@niehs.nih.gov; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP); mfocazio@usgs.gov; Terra.irons@va.gov; Grevatt, Peter; Mclain, Jennifer; Holsinger, Hannah; Wadlington, Christina; Tiago, Joseph; Burneson, Eric; Behl, Betsy; Strong, Jamie; Jacobs, Brittany; Donohue, Joyce; Miller, Gregory; Harper, Ashley; Drinkard, Andrea; Behrsing, Tracy; Babcock, Amy; Aubee, Catherine; Henry, Tala; Orme-Zavaleta, Jennifer; Gillespie, Andrew; Bahadori, Tina; Jones, Samantha; Lambert, Jason; Lavoie, Emma; Owens, Beth; Moore, Alexa; Champlin, Anna; Rodan, Bruce; Mattas-Curry, Lahne; Raffaele, Kathleen; Gervais, Gregory; Leonard, Paul; Soares, Barbara; Speth, Thomas; Lehman, Rachel; michael.j.quinn104.civ@mail.mil; Birchfield, Norman
Optional Attendees: Albert, Ryan; Foster, Stiven; Libelo, Laurence; Cooke, Maryt; Burchette, John

Agenda: PFAS Toxicity Development Updates

1) Introduction and general questions re process and reviewers (10 min)
2) GenX chemicals assessment (20 min)
3) PFBS assessment (30 min)
4) Charge questions (30 min)

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/17/2018 4:21:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: presentation on PFBS and GenX

No comments on genx. Two questions: do we have ot identify peer reviewers by name? who has the latest version, as this doesn't include pfbs slides. Thanks!

From: Jacobs, Brittany
Sent: Tuesday, August 14, 2018 8:25 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: presentation on PFBS and GenX

Hi Betsy,

These are the slides that Jamie sent you. Neither Greg nor I have a version with your comments, so let us know if you would like anything changed. Sorry if you already did this and we just didn't get that version!

Britt

From: Behl, Betsy
Sent: Monday, August 13, 2018 10:17 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: presentation on PFBS and GenX

I can't recall the comments. Thought it looked great overall. if you send what you have I will confirm.

From: Jacobs, Brittany
Sent: Monday, August 13, 2018 8:46 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: presentation on PFBS and GenX

Good Morning Betsy,

When you get a chance, could you send Greg and me your comments on the slides? Neither of us has the slides with your comments.

Thanks!
Brittany

From: Behl, Betsy
Sent: Monday, August 13, 2018 1:25 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Snowden, Belinda <snowden.belinda@epa.gov>
Subject: Re: presentation on PFBS and GenX

I commented on a draft last week. Brittany, can you send it around?

Sent from my iPhone

On Aug 10, 2018, at 7:37 PM, Jones, Samantha <Jones.Samantha@epa.gov> wrote:

Hi all,

I can call in on the 17th. Tina is out of the country. I saw that Joe sent out the invite, so I forwarded it to Jason and Beth.

Do we have a draft of the presentation ready for review?

Thanks,
Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Behl, Betsy
Sent: Friday, August 10, 2018 6:01 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Snowden, Belinda <snowden.belinda@epa.gov>
Subject: presentation on PFBS and GenX

I would like to get this presentation to Deborah and Peter for their review early this week and would like to get a short meeting with peter on Friday to discuss how we are going to approach it. He is out the whole week of 8/20 so the 27th is his first day back in the office and our first meeting is at 9 am.

He does seem to be free Friday afternoon (the 17th). I will ask Joe Tiago about his availability. Please let me know if you are here.

Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/17/2018 9:02:11 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]
Subject: RE: materials for today's meeting with Peter
Attachments: Home stretch calendar for GenX and PFBS_Final.docx; stakeholder briefing PFBS GenX Chemicals 08 12 18.pptx

Updated versions of the schedule and presentations attached with revisions after the meeting with Peter. Looking good folks.

Betsy

From: Jones, Samantha
Sent: Friday, August 17, 2018 1:16 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: materials for today's meeting with Peter

Thanks for sharing! Replying all to add in Beth to the email chain.

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Behl, Betsy
Sent: Friday, August 17, 2018 1:06 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: materials for today's meeting with Peter

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/17/2018 9:38:28 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
CC: Bahadori, Tina [Bahadori.Tina@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]
Subject: RE: materials for today's meeting with Peter
Attachments: PFAS stakeholder briefing_PFBS and GenX Chemicals_8-27-18.pptx

Thanks Betsy!

These look good. For the slides, I removed the highlighting and comments bubble, cleaned up the slide numbers, removed a couple of extra commas, renamed the file with the 27th date for the meeting.

I'm going to add this one to the calendar invite for the internal EPA meeting scheduled for Monday, August 20th. We can see if any edits are needed after that in time to distribute to the federal and state stakeholders a week ahead of the meeting on the 27th.

Thanks!
Samantha

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
HHRA Interim Deputy National Program Director
USEPA, ORD/NCEA
(o) 202-564-6794; (m) 703-943-7990

From: Behl, Betsy
Sent: Friday, August 17, 2018 5:02 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Subject: RE: materials for today's meeting with Peter

Updated versions of the schedule and presentations attached with revisions after the meeting with Peter. Looking good folks.

Betsy

From: Jones, Samantha
Sent: Friday, August 17, 2018 1:16 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: materials for today's meeting with Peter

Thanks for sharing! Replying all to add in Beth to the email chain.

Samantha J. Jones, PhD
NCEA Associate Director for Health (acting)
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From: Behl, Betsy
Sent: Friday, August 17, 2018 1:06 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Bahadori, Tina <Bahadori.Tina@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: materials for today's meeting with Peter

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/4/2018 4:04:47 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Gen X redline
Attachments: transmission of EPA GenX assessment and draft charge for peer review; FW: TD for TT-GenX tech edit; PUBLIC COMMENT DRAFT Human Health Tox Values for GenX Chemicals_08_30_18 REDLINE.DOCX

The attached draft is the redline comparing the 6/21/18 External Peer Review Draft to the revised 8/30/18 Public Comment Draft that we just sent for tech edit. Also attached are the 2 emails that I found these drafts in to be sure that I've compared the correct versions. Let me know if something looks off.

Greg

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/13/2018 12:28:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Agenda for Today's PFAS Toxicity Assessment Discussion-Federal

---

From: Grevatt, Peter
Sent: Thursday, September 13, 2018 8:10 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Re: Agenda for Today's PFAS Toxicity Assessment Discussion-Federal

Yes. I believe the word thyroid appears in your document once in a table, saying that effects were not the observed. I included the reference to two documents since OMB was emphasizing this as a topic of great concern earlier.

Sent from my iPhone

On Sep 13, 2018, at 7:57 AM, Strong, Jamie <Strong.Jamie@epa.gov> wrote:

> Peter,
> Just wanted to let you know that for GenX we don't have any thyroid endpoints (there are no effects on the thyroid observed in the studies available) so there is no text in our document describing this domain. Number 2 in the agenda below should be focused on PFBS.
>
> Jamie
>
> ---
>
> **From:** Grevatt, Peter
> **Sent:** Thursday, September 13, 2018 7:42 AM
> **To:** patricia.m.underwood.civ@mail.mil; maria.vargas@navy.mil; wanda.holmes@navy.mil; freeman.holifield.mil@mail.mil; andrew.rak@noblis.org; andrew.rak2.ctr@mail.mil; mark.s.johnson.civ@mail.mil; jennifer.corack@navy.mil; Anita.K.Meyer@usace.army.mil; james.s.smith454.civ@mail.mil; barry.marcel@us.af.mil; resha.m.putzrath.civ@mail.mil; Sandra Howard <Sandra.Howard@HHS.GOV>; Suzanne_Fitzpatrick <Suzanne.Fitzpatrick@fda.hhs.gov>; Jason.Aungst@fda.hhs.gov; Penelope.Rice@fda.hhs.gov; Paul.South@fda.hhs.gov; wic1@cdc.gov; txf5@cdc.gov; pjb7@cdc.gov; Christopher.Weis@nih.gov; miller.aubrey@nih.gov; suzanne.fenton@nih.gov; michael.devito@nih.gov; Linda Birnbaum <birnbaumls@niehs.nih.gov>; fjh1@cdc.gov; seg3@cdc.gov; eaw0@cdc.gov; iwa6@cdc.gov; oii2@cdc.gov; pxp5@cdc.gov; linda.s.wennerberg@nasa.gov; Ex. 6 Personal Privacy (PP)
> Ex. 6 Personal Privacy (PP)
> Ex. 6 Personal Privacy (PP) mfocazio@usgs.gov; Terra.irons@va.gov; Beth.moore@em.doe.gov; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Donohue, Joyce <Donohue.Joyce@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Harper, Ashley <harper.ashley@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Behrsing, Tracy; Babcock, Amy <babcock.amy@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Jones, Samantha

<Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Moore, Alexa <moore.alexa@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Rodan, Bruce <rodan.bruce@epa.gov>; Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Raffaele, Kathleen <raffaele.kathleen@epa.gov>; Gervais, Gregory <Gervais.Gregory@epa.gov>; Leonard, Paul <leonard.paul@epa.gov>; Foster, Stiven <Foster.Stiven@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>; Lehman, Rachel <lehman.rachel@epa.gov>; Murphy, Elizabeth <Murphy.Elizabeth@epa.gov>; Lan, Alexis <lan.alexis@epa.gov>; Albert, Ryan <Albert.Ryan@epa.gov>
Cc: Underwood, Patricia CIV (US) <patricia.underwood6.civ@mail.mil>; Thayer, Kris <thayer.kris@epa.gov>; hga0@cdc.gov; cjc3@cdc.gov; masten@niehs.nih.gov
Subject: Agenda for Today's PFAS Toxicity Assessment Discussion-Federal

Agenda:

1) Brief review of process to date
2) Discussion of text in two draft documents related to impacts on the thyroid
3) Identification and discussion of other topics of primary interest to federal partners
4) Next steps related to messaging and posting of documents for public review and comment

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 5/20/2019 3:37:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: revised GenX briefing - 5/17/19
Attachments: post-briefing revision_ Options for the GenX Chemicals Assessment 052019_blj gMiller.docx

Found a couple of small problems when reading through with "no markup" on. Corrections attached. I'm good to go.

From: Jacobs, Brittany
Sent: Monday, May 20, 2019 11:23 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: revised GenX briefing - 5/17/19

I had one edit. I think it is important to say that ToxStrategies re-assessed liver slides from the original DuPont studies. Hopefully this is just a fact.

From: Strong, Jamie
Sent: Monday, May 20, 2019 11:13 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: revised GenX briefing - 5/17/19

Let me know so I can send to Colleen.

From: Strong, Jamie
Sent: Monday, May 20, 2019 8:35 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: revised GenX briefing - 5/17/19

Here are my edits on top of yours.

From: Miller, Gregory
Sent: Friday, May 17, 2019 11:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: revised GenX briefing - 5/17/19

Here are some edits to consider.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/20/2019 7:20:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: NTP pathology consult memo
Attachments: NTP pathology consult memo_GenX chemicals 052019.docx

Edited. Attached here just in case.

From: Jacobs, Brittany
Sent: Monday, May 20, 2019 1:57 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: NTP pathology consult memo

I have two meetings starting at 2pm so I wanted to get this to you in case you had time to edit before 4pm. Attached a copy in case the onedrive link/document is being stupid. I will pick back up around 4:30.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 5/31/2019 8:09:26 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: letter to Chemours requesting the GenX pathology slides
Attachments: Chemours letter 5.31.19.docx

FYI.

From: Behl, Betsy
Sent: Friday, May 31, 2019 4:05 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: letter to Chemours requesting the GenX pathology slides

Deborah,

Please find attached a short letter to Chemours requesting the liver pathology slides for GenX chemicals. We aren't sure who it should be addressed to. I put in a call to Tala Henry asking her advice, and who would have submitted the studies to OCSPP. I could also ask Tox Strategies who provided them with the slides. Let me know what you think.

The call with NTP went very well. They indicated that it would be important to have the slides to be able to make a definitive call. A rough initial estimate was that the process could be done in a few months once they have the slides. We will send an email with the scope of the studies and that should enable them to provide a better estimate.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/3/2019 4:19:24 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: letter to Chemours requesting the GenX pathology slides
Attachments: Email to NTP director jbs.docx

How about this?

From: Jacobs, Brittany
Sent: Monday, June 03, 2019 12:13 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

Alright, here is a draft email to Brian. I struggled with the level of detail to get into so edit at will.

Britt

From: Strong, Jamie
Sent: Monday, June 03, 2019 10:48 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

I think we would send them everything.

From: Jacobs, Brittany
Sent: Monday, June 03, 2019 10:06 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

At some point, Betsy said that Deborah talked about sending NTP both the slides and the studies (including ToxStrategies materials). Do you think we should do this? Then have NTP comment on differences in methodology, following the INHAND guidelines etc. like we were planning to do without the slides?

From: Strong, Jamie
Sent: Monday, June 03, 2019 8:11 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

Now?

From: Jacobs, Brittany
Sent: Monday, June 03, 2019 7:42 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>

Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

Sure, when is a good time to chat?

From: Strong, Jamie
Sent: Friday, May 31, 2019 4:12 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides

Britt,
Can you develop an email to send to Berridge on Monday? Needs to give him a little background on the issue and the scope (see below) and what we are asking for and by when. This is in addition to the memo (which we also need to get going on again).

Let's chat (I am working from home) first.

Jamie

From: Behl, Betsy
Sent: Friday, May 31, 2019 4:05 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: letter to Chemours requesting the GenX pathology slides

Deborah,

Please find attached a short letter to Chemours requesting the liver pathology slides for GenX chemicals. We aren't sure who it should be addressed to. I put in a call to Tala Henry asking her advice, and who would have submitted the studies to OCSPP. I could also ask Tox Strategies who provided them with the slides. Let me know what you think.

The call with NTP went very well. They indicated that it would be important to have the slides to be able to make a definitive call. A rough initial estimate was that the process could be done in a few months once they have the slides. We will send an email with the scope of the studies and that should enable them to provide a better estimate.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2019 11:37:55 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: letter to Chemours requesting the GenX pathology slides
Attachments: Request for Pathology Slides - GenX Chemicals Assessment 060319.docx

FYI

From: Nagle, Deborah
Sent: Monday, June 03, 2019 6:28 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

Betsy-

Attached is a redline of the letter with my edits.

-Deborah

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460
Tel: (202) 564-1185

From: Behl, Betsy
Sent: Friday, May 31, 2019 4:05 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: letter to Chemours requesting the GenX pathology slides

Deborah,

Please find attached a short letter to Chemours requesting the liver pathology slides for GenX chemicals. We aren't sure who it should be addressed to. I put in a call to Tala Henry asking her advice, and who would have submitted the studies to OCSPP. I could also ask Tox Strategies who provided them with the slides. Let me know what you think.

The call with NTP went very well. They indicated that it would be important to have the slides to be able to make a definitive call. A rough initial estimate was that the process could be done in a few months once they have the slides. We will send an email with the scope of the studies and that should enable them to provide a better estimate.

Elizabeth (Betsy) Behl, Director

Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/4/2019 5:12:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: letter to Chemours requesting the GenX pathology slides
Attachments: Request for Pathology Slides - GenX Chemicals Assessment 060319.docx; Request for Pathology Slides - GenX Chemicals Assessment 060419.docx

FYI

From: Behl, Betsy
Sent: Tuesday, June 04, 2019 1:11 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides

Deborah, we edited the letter in the attached (version dated 6/4). We modified your first edit (the comments were independent) and expanded on the second.

Please let us know if this works for you. Your marked up version is included above as well.

Betsy

From: Nagle, Deborah
Sent: Monday, June 03, 2019 6:28 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides

Betsy-

Attached is a redline of the letter with my edits.

-Deborah

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460
Tel: (202) 564-1185

From: Behl, Betsy
Sent: Friday, May 31, 2019 4:05 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>

Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: letter to Chemours requesting the GenX pathology slides

Deborah,

Please find attached a short letter to Chemours requesting the liver pathology slides for GenX chemicals. We aren't sure who it should be addressed to. I put in a call to Tala Henry asking her advice, and who would have submitted the studies to OCSPP. I could also ask Tox Strategies who provided them with the slides. Let me know what you think.

The call with NTP went very well. They indicated that it would be important to have the slides to be able to make a definitive call. A rough initial estimate was that the process could be done in a few months once they have the slides. We will send an email with the scope of the studies and that should enable them to provide a better estimate.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/11/2019 2:23:45 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: NTP memo
Attachments: pathology consult memo_GenX chemicals_with slides jbs.docx

Lets find a time to chat.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/11/2019 6:20:02 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: CORRECT letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE
Attachments: Chemours letter 061119.docx

FYI

From: Behl, Betsy
Sent: Tuesday, June 11, 2019 2:17 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Weyer, Erica <weyer.erica@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: CORRECT letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

PLEASE USE THIS VERSION

From: Behl, Betsy
Sent: Tuesday, June 11, 2019 2:16 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Weyer, Erica <weyer.erica@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

Deborah, we made Jess's changes and added the contact at Chemour provided by OSCPP. Ready for Dave's signature.

Betsy

From: Kramer, Jessica L.
Sent: Tuesday, June 11, 2019 10:56 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Mejias, Melissa <mejias.melissa@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

Hi Deborah,

I promise I'm attaching the right document this time ☺. Attached is the draft with my edits included. Please let me know if you have any questions. Thanks!

Jess

Jessica L. Kramer
Policy Counsel to the Assistant Administrator
Office of Water
(202) 564-6322

From: Nagle, Deborah
Sent: Tuesday, June 4, 2019 3:35 PM
To: Kramer, Jessica L. <kramer.jessical@epa.gov>
Cc: Mejias, Melissa <mejias.melissa@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides

Jess,

Do want to review the attached letter to Chemours requesting the liver pathology slides for GenX chemicals? FYI- we are still trying to determine who to send it to.

-Deborah

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/19/2019 1:46:28 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: reschedule call toxStrategies

From: Laurie Haws <lhaws@toxstrategies.com>
Sent: Wednesday, June 19, 2019 9:43 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>; Chad Thompson <cthompson@toxstrategies.com>; Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: Re: reschedule call toxStrategies

We just received notification that our manuscript is now available online. It is freely available through open access. You can access it using the following link:

https://onlinelibrary.wiley.com/doi/full/10.1002/jat.3812

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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Inc. at (281) 712-2062 (ext 2001) and permanently delete the original and any copy of any e-mail and any printout thereof.

From: "Strong, Jamie" <Strong.Jamie@epa.gov>
Date: Friday, May 10, 2019 at 11:17 AM
To: Laurie Haws <lhaws@toxstrategies.com>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>, "Flaherty, Colleen" <Flaherty.Colleen@epa.gov>
Subject: RE: reschedule call toxStrategies

Laurie,
Thanks for the update. We are planning to load late comments onto our docket for GenX and wanted to see if it would be okay with ToxStrategies if we included your powerpoint slides from the meeting we had. Please let me know.

Best,
Jamie

From: Laurie Haws <lhaws@toxstrategies.com>
Sent: Friday, May 10, 2019 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>; Chad Thompson <cthompson@toxstrategies.com>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Re: reschedule call toxStrategies

Jamie,

I wanted to update you on the status of our RfD manuscript. We sent the manuscript proofs back to the journal last week. As such, posting online should be imminent. We are checking daily and will send you the link to the paper as soon as it's posted on line. In addition, we should have the transcriptomics manuscript submitted by the end of this month at the latest. Finally, our offer to set up a call to answer questions on the transccriptomics still stands. Just let us know. Take care.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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From: Laurie Haws <lhaws@toxstrategies.com>
Date: Wednesday, April 10, 2019 at 3:49 PM
To: "Strong, Jamie" <Strong.Jamie@epa.gov>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>
Subject: Re: reschedule call toxStrategies

Jamie,

Chad checked with the editor after I sent my last email to you and the editor indicated that the paper should be available online as a pre-pub sometime within the next couple of weeks. We will send it to you as soon as it's posted.

In addition, let us know if you'd like to set up a call with our transcriptomics expert, Grace Chappell, to answer some of the more specific questions that we were not able to answer in the meeting. Grace can also walk your staff through her overall approach.

Take care.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
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From: "Strong, Jamie" <Strong.Jamie@epa.gov>
Date: Tuesday, April 9, 2019 at 2:23 PM
To: Laurie Haws <lhaws@toxstrategies.com>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>
Subject: RE: reschedule call toxStrategies

In addition, your staff had quite a few questions related to the transcriptomics analyses. We are happy to set up a call with our expert, Grace Chappell, at your convenience to answer some of the more specific questions that we were not able to answer in the meeting. Grace can also walk your staff through her overall approach.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/12/2019 12:17:32 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: CORRECT letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE
Attachments: Chemours letter 061119.docx

Here we go…

From: Nagle, Deborah
Sent: Tuesday, June 11, 2019 6:20 PM
To: Weyer, Erica <weyer.erica@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: CORRECT letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

Erica – can you create a clean version of the attached letter and then work with Janita and Melissa to get Dave's review. Once Dave has commented or indicates that he has no edits, we will load it into CMS for signature.

-Deborah

From: Behl, Betsy
Sent: Tuesday, June 11, 2019 2:17 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Weyer, Erica <weyer.erica@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: CORRECT letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

PLEASE USE THIS VERSION

From: Behl, Betsy
Sent: Tuesday, June 11, 2019 2:16 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Weyer, Erica <weyer.erica@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

Deborah, we made Jess's changes and added the contact at Chemour provided by OSCPP. Ready for Dave's signature.

Betsy

From: Kramer, Jessica L.
Sent: Tuesday, June 11, 2019 10:56 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Mejias, Melissa <mejias.melissa@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: letter to Chemours requesting the GenX pathology slides; DELIBERATIVE DRAFT DO NOT RELEASE

Hi Deborah,

I promise I'm attaching the right document this time ☺. Attached is the draft with my edits included. Please let me know if you have any questions. Thanks!

Jess

Jessica L. Kramer
Policy Counsel to the Assistant Administrator
Office of Water
(202) 564-6322

From: Nagle, Deborah
Sent: Tuesday, June 4, 2019 3:35 PM
To: Kramer, Jessica L. <kramer.jessical@epa.gov>
Cc: Mejias, Melissa <mejias.melissa@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: letter to Chemours requesting the GenX pathology slides

Jess,

Do want to review the attached letter to Chemours requesting the liver pathology slides for GenX chemicals? FYI- we are still trying to determine who to send it to.

-Deborah

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/17/2019 7:14:47 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Letter to NTP requesting their review of GenX slides
Attachments: NTP PWG CONSULT MEMO DRAFT 061419 clean.docx

FYI

From: Behl, Betsy
Sent: Monday, June 17, 2019 1:33 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Letter to NTP requesting their review of GenX slides

Deborah,

Attached above is the letter we drafted for you to send to the NTP requesting their review of the Chemours slides. We presume that this letter will come from you to Dr. Berridge. It doesn't say anything about timing, as we don't know yet when we can get the slides. Hopefully Dave will sign the letter to Chemours soon.

Please let us know if you have comments on this letter. If you approve we will have it formatted for your signature when you return.

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 6/28/2019 4:57:58 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: ⚠ letter from EPA requesting slides for GenX chemical studies

Look at that!

From: Behl, Betsy
Sent: Friday, June 28, 2019 12:56 PM
To: Gannon, Shawn A <SHAWN.A.GANNON@chemours.com>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: RE: ⚠ letter from EPA requesting slides for GenX chemical studies

Thanks for the note Shawn. I believe it will be in North Carolina. I should know more on Monday.

From: Gannon, Shawn A <SHAWN.A.GANNON@chemours.com>
Sent: Friday, June 28, 2019 10:57 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: Re: ⚠ letter from EPA requesting slides for GenX chemical studies

Hi Betsy, very nice to (virtually) meet you! As I mentioned on the phone, we very much look forward to helping you out with this request. I've already opened discussions with our legal team.

Where is your pathologist located? I know NTP and I think NIEHS both use pathologists in North Carolina, so it may be as simple as asking our contract pathologist to transport the slides in person.

Regards,

Shawn

Shawn Gannon, Ph.D., DABT
Senior Toxicologist, Toxicology and Risk Assessment (TRAC),
Product Support and Sustainability Center
+1 302 544 0275 mobile
+1 302 773 1376 office

The Chemours Company
1007 Market Street
Wilmington, DE 19899

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, June 26, 2019 8:52:05 AM
To: Gannon, Shawn A
Cc: Nagle, Deborah
Subject: ⚠ letter from EPA requesting slides for GenX chemical studies

External email. Confirm links and attachments before opening.

Greetings Dr. Gannon,

Thanks you for speaking with me last Monday (6/24/19) regarding our request for access to slides from specific studies on GenX, which Chemours possesses. In our conversation on Monday you indicated the slides were in North Carolina and you would be in touch regarding logistics once you had the letter from the Agency.

The letter was mailed to you on Thursday of last week, but I wanted to make sure that you receive it, so have attached a copy of the signed letter above. The contact in the letter is my Office Director, Deborah Nagle (copied above). You may also reach out to me, as I will be coordinating the review.

We would like to initiate the independent review as quickly as possible and appreciate your assistance.

Best, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460
phone: 202.566.0788

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/7/2019 2:48:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Harper, Ashley [harper.ashley@epa.gov]
Subject: Strong, Jamie shared "status update NTP PWG GenX chemicals 08 07 19" with you.

sharing this very rough draft (will refine after we talk to NTP tomorrow) in case someone decides that this should be topic for biweekly with dave ross.

This link only works for the direct recipients of this message.

status update NTP PWG GenX chemicals 08 07 19

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/12/2019 5:08:41 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Draft briefing sheet about NTP PWG for Dave Ross
Attachments: Briefing-Results of the NTP PWG for GenX Chemicals_11.6.19 jbs.docx

Take a look at my edits

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 07, 2019 11:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Draft briefing sheet about NTP PWG for Dave Ross

Here is a first attempt. A little heavy on background. Let me know what you would like changed or emphasized/deemphasized.

Britt

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2019 12:32:46 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: Draft briefing sheet about NTP PWG for Dave Ross
Attachments: Briefing-Results of the NTP PWG for GenX Chemicals_11.13.19.docx

Here you go. Its close.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 12, 2019 4:59 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft briefing sheet about NTP PWG for Dave Ross

Updated briefing sheet to incorporate Jamie's edits and what we discussed today. Edit as you see fit!

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, November 12, 2019 12:09 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Draft briefing sheet about NTP PWG for Dave Ross

Take a look at my edits

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 07, 2019 11:46 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Draft briefing sheet about NTP PWG for Dave Ross

Here is a first attempt. A little heavy on background. Let me know what you would like changed or emphasized/deemphasized.

Britt

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/20/2019 7:14:48 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Notes from NTP PWG GenX meeting
Attachments: NTP PWG questions with NTP response notes 11 20 19.docx

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/19/2019 8:48:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: double check on incidence data
Attachments: Appendix A count mark up blj_gMiller.pdf; NTP PWG_Incidence Reports for liver effects_GenX chemicals_11.4.19 gMiller.xlsx

I was only able to get through the 90day mouse study. So I think maybe you were just asking me to count the necrosis incidence, but I ended up counting all of the endpoints since I noticed the slide was missing for Animal #251 and the N in the data table was listed as 10. I also found a problem with the count for Mixed Cell Infiltrate for the Group 4 males. Can you double check that one? Attached is your table with some comments in it and I scanned the copy of Appendix A you gave me.

I'll work through the Repro/Dev tomorrow.

Greg

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 19, 2019 10:36 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: double check on incidence data

Thanks for providing a second check!

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/20/2019 2:57:20 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: double check on incidence data
Attachments: Appendix B count mark up blj_gMiller.pdf; NTP PWG_Incidence Reports for liver effects_GenX chemicals_11.4.19 gMiller.xlsx

Females included in the spreadsheet now. Found 1 more error.

From: Miller, Gregory
Sent: Wednesday, November 20, 2019 9:43 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: double check on incidence data

Sorry, I got sidetracked and forgot to send this. Females are coming soon…

Here's the count for the males in the repro/dev. Found 4 discrepancies. I'm working on the females now. Can you double check the male counts?

This is incredibly tedious work :/

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 19, 2019 4:44 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: double check on incidence data

I also counted 6 and I agree with your comment that the n should be 9 in group 2 females

---

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, November 19, 2019 3:49 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: double check on incidence data

I was only able to get through the 90day mouse study. So I think maybe you were just asking me to count the necrosis incidence, but I ended up counting all of the endpoints since I noticed the slide was missing for Animal #251 and the N in the data table was listed as 10. I also found a problem with the count for Mixed Cell Infiltrate for the Group 4 males. Can you double check that one? Attached is your table with some comments in it and I scanned the copy of Appendix A you gave me.

I'll work through the Repro/Dev tomorrow.

Greg

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 19, 2019 10:36 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: double check on incidence data

Thanks for providing a second check!

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 6/20/2019 2:47:14 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Letter to NTP requesting their review of GenX slides
Attachments: DuPont-18405-1307.pdf; DuPont-18405-1037.pdf; Elmore et al 2016.pdf; Thompson et al 2019.pdf

I attached the ToxStrategies paper too just in case.

These refs are attached:

DuPont-18405-1037: E.I. du Pont de Nemours and Company. 2010. An Oral (Gavage) Reproduction/Developmental Toxicity Screening Study of H-28548 in Mice. U.S. EPA OPPTS 870.3550; OECD Test Guideline 421. Study conducted by WIL Research Laboratories, LLC (Study Completion Date: December 29, 2010), Ashland, OH.

DuPont-18405-1307: E.I. du Pont de Nemours and Company. 2010. H-28548: Subchronic Toxicity 90-Day Gavage Study in Mice. OECD Test Guideline 408. Study conducted by E.I. du Pont de Nemours and Company (Study Completion Date: February 19, 2010), Newark, DE.

Elmore, S. A., D. Dixon, J. R. Hailey, T. Harada, R. A. Herbert, R. R. Maronpot, T. Nolte, J.E. Rehg, S. Rittinghausen, T.J. Rosol, H. Satoh, J.D. Vidal, C.L. Willard-Mack, and D.M. Creasy. 2016. Recommendations from the INHAND Apoptosis/Necrosis Working Group. Toxicologic Pathology 44:173-188. DOI: 10.1177/0192623315625859.

Attachments

Elmore, S. A., D. Dixon, J. R. Hailey, T. Harada, R. A. Herbert, R. R. Maronpot, T. Nolte, J.E. Rehg, S. Rittinghausen, T.J. Rosol, H. Satoh, J.D. Vidal, C.L. Willard-Mack, and D.M. Creasy. 2016. Recommendations from the INHAND Apoptosis/Necrosis Working Group. Toxicologic Pathology 44:173-188. DOI: 10.1177/0192623315625859.

From: Strong, Jamie
Sent: Thursday, June 20, 2019 10:36 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Letter to NTP requesting their review of GenX slides
Importance: High

Can you provide refs/attachments? Need to get to BB.

From: Behl, Betsy
Sent: Thursday, June 20, 2019 10:04 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Letter to NTP requesting their review of GenX slides

Super. thanks

From: Nagle, Deborah
Sent: Thursday, June 20, 2019 9:58 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>

Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Letter to NTP requesting their review of GenX slides

This memo looks fine. I made a couple of edits. See attached. Please print the memo on Office of Water letter head and have this ready for my signature on Monday.

-Deborah

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460
Tel: (202) 564-1185

From: Behl, Betsy
Sent: Monday, June 17, 2019 1:33 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: Letter to NTP requesting their review of GenX slides

Deborah,

Attached above is the letter we drafted for you to send to the NTP requesting their review of the Chemours slides. We presume that this letter will come from you to Dr. Berridge. It doesn't say anything about timing, as we don't know yet when we can get the slides. Hopefully Dave will sign the letter to Chemours soon.

Please let us know if you have comments on this letter. If you approve we will have it formatted for your signature when you return.

Betsy

Message

From: NIEHS-kiteworks@niehs.nih.gov [NIEHS-kiteworks@niehs.nih.gov]
Sent: 12/4/2019 4:59:17 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: Pathology Peer Review Report of Liver Findings from GenX Chemical Studies

National Institute of Environmental Health Sciences

elmore@niehs.nih.gov sent you a secure message

Access message

Secured by kiteworks

This message requires that you sign in to access the message and any file attachments.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 12/5/2019 7:35:25 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Pathology Peer Review Report of Liver Findings from GenX Chemical Studies

Worked for me.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, December 04, 2019 12:16 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Pathology Peer Review Report of Liver Findings from GenX Chemical Studies

Testing to see if these files can be sent internally as a zip.

From: Elmore, Susan (NIH/NIEHS) [E] <elmore@niehs.nih.gov>
Sent: Wednesday, December 4, 2019 12:00 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Sills, Robert (NIH/NIEHS) [E] <sills@niehs.nih.gov>; Berridge, Brian (NIH/NIEHS) [E] <brian.berridge@nih.gov>; Brix, Amy (NIH/NIEHS) [C] <brix@niehs.nih.gov>; Elmore, Susan (NIH/NIEHS) [E] <elmore@niehs.nih.gov>
Subject: Pathology Peer Review Report of Liver Findings from GenX Chemical Studies

Dear Greg, Betsy, Jamie and Brittany,

I've sent these files to you via secure file transfer due to email size limits:

1) Final pdf report for the pathology peer review of liver findings from GenX chemical studies
2) Word document (as requested)
3) Word document with tracked changes
4) Appendix A
5) Appendix B

Please let me know if you have any problems with the download.
We appreciate the opportunity to be able to provide this histology peer review evaluation hope that you will find this helpful as you move forward with GenX chemicals assessment.
We hope that there will be future opportunities for us to collaborate on issues of significant public health interest.

Best regards,

Susan

Susan A. Elmore, MS, DVM, DACVP, DABT, FIATP
Staff Scientist/NTP Pathologist
Group Leader, NIEHS Embryo Phenotyping Core
Group Leader, NIEHS Special Techniques Core
Cellular and Molecular Pathology Branch

National Toxicology Program/NIEHS
111 TW Alexander Drive
RTP, NC 27709
984-287-3834
http://www.niehs.nih.gov/research/atniehs/labs/lep/ntp-path/staff/elmore/index.cfm

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/17/2020 4:47:33 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX literature search

links to a page you need access to. betsy wants it public facing so she can share with Gloria.

From: Vining, Erin <vining.erin@epa.gov>
Sent: Tuesday, November 17, 2020 11:41 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX literature search

Hi Brittany,
This study has been added to HERO and tagged to the GenX project:
https://heronet.epa.gov/heronet/index.cfm/reference/details/reference_id/6985027

Please let me know if you have any questions.

Best,

Erin Vining
HERO Data Specialist
ORAU Student Contractor
Center for Public Health and Environmental Assessment
US Environmental Protection Agency
Research Triangle Park, NC 27711
919-541-3785

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 17, 2020 10:40 AM
To: Vining, Erin <vining.erin@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; HERO <HERO@epa.gov>
Subject: RE: GenX literature search

Good Morning Erin,

My management has asked me to get a reference added to the GenX chemicals HERO page ((https://hero.epa.gov/hero/index.cfm/project/page/project_id/2627). This reference is the final NTP Pathology Working Group report that EPA asked NTP to complete. It is referenced and included in the assessment. Thanks in advance for your help and continued assistance on this project and let me know if you have any questions or need any additional info.

All the best,
Brittany

From: Vining, Erin <vining.erin@epa.gov> **On Behalf Of** HERO
Sent: Wednesday, October 30, 2019 9:17 AM

To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Nichols, Jennifer <Nichols.Jennifer@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>
Subject: RE: GenX literature search

Hi Brittany,
I will pass on this litsearch update request to our librarians to get started on.

Best,

Erin Vining
HERO Data Specialist
ORAU Student Contractor
Center for Public Health and Environmental Assessment
US Environmental Protection Agency
Research Triangle Park, NC 27711
919-541-3785

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
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To: Nichols, Jennifer <Nichols.Jennifer@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; HERO <HERO@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>
Subject: FW: GenX literature search

Hi Jen,

I was hoping you could help us with updating the GenX chemicals literature search that was performed in February 2019 (see email below). I'm hoping to have the exact same literature search completed, just date limited from February 2019 until now. The search strategies are presented in Table A-2 in the attached PDF. We already have a HERO page set up for GenX chemicals (https://hero.epa.gov/hero/index.cfm/project/page/project_id/2627). I think we would just need the RIS file of the updated literature to add to the Distiller project page.

Let me know if you have any questions and thanks in advance for your help!

All the best,
Brittany

Brittany Jacobs | Biologist, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
☎ Phone: (202) 566-1352

From: Thayer, Kris <thayer.kris@epa.gov>
Sent: Thursday, February 14, 2019 12:45 PM
To: Nichols, Jennifer <Nichols.Jennifer@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>
Subject: GenX literature search

Hi Jen,

Would it be possible to have HERO run ASAP the GenX search strategies presented in Table A-2 in the attached PDF (including TSCATS1 if that is possible)? No date or language restrictions. We aren't expecting to find much that wasn't already considered in the assessment, but just need to tighten up the inputs for a study flow diagram.

Also, many of the GenX studies are already in HERO – we still want to screen them against a PECO within Distiller, but I assume there is a way for HERO to find and use the existing HERO link in the RIS output?

And can we have the summary table that shows the number or results per database and then after duplication across databases?

And estimated time frame for getting search results.

Thanks!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/17/2020 4:48:18 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX literature search

ha you read my mind!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, November 17, 2020 11:48 AM
To: Vining, Erin <vining.erin@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX literature search

Great, thanks so much Erin! Is this page currently not public facing? We would want it to be publicly accessible.

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Sent: Tuesday, November 17, 2020 11:41 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Thayer, Kris <thayer.kris@epa.gov>; Jones, Ryan <Jones.Ryan@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX literature search

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https://heronet.epa.gov/heronet/index.cfm/reference/details/reference_id/6985027

Please let me know if you have any questions.

Best,

Erin Vining
HERO Data Specialist
ORAU Student Contractor
Center for Public Health and Environmental Assessment
US Environmental Protection Agency
Research Triangle Park, NC 27711
919-541-3785

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Subject: RE: GenX literature search

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Working Group report that EPA asked NTP to complete. It is referenced and included in the assessment. Thanks in advance for your help and continued assistance on this project and let me know if you have any questions or need any additional info.

All the best,
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All the best,
Brittany

Brittany Jacobs | Biologist, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
☎ Phone: (202) 566-1352

From: Thayer, Kris <thayer.kris@epa.gov>
Sent: Thursday, February 14, 2019 12:45 PM
To: Nichols, Jennifer <Nichols.Jennifer@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>
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And can we have the summary table that shows the number or results per database and then after duplication across databases?

And estimated time frame for getting search results.

Thanks!

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/7/2018 5:33:55 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: FW: GenX assessment
Attachments: GenX Report_Toxstrategies_final_110718.pdf

FYI

From: Ohanian, Edward
Sent: Wednesday, November 07, 2018 12:31 PM
To: lhaws@toxstrategies.com
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX assessment

Hi Laurie,
Thank you very much. By copy, I am sharing it with my colleagues. Be well, Ed

Edward V. Ohanian, Ph.D.
Associate Director for Science
USEPA/Office of Water (MC: 4301T)
(202) 566-1117 (Voice)
(202) 566-0441(Fax)

From: Laurie Haws [mailto:lhaws@toxstrategies.com]
Sent: Wednesday, November 07, 2018 12:08 PM
To: Ohanian, Edward <Ohanian.Edward@epa.gov>
Subject: Re: GenX assessment

Ed,

In anticipation of a call/meeting with you and your colleagues, I thought it might be helpful to send you a copy of our report summarizing our work. I look forward to hearing from you. Take care.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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From: Ed Ohanian <Ohanian.Edward@epa.gov>
Date: Monday, October 29, 2018 at 10:08 AM
To: Laurie Haws <lhaws@toxstrategies.com>
Subject: RE: GenX assessment

Hi Laurie,

Betsy Behl, Director of Health and Ecological Criteria Division, OW responded to my request as follows:

"It would be good to meet with them, but we are busy for the next few weeks with PARS and other things. Maybe we can get together toward the end of the month?"

Let's keep in touch. Ed

Edward V. Ohanian, Ph.D.
Associate Director for Science
USEPA/Office of Water (MC: 4301T)
(202) 566-1117 (Voice)
(202) 566-0441(Fax)

From: Laurie Haws [mailto:lhaws@toxstrategies.com]
Sent: Saturday, October 27, 2018 2:49 PM
To: Ohanian, Edward <Ohanian.Edward@epa.gov>
Cc: lhaws@toxstrategies.com
Subject: GenX assessment

Ed,

I hope this note finds you well. I wanted to reached out to you regarding some work that Chad and I have been involved with that may be of interest to you and your colleagues in the Office of Water. Specifically, we were approached by Chemours and asked to conduct an independent assessment of the toxicology data for GenX and to develop an oral reference dose. To accomplish this, we employed standard and Bayesian models in BMDS v2.7 and v3.0, as well as developed both deterministic and probabilistic RfDs. We understand that the EPA Office of Water is in the process of developing an oral Rfd for GenX and I thought you might be interested in our work. I'd be happy to send y'all a copy of our assessment and would welcome the opportunity to discuss our findings with you and your colleagues, as well as answer any questions that you might have. Just let me know. Thanks much.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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Edward V. Ohanian, Ph.D.
Associate Director for Science
USEPA/Office of Water (MC: 4301T)
(202) 566-1117 (Voice)
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Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

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Edward V. Ohanian, Ph.D.
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To: Ohanian, Edward <Ohanian.Edward@epa.gov>
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Subject: GenX assessment

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Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/29/2019 8:31:28 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: one pager based on your paper
Attachments: Options for the GenX Chemicals Assessment 042919.docx

Still may be too detailed for Dave. Tell me what you think, especially how I characterized the timeline.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/30/2019 11:49:15 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: one pager based on your paper
Attachments: Options for the GenX Chemicals Assessment 042919 jbs.docx

Importance: High

Here are my edits and comments (some to you and some to BB).

From: Strong, Jamie
Sent: Tuesday, April 30, 2019 7:26 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper

Ack, I know you all are at WQS. I do need help with this…BB has made some changes and has some questions (one is a comment I made previously)

From: Strong, Jamie
Sent: Tuesday, April 30, 2019 7:20 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper
Importance: High

Please send me any edits today.

From: Behl, Betsy
Sent: Monday, April 29, 2019 4:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: one pager based on your paper

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Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 4/30/2019 3:34:18 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: one pager based on your paper
Attachments: Options for the GenX Chemicals Assessment 042919 jbs gMiller.docx

Added my edits. Britt is going to have a go next.

Greg

From: Strong, Jamie
Sent: Tuesday, April 30, 2019 7:49 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper
Importance: High

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Sent: Tuesday, April 30, 2019 7:26 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper

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From: Strong, Jamie
Sent: Tuesday, April 30, 2019 7:20 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper
Importance: High

Please send me any edits today.

From: Behl, Betsy
Sent: Monday, April 29, 2019 4:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: one pager based on your paper

Still may be too detailed for Dave. Tell me what you think, especially how I characterized the timeline.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/30/2019 5:03:18 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: one pager based on your paper
Attachments: Options for the GenX Chemicals Assessment 043019.docx

Importance: High

We made some edits. Yes it is detailed, but I don't know how to get around that…the info is relevant to the decision being made.

From: Behl, Betsy
Sent: Monday, April 29, 2019 4:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: one pager based on your paper

Still may be too detailed for Dave. Tell me what you think, especially how I characterized the timeline.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 5/13/2019 2:55:16 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: reschedule call toxStrategies

Good news!

From: Laurie Haws <lhaws@toxstrategies.com>
Sent: Friday, May 10, 2019 4:28 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>; Chad Thompson <cthompson@toxstrategies.com>; Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: Re: reschedule call toxStrategies

Jamie,

We are fine with you loading the powerpoint in the docket. Do you envision loading the RfD manuscript in the docket as well once we send such to you? Much of what's in the powerpoint is also in the manuscript and the manuscript is certainly easier to follow.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094
Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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Inc. at (281) 712-2062 (ext 2001) and permanently delete the original and any copy of any e-mail and any printout thereof.

From: "Strong, Jamie" <Strong.Jamie@epa.gov>
Date: Friday, May 10, 2019 at 11:17 AM
To: Laurie Haws <lhaws@toxstrategies.com>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>, "Flaherty, Colleen" <Flaherty.Colleen@epa.gov>
Subject: RE: reschedule call toxStrategies

Laurie,
Thanks for the update. We are planning to load late comments onto our docket for GenX and wanted to see if it would be okay with ToxStrategies if we included your powerpoint slides from the meeting we had. Please let me know.

Best,
Jamie

From: Laurie Haws <lhaws@toxstrategies.com>
Sent: Friday, May 10, 2019 11:58 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Snowden, Belinda <snowden.belinda@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>; Chad Thompson <cthompson@toxstrategies.com>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: Re: reschedule call toxStrategies

Jamie,

I wanted to update you on the status of our RfD manuscript. We sent the manuscript proofs back to the journal last week. As such, posting online should be imminent. We are checking daily and will send you the link to the paper as soon as it's posted on line. In addition, we should have the transcriptomics manuscript submitted by the end of this month at the latest. Finally, our offer to set up a call to answer questions on the transccriptomics still stands. Just let us know. Take care.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

9390 Research Blvd
Bldg II, Suite 100
Austin, TX 78759

Office: (512) 351-7094

Cell: (512) 940-2021
Fax: (512) 382-6945
Email: lhaws@toxstrategies.com

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From: Laurie Haws <lhaws@toxstrategies.com>
Date: Wednesday, April 10, 2019 at 3:49 PM
To: "Strong, Jamie" <Strong.Jamie@epa.gov>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>
Subject: Re: reschedule call toxStrategies

Jamie,

Chad checked with the editor after I sent my last email to you and the editor indicated that the paper should be available online as a pre-pub sometime within the next couple of weeks. We will send it to you as soon as it's posted.

In addition, let us know if you'd like to set up a call with our transcriptomics expert, Grace Chappell, to answer some of the more specific questions that we were not able to answer in the meeting. Grace can also walk your staff through her overall approach.

Take care.

Regards,

Laurie

Laurie C. Haws, Ph.D., DABT
Managing Principal Health Scientist
ToxStrategies, Inc.

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Bldg II, Suite 100
Austin, TX 78759

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From: "Strong, Jamie" <Strong.Jamie@epa.gov>
Date: Tuesday, April 9, 2019 at 2:23 PM
To: Laurie Haws <lhaws@toxstrategies.com>
Cc: "Snowden, Belinda" <snowden.belinda@epa.gov>, Ed Ohanian <Ohanian.Edward@epa.gov>, Chad Thompson <cthompson@toxstrategies.com>, "Behl, Betsy" <Behl.Betsy@epa.gov>
Subject: RE: reschedule call toxStrategies

In addition, your staff had quite a few questions related to the transcriptomics analyses. We are happy to set up a call with our expert, Grace Chappell, at your convenience to answer some of the more specific questions that we were not able to answer in the meeting. Grace can also walk your staff through her overall approach.

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/30/2019 8:50:04 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: one pager based on your paper
Attachments: Options for the GenX Chemicals Assessment 043019bb.docx

Made a few more tweeks. One more round from you all and I will send to Deborah for her comments

---

From: Strong, Jamie
Sent: Tuesday, April 30, 2019 1:03 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: one pager based on your paper
Importance: High

We made some edits. Yes it is detailed, but I don't know how to get around that…the info is relevant to the decision being made.

From: Behl, Betsy
Sent: Monday, April 29, 2019 4:31 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: one pager based on your paper

Still may be too detailed for Dave. Tell me what you think, especially how I characterized the timeline.

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/1/2021 4:33:14 PM
To: Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: GenX for radhika

You can send as is. I only changed the last topic

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, September 1, 2021 12:22 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: genX for radhika

OK was just about to send my comments to all so now will weave them in with this version.

Sue

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, September 1, 2021 12:16 PM
To: Euling, Susan <Euling.Susan@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: genX for radhika

So this is my attempt at the one pager (3 pages) in light of the conversation with ORD. your feedback is appreciated. I need to get Deborah's take as well and I think today is her last day this week.

From: Behl, Betsy
Sent: Tuesday, August 31, 2021 7:23 PM
To: Euling, Susan <Euling.Susan@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: genX for radhika

This is the GenX blurb I drafted for next week's biweekly. Above is a draft one pager I drafted to elicit decisions. Attached is also a revised draft timeline. Lets find a time tomorrow to discuss this all. Maybe if the GenX/PFAS meeting runs short.

GenX assessment status and next steps

The final GenX toxicity assessment has completed OST Office Director review. This will be the fourth PFAS for which EPA has developed a final toxicity assessment. A fact sheet (attached) summarizes major conclusions and changes to the document following its release for public comment.

The draft GenX toxicity assessment was released for public comment in 2018 and the final was slated to be released in 2020. The document is now complete, and release of the final toxicity assessment is currented targeted for October-November 2021. We would like to begin engagement soon with states and tribes who have or are developing GenX standards and with CDC/ATSDR and plan outreach to a diverse group of stakeholders shortly before release to provide background on the final assessments. OST is seeking input on three topics to be able to finalize the timeline. These three topics and options are highlighted in the attached one-pager.

Attached above is a draft of the one-pager I developed with the 3 decisions. Deborah wanted to ask Radhika about the FRN, the other two are decisions about starting outreach to states early and the OMB process. I am waiting from some language from ORD about their process at this stage.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/16/2021 1:15:10 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]
CC: Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: Plan: GenX briefing tomorrow to Agency

perfect

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 16, 2021 7:02 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Plan: GenX briefing tomorrow to Agency

I'll share the slides

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, September 15, 2021 6:37 PM
To: Euling, Susan <Euling.Susan@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Plan: GenX briefing tomorrow to Agency

I can do that and I will keep it simple.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, September 15, 2021 6:30 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: Plan: GenX briefing tomorrow to Agency

For tomorrow's GenX briefing, let me know what the plan is – Betsy are you saying a few words at beginning? Brittany start right in?

Brittany, sharing your own slides or do you want Greg or me too?

Sue

Appointment

From: Euling, Susan [Euling.Susan@epa.gov]
Sent: 9/18/2021 6:24:14 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]; MeghanC3.Williams@wisconsin.gov; Harris, Kimberly [harris.kimberly@epa.gov]; Amy.Klei@epa.ohio.gov; Groetsch, Kory J. (DHHS) [GroetschK@michigan.gov]; Jennifer Gray [GrayJ@michigan.gov]; Matt Prater [MPrater@idem.IN.gov]; Carol.Hawbaker@illinois.gov
CC: teschlyn.woods@illinois.gov; SarahP.Yang@dhs.wisconsin.gov; helen.goeden@state.mn.us; Braverman, Carole [braverman.carole@epa.gov]; James.kelly@state.mn.us

Subject: Region 5 Briefing on EPA's Final Toxicity Assessment for GenX Chemicals
Location: Microsoft Teams Meeting

Start: 9/24/2021 1:00:00 PM
End: 9/24/2021 2:00:00 PM
Show Time As: Tentative

Required Attendees: Behl, Betsy; Jacobs, Brittany; Miller, GregoryG; MeghanC3.Williams@wisconsin.gov; Harris, Kimberly; Amy.Klei@epa.ohio.gov; Groetschk@michigan.gov; grayj@michigan.gov; mprater@idem.in.gov; Carol.Hawbaker@illinois.gov
Optional Attendees: Woods, Teschlyn; SarahP.Yang@dhs.wisconsin.gov; helen.goeden@state.mn.us; Braverman, Carole; Kelly, James (MDH)

Dear Region 5,

Please join us for a briefing on the final toxicity assessment for GenX Chemicals, highlighting changes in response to public and peer review comments.

Please forward this invitation to the appropriate contacts in your region's states and tribes. Please let me know whether the meeting needs to be rescheduled to accommodate schedules.

Materials will be added prior to the meeting.

Sue

Microsoft Teams meeting

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Click here to join the meeting

Or call in (audio only)

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/20/2021 12:51:39 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: updated outreach plan for GenX

Deborah is writing a note to Radhika today that will serve to inform senior EPA officials that we are planning an informational briefing for OMB the week of October 4. All other outreach moved to post release. ☺

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/21/2021 11:19:38 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: GenX slides for external audience

the third question was do we need a clearance form. I'm going with no.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, September 20, 2021 7:50 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Weyer, Erica <weyer.erica@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: FW: GenX slides for external audience

I know I said we didn't have anything for your review, but you may want to take a look at these slides we will use for the state engagements later this week. They are very similar to the slides we used for the EPA briefing. Do we need a clearance form?

One question I anticipate is how to respond if asked whether we will be developing HAs?

Ex. 5 Deliberative Process (DP)

Another is about timing of release:

Ex. 5 Deliberative Process (DP)

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Sunday, September 19, 2021 7:36 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, GregoryG <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX slides for external audience

Hi Brittany,

Your Agency briefing presentation was excellent. I was especially impressed with how clearly you described the constellation of liver effects and the downstream consequences of the NTP recommendations. It is really complicated – the change to the POD in females and the downstream impacts of that change, and the decision to count adversity by dose group and not individual animal and you skillfully presented the information transparently and with just the right level of detail. I'm sure that the next 4 will go well too.

Attached are the revised slides for Sept. 23rd briefings. You can use for both briefings that day and change the date to Sept. 24th for the next two. I moved the slides from last week into the OW ppt template that was sent around by Erica Weyer last week.

Here are the changes that I made:

1)

2)

3)

4)

Ex. 5 Deliberative Process (DP)

5)

6)

I have also attached a clearance form filled out and ready for Betsy to sign.

Please send me your final version of the slides – then I can attach a pdf of the slides to the 4 meeting invites before the briefings.

All, let's think more about how to convey the PFOA/S HA level and the GenX comparison. It may be best to focus on the lack of comparability. What about –"**it's important to remember that it is difficult to compare** the 2016 PFOA/S HAs when more data has become available, with a 2021 GenX value whose data and data gaps suggest that there could be other more sensitive endpoints/10X DBUF applied." I'm sure that Greg can come up with something even better.

Sue

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/24/2021 3:06:13 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals

Thanks!

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Friday, September 24, 2021 11:05 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals

Ex. 5 Deliberative Process (DP)

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Friday, September 24, 2021 10:59 AM
To: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals

I didn't see anyone in the waiting room, sorry about that. MN was not invited to this meeting as they were not identified as having GenX guidelines in process.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Friday, September 24, 2021 10:56 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals

Just seeing this now – couldn't get into my laptop until now (in office).

From: Greene, Sophie (MPCA) <Sophie.Greene@state.mn.us>
Sent: Friday, September 24, 2021 9:14 AM
To: Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals

Hello Sue,

I am trying to enter this call but am waiting in the Teams waiting room. Any suggestions?

Thanks!

Sophie

-----Original Appointment-----
From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Friday, September 17, 2021 2:10 PM
To: Euling, Susan; Greene, Sophie (MPCA); Kelly, James (MDH); Behl, Betsy; Jacobs, Brittany; Miller, GregoryG; MeghanC3.Williams@wisconsin.gov; Harris, Kimberly; Amy.Klei@epa.ohio.gov; Groetsch, Kory J. (DHHS); Jennifer Gray; Matt Prater; Carol.Hawbaker@illinois.gov
Cc: teschlyn.woods@illinois.gov; SarahP.Yang@dhs.wisconsin.gov; Goeden, Helen (MDH); Braverman, Carole
Subject: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals
When: Friday, September 24, 2021 8:00 AM-9:00 AM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

-----Original Appointment-----
From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Friday, September 17, 2021 12:34 PM
To: Euling, Susan; Behl, Betsy; Jacobs, Brittany; Miller, GregoryG; MeghanC3.Williams@wisconsin.gov; Harris, Kimberly; Amy.Klei@epa.ohio.gov; Groetsch, Kory J. (DHHS); Jennifer Gray; Matt Prater; Carol.Hawbaker@illinois.gov
Cc: teschlyn.woods@illinois.gov; SarahP.Yang@dhs.wisconsin.gov; Goeden, Helen (MDH); Braverman, Carole
Subject: FW: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals
When: Friday, September 24, 2021 8:00 AM-9:00 AM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

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-----Original Appointment-----
From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Thursday, September 16, 2021 3:57 PM
To: Euling, Susan; Behl, Betsy; Jacobs, Brittany; Miller, GregoryG; MeghanC3.Williams@wisconsin.gov; Harris, Kimberly; Amy.Klei@epa.ohio.gov; Groetsch, Kory J. (DHHS); Jennifer Gray; Matt Prater; Carol.Hawbaker@illinois.gov
Cc: teschlyn.woods@illinois.gov
Subject: Region 5 Briefing on Final Toxicity Assessment for GenX Chemicals
When: Friday, September 24, 2021 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

Dear Region 5,

Please join us for a briefing on the final toxicity assessment for GenX Chemicals, highlighting changes in response to public and peer review comments.

Please forward this invitation to the appropriate contacts your region's states and tribes. This date and time works for EPA folks based on Outlook but if the meeting needs to be rescheduled to accommodate other folks, then please let me know.

Materials will be added prior to the meeting.

Sue

Microsoft Teams meeting

Join on your computer or mobile app

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Ex. 6 Personal Privacy (PP) es, Washington DC

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/28/2021 7:30:17 PM
To: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
Subject: RE: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxicity Assessment Release

Ex. 6 Personal Privacy (PP)

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Tuesday, September 28, 2021 3:29 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxcity Assessment Release

I have a good feeling about this. E **Ex. 6 Personal Privacy (PP)**

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, September 28, 2021 3:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxcity Assessment Release

Time to light some candles.

From: Best-Wong, Benita <Best-Wong.Benita@epa.gov>
Sent: Tuesday, September 28, 2021 3:02 PM
To: Fox, Radhika <Fox.Radhika@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Aguirre, Janita <Aguirre.Janita@epa.gov>
Subject: RE: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxcity Assessment Release

Radhika – I followed up with Phil and he confirmed that the approach we are taking to give Janet a heads up is a good one. He asked about engagement/consultation with OMB on the draft document. So, I will add a sentence or two about prior engagement to the note below and then send it to Janet.

Thanks,
Benita

Benita Best-Wong (she, her)
Deputy Assistant Administrator
Office of Water
US EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

From: Fox, Radhika <Fox.Radhika@epa.gov>
Sent: Monday, September 27, 2021 8:25 PM

To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Aguirre, Janita <Aguirre.Janita@epa.gov>
Subject: RE: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxcity Assessment Release

Deb – I started to edit and send this to Janet and Alison but I had a question – OP is good with this approach right?

Benita – can you please send this to Janet and CC me.

thanks

From: Nagle, Deborah <Nagle.Deborah@epa.gov>
Sent: Monday, September 20, 2021 8:53 AM
To: Fox, Radhika <Fox.Radhika@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Aguirre, Janita <Aguirre.Janita@epa.gov>
Subject: DRAFT email for you to send to Janet McCabe__SITUATIONAL AWARENESS: GenX Toxcity Assessment Release

Radhika,

Ex. 5 Deliberative Process (DP)

DRAFT NOTE

Janet and Alison,

Ex. 5 Deliberative Process (DP)

Background

Ex. 5 Deliberative Process (DP)

Happy to answer any questions.

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460
Office: (202) 564-1185
Mobile: (202) 689-9404

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/29/2021 12:35:31 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, GregoryG [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: FW: Awareness - GenX Toxicity Assessment Release

I plan to reach out to Vlad on Friday to schedule this meeting. Benta said the week of October 4. I will shoot for the end of that week.

From: Best-Wong, Benita <Best-Wong.Benita@epa.gov>
Sent: Wednesday, September 29, 2021 7:31 AM
To: McCabe, Janet <McCabe.Janet@epa.gov>; Cassady, Alison <Cassady.Alison@epa.gov>; Arroyo, Victoria <Arroyo.Victoria@epa.gov>; Fine, Philip <Fine.Philip@epa.gov>
Cc: Fox, Radhika <Fox.Radhika@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Nickerson, William <Nickerson.William@epa.gov>; Aguirre, Janita <Aguirre.Janita@epa.gov>
Subject: Awareness - GenX Toxicity Assessment Release

Janet,

Ex. 5 Deliberative Process (DP)

If you have any questions or need additional information, please contact me.

Background

Ex. 5 Deliberative Process (DP)

Regards,
Benita

Benita Best-Wong (she, her)
Deputy Assistant Administrator
Office of Water
US EPA
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Message

From: Miller, GregoryG [Miller.Gregory@epa.gov]
Sent: 10/25/2021 11:37:12 AM
To: Euling, Susan [Euling.Susan@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Need your input: GenX outreach slides

Yes. Pull adults from the susceptible group on Slide 8.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Monday, October 25, 2021 12:50 AM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Need your input: GenX outreach slides

Thanks Greg and Brittany for the changes to slide 8 and the comment about getting the correct link to the docs on slides 10 and 13. Will fix that.

What about I remove "adults" from potentially susceptible groups (slide 8)? I would think so since we have the adults that are pregnant or could be pregnant included. ?

Sue

From: Miller, GregoryG <Miller.Gregory@epa.gov>
Sent: Thursday, October 21, 2021 8:38 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Need your input: GenX outreach slides

See file attached. Made most of the edits. Slide 8 was going to have too much text with the additions so I simplified a bit.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 21, 2021 8:14 AM
To: Euling, Susan <Euling.Susan@epa.gov>; Miller, GregoryG <Miller.Gregory@epa.gov>
Subject: RE: Need your input: GenX outreach slides

See below. Greg will send the powerpoint that we both reviewed shortly.

From: Euling, Susan <Euling.Susan@epa.gov>
Sent: Wednesday, October 20, 2021 8:32 PM
To: Miller, GregoryG <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Need your input: GenX outreach slides

Hi Greg and Brittany,

I walked through Betsy's latest version of the "overview" high level briefing (attached) that she has been giving today. There are a couple of places to fill in for the post-release briefings. Could you help?:

1) **Ex. 5 Deliberative Process (DP)**

2) Ex. 5 Deliberative Process (DP)

Also could you take a look at Slide 8, which is a text version of the info in the Conceptual Model? My suggestion would be for the slide to have this change:

Ex. 5 Deliberative Process (DP)

I would appreciate your review.

Thanks,
Sue

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, October 20, 2021 4:54 PM
To: Euling, Susan <Euling.Susan@epa.gov>
Subject: GenX

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 8/11/2020 12:10:15 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]; McLain, Jennifer L. [McLain.Jennifer@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]

Subject: GenX Update
Attachments: OW IO Briefing- GenX chemicals tox assessments update 081220.docx
Location: Microsoft Teams Meeting

Start: 8/11/2020 5:00:00 PM
End: 8/11/2020 6:00:00 PM
Show Time As: Tentative

Required Attendees: Miller, Gregory; Strong, Jamie; Jacobs, Brittany; Rodgers-Jenkins, Crystal; Burneson, Eric; McLain, Jennifer L.; Nagle, Deborah

---

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) es, Washington DC (Toll)

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Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 8/11/2020 7:35:15 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: SC to C UF plain language for briefing

Nicely stated

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, August 11, 2020 2:07 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: SC to C UF plain language for briefing

1.
2.
3.
4.

Ex. 5 Deliberative Process (DP)

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 8/10/2020 12:13:03 PM
To: Ross, David P [ross.davidp@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; McDonough, Owen [mcdonough.owen@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Weyer, Erica [weyer.erica@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]

Subject: GenX Update
Attachments: Request 112 - GenX Update.pdf; OW IO Briefing- GenX chemicals tox assessments update 081220.docx
Location: Call in Ex. 6 Personal Privacy (PP)

Start: 8/12/2020 3:00:00 PM
End: 8/12/2020 4:00:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Bertrand, Charlotte; McDonough, Owen; Strong, Jamie; Jacobs, Brittany; Miller, Gregory
Optional Attendees: Weyer, Erica; Nagle, Deborah; Behl, Betsy

Appointment

From: Owscheduling [Owscheduling@epa.gov]
Sent: 8/12/2020 1:23:55 PM
To: Ross, David P [ross.davidp@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; McDonough, Owen [mcdonough.owen@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Weyer, Erica [weyer.erica@epa.gov]; Nagle, Deborah [Nagle.Deborah@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Aguirre, Janita [Aguirre.Janita@epa.gov]

Subject: GenX Update
Attachments: Request 112 - GenX Update.pdf; OW IO Briefing- GenX chemicals tox assessments update 081220.docx
Location: Call in Ex. 6 Personal Privacy (PP)

Start: 8/12/2020 3:00:00 PM
End: 8/12/2020 4:00:00 PM
Show Time As: Tentative

Required Attendees: Ross, David P; Bertrand, Charlotte; McDonough, Owen; Strong, Jamie; Jacobs, Brittany; Miller, Gregory
Optional Attendees: Weyer, Erica; Nagle, Deborah; Behl, Betsy; Aguirre, Janita

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/12/2020 9:58:42 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Request for GEN X Material

start to pull together in a sharepoint file I guess.

From: Weyer, Erica <weyer.erica@epa.gov>
Sent: Wednesday, August 12, 2020 5:08 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: FW: Request for GEN X Material

Hi all,

Please send this material to Deborah and myself when you have it compiled – or let me know if you need to send in batches.

Thanks,
Erica

From: Aguirre, Janita <Aguirre.Janita@epa.gov>
Sent: Wednesday, August 12, 2020 4:54 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Subject: Request for GEN X Material

Hi Deborah, Betsy, and Erica,

As a follow-up to today's meeting on GenX, please prepare the following material that Charlotte termed the "care package" during the meeting. I may receive additional asks from Owen, but here's the list from Charlotte and Dave so far. Once you have the package, please send back to me and I'll put it in their reading queues for attention. I think I'd prefer the information to come in one package, but if you need to batch certain items, let's map out a plan.

A summary of:

1) the higher RfD using the new study as the endpoint and the uncertainty factors used to come up with that number.

A comparison of:

1) other chemicals that have the most conservative 3000 uncertainty factor assumption and the robustness of the studies supporting those other 3000s.

A copy of:

1) PWG report to EPA from Dec. 2019
2) Our updated systematic review of the studies
3) The study that is providing the current POD – possibly the Dupont 18405-1037
4) The Dupont Prenatal and Developmental toxicity study in Rats (18405-841)

5) The two new publications on the reproductive/developmental toxicity of GenX chemicals (Conley et al., 2019; Blake et al., 2020)
6) Comments from
    a. Environmental Working Group
    b. Pennsylvania Department of Environmental Protection
    c. Michigan Department of Environmental Quality
    d. Natural Resources Defense Council
    e. Sierra Club
    f. ACC
    g. Dr. James Klaunig, Dr. Damian Shea and Tox Strategies LLC (on behalf of Chemours)

Thank you,
Janita

Janita Aguirre – Special Assistant to David Ross and Anna Wildeman
U.S. Environmental Protection Agency | Office of Water | Office of the Assistant Administrator
Phone: **(202) 566-1149** | Email: aguirre.janita@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/13/2020 11:32:40 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Request for GEN X Material

but you would have to do that for everything right? and I thought in our discussions we don't have data to do that, call me.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 13, 2020 7:31 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for GEN X Material

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 13, 2020 7:23 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for GEN X Material

I think we need to talk to Betsy. Why would we make the assumption in yellow? I don't want to start monkeying around with decisions yet.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, August 13, 2020 7:06 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for GEN X Material

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, August 12, 2020 7:04 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for GEN X Material

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 12, 2020 6:32 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for GEN X Material

Especially the public comments, I think there is more there than they are asking for but I couldn't remember if like EPN included EWG.

From: Strong, Jamie
Sent: Wednesday, August 12, 2020 6:26 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Request for GEN X Material

I uploaded everything to a folder on Sharepoint except what is highlighted below. Please check my work. We need to talk about the first ask (RfD based on Blake).

From: Aguirre, Janita <Aguirre.Janita@epa.gov>
Sent: Wednesday, August 12, 2020 4:54 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Subject: Request for GEN X Material

Hi Deborah, Betsy, and Erica,

As a follow-up to today's meeting on GenX, please prepare the following material that Charlotte termed the "care package" during the meeting. I may receive additional asks from Owen, but here's the list from Charlotte and Dave so far. Once you have the package, please send back to me and I'll put it in their reading queues for attention. I think I'd prefer the information to come in one package, but if you need to batch certain items, let's map out a plan.

A summary of:

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A copy of:

1) PWG report to EPA from Dec. 2019
2) Our updated systematic review of the studies
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4) The Dupont Prenatal and Developmental toxicity study in Rats (18405-841)
5) The two new publications on the reproductive/developmental toxicity of GenX chemicals (Conley et al., 2019; Blake et al., 2020)
6) Comments from
    a. Environmental Working Group
    b. Pennsylvania Department of Environmental Protection
    c. Michigan Department of Environmental Quality
    d. Natural Resources Defense Council
    e. Sierra Clubj
    f. ACC
    g. Dr. James Klaunig, Dr. Damian Shea and Tox Strategies LLC (on behalf of Chemours)

Thank you,
Janita

Janita Aguirre – Special Assistant to David Ross and Anna Wildeman
U.S. Environmental Protection Agency | Office of Water | Office of the Assistant Administrator
Phone: **(202) 566-1149** | Email: aguirre.janita@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/14/2020 12:27:03 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: help with an ask from the OW IO

Ex. 5 Deliberative Process (DP)

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Thursday, August 13, 2020 8:10 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: help with an ask from the OW IO

Hi all,

Ex. 5 Deliberative Process (DP)

Thanks,
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, August 13, 2020 7:25 AM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: help with an ask from the OW IO

Betsy wants us to pull OPP assessments with total UF of 3000 too. Can you work with Adrienne to get these assessments?

From: Lindberg, Casey <Lindberg.Casey@epa.gov>
Sent: Wednesday, August 12, 2020 12:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: help with an ask from the OW IO

Hi all,
Sure, I will pull IRIS and OW assessments and get back to you if I have any questions.
Casey

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 12, 2020 12:06 PM
To: Lindberg, Casey <Lindberg.Casey@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: help with an ask from the OW IO
Importance: High

Casey,
We just briefed Dave Ross on the GenX assessment. One of the follow ups is to identify assessments with a 3000 total UF and compare those databases with that of GenX. I think we look at IRIS and OW assessments. Pull info related to what the DB includes and is missing (should be in most DB UF write ups). Can you start on this for us?

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 8/17/2020 2:15:48 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: Uncertainty Factor Definitions & Guidance
Attachments: DB UF Language in guidance, IRIS, and GenX.docx

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, August 17, 2020 8:19 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Uncertainty Factor Definitions & Guidance

use this to highlight

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Monday, August 17, 2020 7:07 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: Uncertainty Factor Definitions & Guidance

From the IRIS Glossary:

Uncertainty Factor

Definition: One of several, generally 10-fold, default factors used in operationally deriving the RfD and RfC from experimental data. The factors are intended to account for (1) variation in susceptibility among the members of the human population (i.e., inter-individual or intraspecies variability); (2) uncertainty in extrapolating animal data to humans (i.e., interspecies uncertainty); (3) uncertainty in extrapolating from data obtained in a study with less-than-lifetime exposure (i.e., extrapolating from subchronic to chronic exposure); (4) uncertainty in extrapolating from a LOAEL rather than from a NOAEL; and (5) uncertainty associated with extrapolation when the database is incomplete.

This is the boilerplate language they're putting in all IRIS assessments. It cites the RfD/RfC Guidance:

Extrapolation: reference values. An *oral reference dose* or an *inhalation reference concentration* is an estimate of human exposure (including in susceptible populations) likely to be without appreciable risk of adverse health effects over a lifetime (U.S. EPA, 2002b). Reference values generally cover effects other than cancer. They are also appropriate for carcinogens with a nonlinear mode-of-action.

Calculation of reference values involves dividing the point of departure by a set of *uncertainty factors* (each typically 1, 3, or 10, unless there are adequate chemical-specific data) to account for different sources of uncertainty and variability (U.S. EPA, 2002b), (U.S. EPA, 2014b).

Human variation: An uncertainty factor covers susceptible populations and lifestages that may respond at lower levels, unless the data originate from a susceptible study population.

Animal-to-human extrapolation: For reference values based on animal results, an uncertainty factor reflects cross-species differences, which may cause humans to respond at lower levels.

Subchronic-to-chronic exposure: For chronic reference values based on subchronic studies, an uncertainty factor reflects the likelihood that a lower level over a longer duration may induce a similar response. This factor may not be necessary for reference values of shorter duration.

Adverse-effect level to no-observed-adverse-effect level: For reference values based on a lowest-observed-adverse-effect level, an uncertainty factor reflects a level judged to have no observable adverse effects.

Database deficiencies*:* If there is concern that future studies may identify a more sensitive effect, target organ, population, or lifestage, a *database uncertainty factor* reflects the nature of the database deficiency.

From the RfD/RfC Guidance (cited above as USEPA 2002b)

The Technical Panel recommends limiting the total UF applied for any particular chemical to no more than 3000 and avoiding the derivation of a reference value that involves application of the full 10-fold UF in four or more areas of extrapolation. This maximum of 3000 applies only to the UFs discussed in the following sections and does not include the various adjustment factors that have been discussed previously (Sections 4.4.2. and 4.4.3.). Similar concerns would need to be considered for the less-than-lifetime reference values, taking into account those UFs that are appropriate for each duration reference value.

Uncertainty/Variability Factor: One of several, generally 10-fold, default factors used in operationally deriving the RfD and the RfC from experimental data. The factors are intended to account for (1) the variation in sensitivity among the members of the human population (i.e., inter-individual variability); (2) the uncertainty in extrapolating animal data to humans (i.e., interspecies uncertainty); (3) the uncertainty in extrapolating from data obtained in a study with less-than-lifetime exposure to lifetime exposure (i.e., extrapolating from subchronic to chronic exposure); (4) the uncertainty in extrapolating from a LOAEL rather than from a NOAEL; and (5) the uncertainty associated with extrapolation when the database is incomplete.

4.4.5.5. *Database UF*

The database UF is intended to account for the potential for deriving an underprotective RfD/RfC as a result of an incomplete characterization of the chemical's toxicity. In addition to identifying toxicity information that is lacking, review of existing data may also suggest that a lower reference value might result if additional data were available. Consequently, in deciding to apply this factor to account for deficiencies in the available data set and in identifying its magnitude, the assessor should consider both the data lacking and the data available for particular organ systems as well as life stages.

In many respects, the additional 10-fold factor for infants recommended by the National Research Council (NRC, 1993) and by Schilter et al. (1996) and called for in the 1996 FQPA is similar to the database UF. If the RfD/RfC is based on animal data, a factor of 3 is often applied if either a prenatal toxicity study or a two-generation reproduction study is missing, or a factor of 10 may be applied if both are missing (Dourson et al., 1996). Dourson et al. (1992) examined the use of the database UF by analyzing ratios of NOAELs for chronic dog, rat, and mouse studies and reproductive and developmental toxicity studies in rats. They concluded that reproductive and developmental toxicity studies provide useful information for establishing the lowest NOAEL, and if one or more bioassays are missing, a factor should be used to address this scientific uncertainty in deriving a chronic RfD.

If data from the available toxicology studies raise suspicions of developmental toxicity and signal the need for developmental data on specific organ systems (e.g., detailed nervous

system, immune system, carcinogenesis, or endocrine system), then the database factor should take into account whether or not these data are available and used in the assessment and their potential to affect the POD for the particular duration RfD or RfC under development.
If the RfD/RfC is based on human data, a similar assessment regarding the completeness of the database is necessary. Information on life stages and organ systems may come from either animal or human studies. If data on specific life stages or organ systems are unavailable or limited data suggest that availability of more extensive data might decrease the POD, this should be taken into account in assigning a database UF. For example, depending on the database and what is known about the chemical, the lack of a two-generation animal reproductive toxicity study might be considered a deficiency even if the reference value is based on human data. In any case, the size of the database factor to be applied will depend on other information in the database and on how much impact the missing data may have on determining the toxicity of a chemical and, consequently, the POD.

4.4.5.6. *Subchronic-to-Chronic-Duration UF*

As indicated earlier, a duration adjustment currently in use is the application of a UF when only a subchronic duration study is available to develop a chronic reference value such as the RfC or the RfD (U.S. EPA, 1994). A default value of 10 for this UF is applied to the NOAEL/LOAEL or BMDL/BMCL from the subchronic study on the assumption that effects from a given compound in a subchronic study occur at a 10-fold higher concentration than in a corresponding (but absent) chronic study. This factor would be applied subsequent to the adjustment of the exposures from intermittent to continuous, as above.

The specific use of a UF applied to a subchronic study in the derivation of a chronic reference value is reasonable. Some work has been published on this aspect of extrapolation (Lewis et al., 1990; Pieters et al., 1998). Guidance for replacement of the default factor of 10 by CSAFs may be forthcoming. It would be appropriate to incorporate such data into applicable assessments. In the current practice, this factor is applied when a chronic reference value is derived from a database in which the critical study is of subchronic duration. No chronic reference value is derived if neither a subchronic nor chronic study is available. The application of a UF to less-than-subchronic studies is not part of the current practice, but further exploration of this issue may be appropriate. For short-term and longer-term reference values, the application of a UF analogous to the subchronic-to-chronic duration UF also needs to be explored, as there may be situations in which data are available and applicable but they are from studies in which the dosing period is considerably shorter than that for the reference value being derived.

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 8/17/2020 8:05:08 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: firedrill

Nope I will work on it, don't worry.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Monday, August 17, 2020 3:59 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: firedrill

I just checked Ashley's OneNote and it hasn't been updated since the draft. I think we can pull some from the briefing sheet, etc. but I don't know what we would say about when it's going out. I'll pull some together as a starting point.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Monday, August 17, 2020 3:57 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: firedrill

I haven't been tending to any talking points recently. At one point I think Ashley was trying to keep a list of talking points for us on OneNote. I haven't checked in on it in a long time. Do you know anything on this Britt?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, August 17, 2020 3:52 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: firedrill

Do we have comms talking pts for genx status? I need them ASAP for Admin.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 8/19/2020 11:46:55 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RfD using BMD modeling of Blake

From: Miller, Gregory
Sent: Thursday, August 13, 2020 7:06 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for GEN X Material

Ex. 5 Deliberative Process (DP)

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, August 12, 2020 7:04 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for GEN X Material

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, August 12, 2020 6:32 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for GEN X Material

Especially the public comments, I think there is more there than they are asking for but I couldn't remember if like EPN included EWG.

From: Strong, Jamie
Sent: Wednesday, August 12, 2020 6:26 PM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Request for GEN X Material

I uploaded everything to a folder on Sharepoint except what is highlighted below. Please check my work. We need to talk about the first ask (RfD based on Blake).

From: Aguirre, Janita <Aguirre.Janita@epa.gov>
Sent: Wednesday, August 12, 2020 4:54 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Weyer, Erica <weyer.erica@epa.gov>
Subject: Request for GEN X Material

Hi Deborah, Betsy, and Erica,

As a follow-up to today's meeting on GenX, please prepare the following material that Charlotte termed the "care package" during the meeting. I may receive additional asks from Owen, but here's the list from Charlotte and Dave so far. Once you have the package, please send back to me and I'll put it in their reading queues for attention. I think I'd prefer the information to come in one package, but if you need to batch certain items, let's map out a plan.

A summary of:

1) the higher RfD using the new study as the endpoint and the uncertainty factors used to come up with that number.

A comparison of:

1) other chemicals that have the most conservative 3000 uncertainty factor assumption and the robustness of the studies supporting those other 3000s.

A copy of:

1) PWG report to EPA from Dec. 2019
2) Our updated systematic review of the studies
3) The study that is providing the current POD – possibly the Dupont 18405-1037
4) The Dupont Prenatal and Developmental toxicity study in Rats (18405-841)
5) The two new publications on the reproductive/developmental toxicity of GenX chemicals (Conley et al., 2019; Blake et al., 2020)
6) Comments from
    a. Environmental Working Group
    b. Pennsylvania Department of Environmental Protection
    c. Michigan Department of Environmental Quality
    d. Natural Resources Defense Council
    e. Sierra Clubj
    f. ACC
    g. Dr. James Klaunig, Dr. Damian Shea and Tox Strategies LLC (on behalf of Chemours)

Thank you,
Janita

Janita Aguirre – Special Assistant to David Ross and Anna Wildeman
U.S. Environmental Protection Agency | Office of Water | Office of the Assistant Administrator
Phone: **(202) 566-1149** | Email: aguirre.janita@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 9/10/2020 7:10:34 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: GenX with Charlotte

You were amazing. Your comprehensive knowledge and smooth nice delivery were perfect. Thanks very much Brittany.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 10, 2020 3:06 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: GenX with Charlotte

Thank you! I appreciate the positive feedback. Just wanted to represent our work in the best possible way!

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, September 10, 2020 2:59 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: GenX with Charlotte

Yes. Great job Brittany! Very clear and patient. Way to go!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, September 10, 2020 2:58 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX with Charlotte

Brittany,
You were phenomenal. Proud of you and our team. Thank you for all of your hard work, especially while juggling pandemic life.

Just fantastic.

Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/3/2020 5:09:54 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: GenX Follow-up Questions ---

FYI

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Thursday, September 03, 2020 12:58 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: GenX Follow-up Questions ---

fyi

From: Nagle, Deborah <Nagle.Deborah@epa.gov>
Sent: Thursday, September 03, 2020 12:47 PM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: GenX Follow-up Questions ---

Charlotte,

For our meeting next Thursday on "GenX Follow-up Questions," other than the uncertainty factors, do you have specific questions that you want to discuss. I want to make this meeting as productive as possible.

Thanks in advance.
-Deborah

Deborah G. Nagle, Director
Office of Science and Technology
1200 Pennsylvania Ave, NW
Washington, DC 20460
Tel: (202) 564-1185

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/10/2020 5:35:58 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: last materials requested on GenX by Charlotte

Sorry!! Thank you!!!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 10, 2020 1:35 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: last materials requested on GenX by Charlotte

Hey Jamie,

I wasn't on the original email chain from Betsy to Deborah but Greg forwarded it to me. It was sent August 17th from Betsy to Deborah.

Britt

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, August 18, 2020 6:43 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: last materials requested on GenX by Charlotte

She forgot your cc.

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, August 17, 2020 5:13 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lindberg, Casey <Lindberg.Casey@epa.gov>
Subject: last materials requested on GenX by Charlotte

Attached are:

1) a spreadsheet with IRIS, OW, and OPP assessments from 2002 (date that the RfD/RfC Tech Panel Report was published describing UFs) to the present that have a total UF of 3000. We have noted what the DB UF is for each chemical and the rationale behind that application.
2) Relevant text from the 2002 RfD/RfC Technical Panel Report for quick reference.

Many thanks to Greg, Casey, and Jamie for pulling this together so quickly.

Please let us know if you think satisfies the request,

Betsy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/7/2018 12:33:50 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: Fw: back pocket chart of toxicity values for GenX and PFBS
Attachments: Chart on tox values for genx pfbs .docx

From: Behl, Betsy
Sent: Monday, August 27, 2018 11:27 AM
To: Strong, Jamie; Jones, Samantha
Subject: FW: back pocket chart of toxicity values for GenX and PFBS

Sorry, I meant to copy you

From: Behl, Betsy
Sent: Monday, August 27, 2018 11:25 AM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Cc: Grevatt, Peter <Grevatt.Peter@epa.gov>
Subject: back pocket chart of toxicity values for GenX and PFBS

Deborah, as requested please find a chart listing the toxicity values we developed for GenX and PFBS and possible values calculated for GenX based on the draft toxicity values. We were not able to provide estimates at this time for PFBS, but will be having discussions with ORD about that this week.

Ex. 5 Deliberative Process (DP)

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/24/2020 12:12:00 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: draft GenX chronic HA
Attachments: DRAFT GenX chronic HA EPA estimate vs NC PHG_9 24 20_DO NOT CITE OR QUOTE.xlsx

Here it is with 90%ile DWI.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, September 24, 2020 7:27 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: draft GenX chronic HA

Yes it should be 90%

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, September 24, 2020 6:39 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: draft GenX chronic HA

I think the calculation looks correct, I'm just curious why we are using 95th percentile for DWI? We used 90th for PFOA/PFOS HAs.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, September 23, 2020 11:44 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: draft GenX chronic HA

Have a look to make sure the calculations work. Used a 95%ile all ages drinking water intake from the Feb 2019 updated EFH Chapter 3 and a 20% RSC. Also included NC's provisional health goal as a reference.

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/23/2020 3:43:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: draft GenX chronic HA
Attachments: DRAFT GenX chronic HA EPA estimate vs NC PHG_9 23 20_DO NOT CITE OR QUOTE.xlsx

Have a look to make sure the calculations work. Used a 95%ile all ages drinking water intake from the Feb 2019 updated EFH Chapter 3 and a 20% RSC. Also included NC's provisional health goal as a reference.

Message

From: Jacobs, Brittany [jacobs.brittany@epa.gov]
Sent: 10/28/2020 12:30:20 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: meeting with ORD
Attachments: Miller, Gregory shared "Topics of conversation with ORD for GenX UFd 10 8 20" with you.

Yes, Greg started a list of items to discuss with them awhile back and some of ORD's comments are related to OPPT's comments. After working through OPPT's comments, I feel like we have some ideas in how to restructure the DB UF write-up where we focus on the other effects occuring at low doses where there are uncertainties which is what I think ORD was suggesting we do.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, October 28, 2020 7:33 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: meeting with ORD

I am going to lean on you all to lead this discussion with them. Are there particular comments/issues they bring up that we want feedback on? Being focused on OPPT and OPP comments I am not sure.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 12/16/2019 10:54:08 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I am as well. I will cancel.

Betsy

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Monday, December 16, 2019 5:36 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi all,

I'll be in an all day meeting tomorrow and can't attend our PFBS/GenX chemicals meeting. ☹

Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, February 6, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Tuesday, December 17, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Message

From: Lambert, Jason [Lambert.Jason@epa.gov]
Sent: 11/20/2019 1:48:26 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi Brittany,
Beth and I don't have anything new to report on PFBS (other than working on the RtC doc following Sam's review), so unless there is anything pressing we could use an extra hour today. Thank you

Jason C. Lambert, PhD, DABT
Senior Science Advisor
Center for Computational Toxicology and Exposure
U.S. Environmental Protection Agency
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513)-569-7078
lambert.jason@epa.gov

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, November 20, 2019 8:46 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Do we need to meet today? I know Greg and I could use the time to prep for talking to NTP later today and for responding to comments.

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Tuesday, November 19, 2019 10:26 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi all,

I'm sequestered in an ORD management meeting tomorrow in RTP and can't call in to this meeting. My apologies for the late notice.

Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)

US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, February 6, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Soares, Barbara
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments: call in 202-991-0477 code: 1239896
When: Wednesday, November 20, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 11/24/2020 7:58:33 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments

Hi all,

For our meeting next week can we discuss where the two assessments stand in light of the OCSPP comments and our potential paths forward? It would be great to meet sooner but looks like our normal time will work for most of us...

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, August 12, 2020 1:09 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Soares, Barbara
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments
When: Wednesday, December 2, 2020 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

New Teams meeting

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Ex. 6 Personal Privacy (PP) Washington DC (Toll)

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Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/28/2020 12:37:58 PM
To: Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: GenX materials for ORD review
Attachments: Mode of Action_GenX Chemicals Assessment_4.27.20.docx; UF Section_4.27.20.docx

Good Morning Samantha, Jason and Beth,

Hope you all are doing well and staying healthy!

Attached are a few sections of the updated GenX chemicals toxicity assessment for your review as discussed, we appreciate you taking the time to do this for us.

The first is the updated mode of action section (Word document: Mode of Action_4.27.20). There are a few specific comments in the document we wanted your thoughts on, but please edit/provide suggestions for clarity and accuracy as you see fit. Did we leave anything out? Let us know if you want to see any of the other cited studies.

The second section we wanted for your review are the UF write-ups (UF Section_4.27.20), particularly the the subchronic to chronic UF and the database UF as we are proposing to change these from UFs of 3 to 10. Do these write-ups justify a 10?

Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions.

All the best,

Jamie

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 5/1/2020 4:08:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX materials for ORD review

Adding my thanks to others. It has been wonderful to work with you all. we should sit down when this is over (that will happen at some point) and talk about what we think made it work. a lot of it is mutual respect, but there may be other lessons to be shared.

Best wishes, Betsy

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Friday, May 01, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX materials for ORD review

Ditto! Thanks!

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, May 1, 2020 11:07 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Thank you so much for this review and for doing it so fast. Its been so great to work with you guys.

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Friday, May 01, 2020 11:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jamie,

We've reviewed the two documents and they look good. We've included some small comments in the UF write-up but overall your selections are well-justified. The MOA write-up is nicely done. It's always good to see controversial topics like this one being addressed in a critical and in-depth manner instead of the superficial soundbites that seem to get tossed around! We made some recommendations in the MOA section that we'd be happy to talk about further.

Thanks!

Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 8:38 AM
To: Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX materials for ORD review

Good Morning Samantha, Jason and Beth,

Hope you all are doing well and staying healthy!

Attached are a few sections of the updated GenX chemicals toxicity assessment for your review as discussed, we appreciate you taking the time to do this for us.

The first is the updated mode of action section (Word document: Mode of Action_4.27.20). There are a few specific comments in the document we wanted your thoughts on, but please edit/provide suggestions for clarity and accuracy as you see fit. Did we leave anything out? Let us know if you want to see any of the other cited studies.

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Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions.

All the best,

Jamie

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 5/1/2020 3:31:04 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX materials for ORD review

You're welcome, and definitely been great to work with you guys as we embarked on this thinking it was a 6 month tour that turned into 2 plus years!!!!!! I was trying to make a Gilligan's Island joke but I don't have the brain power today.

Hope you all are hanging in there!

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Friday, May 1, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX materials for ORD review

Ditto! Thanks!

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Friday, May 1, 2020 11:07 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Thank you so much for this review and for doing it so fast. Its been so great to work with you guys.

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Friday, May 01, 2020 11:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jamie,

We've reviewed the two documents and they look good. We've included some small comments in the UF write-up but overall your selections are well-justified. The MOA write-up is nicely done. It's always good to see controversial topics like this one being addressed in a critical and in-depth manner instead of the superficial soundbites that seem to get tossed around! We made some recommendations in the MOA section that we'd be happy to talk about further.

Thanks!

Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 8:38 AM
To: Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX materials for ORD review

Good Morning Samantha, Jason and Beth,

Hope you all are doing well and staying healthy!

Attached are a few sections of the updated GenX chemicals toxicity assessment for your review as discussed, we appreciate you taking the time to do this for us.

The first is the updated mode of action section (Word document: Mode of Action_4.27.20). There are a few specific comments in the document we wanted your thoughts on, but please edit/provide suggestions for clarity and accuracy as you see fit. Did we leave anything out? Let us know if you want to see any of the other cited studies.

The second section we wanted for your review are the UF write-ups (UF Section_4.27.20), particularly the the subchronic to chronic UF and the database UF as we are proposing to change these from UFs of 3 to 10. Do these write-ups justify a 10?

Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions.

All the best,

Jamie

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 3/10/2021 5:26:43 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments

Can we cancel? I have a conflict as well...

Nothing new to update as of yet, we're in the middle of the PFAS TWG final (hopefully!) review of PFBS....

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, March 10, 2021 12:21 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: Finalizing GenX and PFBS assessments

I have a conflict with this meeting and will not be able to attend.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 2/2/2021 2:45:04 AM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments

I don't think so. Sadly the PFBS assessment is still up and I was told it was coming down today. The night isn't over, so there's that.

Nothing new to report other than we'll likely brief our new ORD leadership on PFBS next week...

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Monday, February 1, 2021 6:50 PM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments

Do we need to meet this week? Nothing changed on GenX. We talk to Radhika on Thursday.

Elizabeth (Betsy) Behl, Director Health and Ecological Criteria Division,
Office of Science and Technology, Office of Water, EPA
Office: 202-566-0788
Cell: 202-251-4747

-----Original Appointment-----
From: Snowden, Belinda **On Behalf Of** Behl, Betsy
Sent: Wednesday, August 12, 2020 1:09 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason
Cc: Owens, Beth
Subject: Finalizing GenX and PFBS assessments
When: Wednesday, February 3, 2021 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

New Teams meeting

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Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 10/23/2020 5:36:22 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: PFBS

<!--[if lte mso 15 || CheckWebRef]-->

Flaherty, Colleen has shared a OneDrive for Business file with you. To view it, click the link below.

PFBS comparison 10.23.20.docx

<!--[endif]-->

Hi guys,

The Adm will be briefed next Friday on PFBS and Charlotte "is asking for information on the draft final PFBS value and also how the toxicity compares to PFOS, PFOA, GenX, etc." I've started a response in the attached. Please add/edit as you see fit. We should try to get something to Deborah Monday. I don't think it needs to be exhaustive (i.e., no more than 1 page).

Thanks,
Colleen

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/26/2020 11:14:22 AM
To: Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: RE: PFBS

Brittany is out today. Greg and I will take a look this morning.

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Friday, October 23, 2020 1:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: PFBS

Hi guys,

The Adm will be briefed next Friday on PFBS and Charlotte "is asking for information on the draft final PFBS value and also how the toxicity compares to PFOS, PFOA, GenX, etc." I've started a response in the attached. Please add/edit as you see fit. We should try to get something to Deborah Monday. I don't think it needs to be exhaustive (i.e., no more than 1 page).

Thanks,
Colleen

Message

From: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Sent: 10/26/2020 4:13:16 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]
Subject: RE: PFBS

Thanks, guys. I'll send this to Deborah.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, October 26, 2020 11:09 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: RE: PFBS

Greg and I looked at it and made changes. Let us know what you need if anything. I don't know what to add about process. The process we proposed for GenX is the same that PFBS used. I don't really know the issues because while they were going through TWG and such we were up to our eyeballs on GenX.

J

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Friday, October 23, 2020 1:36 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>
Subject: PFBS

Hi guys,

The Adm will be briefed next Friday on PFBS and Charlotte "is asking for information on the draft final PFBS value and also how the toxicity compares to PFOS, PFOA, GenX, etc." I've started a response in the attached. Please add/edit as you see fit. We should try to get something to Deborah Monday. I don't think it needs to be exhaustive (i.e., no more than 1 page).

Thanks,
Colleen

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/27/2020 11:37:12 AM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: PFBS Toxicity Assessment

FYI

From: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Sent: Monday, October 26, 2020 3:10 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: PFBS Toxicity Assessment

FYI

From: McLain, Jennifer L. <McLain.Jennifer@epa.gov>
Sent: Monday, October 26, 2020 3:06 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: FW: PFBS Toxicity Assessment

FYI

From: McLain, Jennifer L.
Sent: Monday, October 26, 2020 3:06 PM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: RE: PFBS Toxicity Assessment

Charlotte – PFBS is about an order of magnitude less toxic than PFOS and PFOA. The science team would have to do an analysis for specific numbers but given the toxicity level, we estimate that the MRL for PFBS in UCMR3 (0.09 µg/L) was low enough to have captured the concentration of concern. UCMR3 showed low occurrence for PFBS, it was detected at only at 8 systems out of 4,920 PWSs (0.2% of systems).

Jennifer

From: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Sent: Monday, October 26, 2020 1:33 PM
To: McLain, Jennifer L. <McLain.Jennifer@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: RE: PFBS Toxicity Assessment

This is terrific. Thank you.
Can you give me an idea of how the PFBS value may compare to detection limits (etc.) and what it means for occurrence?

From: McLain, Jennifer L. <McLain.Jennifer@epa.gov>
Sent: Monday, October 26, 2020 1:00 PM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>

Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: RE: PFBS Toxicity Assessment

Charlotte – Deborah is out today. Many thanks to OST for pulling this tox comparison together.

From: McLain, Jennifer L.
Sent: Friday, October 23, 2020 6:19 PM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Cc: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: PFBS Toxicity Assessment

Charlotte,

I did not hear back from ORD regarding the draft final assessment so I sent the question about the level and how it compares to the other PFAS toxicity assessments EPA has conducted (PFOA, PFOS, GenX) to Deborah (cc'd here). OST will be sending the information on Monday. Regarding your UCMR 3 question, PFBS was detected (>/= MRL) at 8 systems out of 4,920 PWSs (0.2% of systems). The UCMR3 MRL was 0.09 µg/L.

Also, ORD reached out to us regarding updating Q&As from the draft toxicity assessment release so we will be working through Comms on that.

Jennifer

Jennifer L McLain, Director
Office of Ground Water and Drinking Water
USEPA

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 5/21/2019 4:25:54 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I don't have anything but would be good to hear if anyone has anything they want to discuss?

From: Behl, Betsy
Sent: Tuesday, May 21, 2019 12:20 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I have a conflict with the next meeting. do we want to reschedule or cancel?

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 6/4/2019 9:10:21 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Attachments: Agenda+for+June+5-6+Board+meeting_5_28_19.pdf

Hi all,

Did we have topics to discuss for tomorrow? If there's nothing burning, I recommend we cancel as there's an SAB meeting in which there will be remarks from the EPA Administrator, the SAB will receive briefings from EPA, and discuss: EPA's proposed Science and Transparency Rule; planned actions on EPA's 2018 Spring Regulatory Agenda; actions related to updating EPA guidelines for carcinogen and noncancer assessment; Science Advisory Board self-initiated project; and EPA's Proposed Waters of the U.S. Rule.

See attached agenda for the SAB meeting.

Samantha J. Jones, PhD
Director, Cincinnati Division (Acting)
National Center for Environmental Assessment (NCEA)
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
AWBERC A-133
(o) 513-569-7697; (m) 703-943-7990

-----Original Appointment-----
From: Behl, Betsy
Sent: Wednesday, February 6, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Cc: Owens, Beth; Flaherty, Colleen
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, June 5, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Message

From: Bahadori, Tina [Bahadori.Tina@epa.gov]
Sent: 5/31/2019 2:35:38 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I will be at SAB – listening to the Administrator's opening remarks. But you don't (really) need me.
T.

-----Original Appointment-----
From: Snowden, Belinda **On Behalf Of** Behl, Betsy
Sent: Friday, May 31, 2019 10:26 AM
To: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Cc: Owens, Beth; Flaherty, Colleen
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, June 5, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231L/DC-CCW-OST

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 5/31/2019 2:26:17 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231L/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Appointment

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 6/5/2019 1:27:21 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231L/DC-CCW-OST

Start: 6/5/2019 1:00:00 PM
End: 6/5/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Owens, Beth; Flaherty, Colleen

Here is FDA's response to all the news on PFAS. https://www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas

Here is the AP story:
Ellen Knickmeyer, John Flesher and Michael Casey | AP
June 3 at 8:06 AM
WASHINGTON — The Food and Drug Administration's first broad testing of food for a worrisome class of nonstick, stain-resistant industrial compounds found substantial levels in some grocery store meats and seafood and in off-the-shelf chocolate cake, according to unreleased findings FDA researchers presented at a scientific conference in Europe.
The FDA's disclosure is likely to add to concerns raised by states and public health groups that the Trump administration is not acting fast enough or firmly enough to start regulating the manmade compounds, called "forever chemicals." A federal toxicology report last year cited consistent associations between very high levels of the industrial compounds in peoples' blood and health risks but said there was not enough evidence to prove the compounds as the cause.
The levels in nearly half of the meat and fish tested were double or more the only currently existing federal advisory level for any kind of the widely used manmade compounds, which are called per- and polyfluoroalykyl substances, or PFAS.
The level in the chocolate cake was higher: more than 250 times the only federal guidelines, which are for some PFAS in drinking water.
Food and Drug Administration spokeswoman Tara Rabin said Monday that the agency thought the contamination was "not likely to be a human health concern," even though the tests exceeded the sole existing federal PFAS recommendations, for drinking water.
As a handful of PFAS contaminations of food emerge around the country, authorities have deemed some a health concern but not others. The agency considers each discovery of the compound in food case by case, including the kind of food, levels of contamination, frequency of consumption and latest scientific information, Rabin said.
"Measuring PFAS concentrations in food, estimating dietary exposure and determining the associated health effects is an emerging area of science," the FDA said.
ADVERTISING
PFAS, created by DuPont in 1938 and put into use for tough nonstick cookware, now exists in an estimated 5,000 varieties. Industries use the product to keep grease, water and stains off countless consumer items, including in food packaging, carpets and couches, dental floss and outdoor gear.

The chemicals also are found in firefighting foam, which the Department of Defense calls irreplaceable in suppressing jet-fuel fires. Especially around military bases and PFAS facilities, decades of use have built up levels in water, soil and some treated sewage sludge used to fertilize non-organic food crops and feed for livestock.
They've been a topic of congressional hearings, state legislation and intense federal and state scrutiny over the past two years.
The federal toxicology review last year concluded the compounds are more dangerous than previously thought, saying consistent studies of exposed people "suggest associations" with some kinds of cancers, liver problems, low birth weight and other issues.
Because the tough compounds are predicted to take thousands of years to degrade, and because older versions have been found to accumulate in peoples' bodies, PFAS has acquired the name "forever chemicals."
The Environmental Protection Agency earlier established a nonbinding health advisory threshold of 70 parts per trillion for two-phased out forms of the contaminant in drinking water.
President Donald Trump's EPA said it would consider setting mandatory limits instead in the wake of the federal toxicology report and after federally mandated water sampling found high levels in many drinking water systems around the country. The administration has called dealing with PFAS contamination a "potential public relations nightmare" and a "national priority."
Impatient for federal action, several states have moved to regulate the chemicals on their own, including setting standards for groundwater or drinking water.
In the FDA study, conducted in October 2017, researchers oversaw market basket testing for more than a dozen PFAS, drawing on samples of food on sale in three undisclosed mid-Atlantic cities.
FDA researchers discussed the results at the annual conference by the Society of Environmental Toxicology and Chemistry in Helsinki, Finland, last week.
Two environmental groups, the Environmental Defense Fund and the Environmental Working Group, obtained written results and charts from the FDA presentation and provided them to The Associated Press.
PFOS, an older form of PFAS no longer made in the U.S., turned up at levels ranging from 134 parts per trillion to 865 parts per trillion in tilapia, chicken, turkey, beef, cod, salmon, shrimp, lamb, catfish and hot dogs. Prepared chocolate cake tested at 17,640 parts per trillion of a kind of PFAS called PFPeA.
The FDA presentation also included what appeared to be previously unreported findings of PFAS levels — one spiking over 1,000 parts per trillion — in leafy green vegetables grown within 10 miles (16 kilometers) of an unspecified eastern U.S. PFAS plant and sold at a farmer's market.
It also previewed test levels for a previously reported instance of PFAS contamination of the food supply, in the feed and milk at a dairy near an Air Force base in New Mexico.
The FDA said the contamination in that milk was a health concern. It said it would release detailed data on that soon.
The FDA in 2015 and 2016 revoked approval for some older versions of PFAS in food packaging, although it was one of those versions that was found in high levels in its testing of meat and seafood.
In its statement, the FDA noted studies suggesting newer forms may also pose a health risk. It said it was working with other federal agencies to determine appropriate next steps.
"What this calls for is additional research to determine how widespread this contamination is and how high the levels are," Linda Birnbaum, director of the National Institute of Environmental Health Sciences, said separately in an interview. "We have to look at total human exposure — not just what's in the water or what's in the food ... or not just dust. We need to look at the sum totals of what the exposures are."
Birnbaum added, "Nobody is exposed to just one form of PFAS in isolation. You're exposed to a whole mixture."
It's unclear what human health risks are posed by the presence of PFAS chemicals in foods, said Jamie DeWitt, a toxicologist at East Carolina University in Greenville, North Carolina, who studies PFAS compounds.
The discovery of PFAS contamination in wells and land around a Chemours Co. manufacturing plant near Fayetteville has made North Carolina one of the focuses of study for exposures.
"Drinking one glass of contaminated water is unlikely to be associated with health risks, as is eating one slice of contaminated chocolate cake," DeWitt said. "Individually, each item is unlikely to be a huge problem, but collectively and over a lifetime, that may be a different story."
Sally Brown, a University of Washington researcher who supports the use of treated sewage sludge by agriculture, said the FDA's findings were "not a major concern."
"If you are worried about this type of compound it makes sense to ban the cookware and the dental floss" treated with PFAS, Brown said.

Near Fayetteville, neighbors of the Chemours PFAS facility are making plans for a Fourth of July parade float dedicated to warning others just how widely PFAS was turning up in the area.
The float will feature men fishing in a contaminated pond and vegetables growing in a contaminated garden, said Michael Watters, who lives a mile (1.6 kilometers) from the plant. Watters said he has stopped consuming well water and vegetables from his own land.

___

Flesher reported from Traverse City, Michigan, and Casey from Concord, New Hampshire.
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Message

From: Lambert, Jason [Lambert.Jason@epa.gov]
Sent: 7/29/2019 7:07:01 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: Re: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi Betsy,
I hope you all are doing well today. Beth and I are locked into a CSS meeting Tues-Wed of this week, so unfortunately not available to meet re: GenX/PFBS. I could do Thurs-Fri of this week. Take care

---

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Monday, July 29, 2019 2:46 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I have to have my expert report on Fluoride to the Court on Thursday, so I don't have time for anything else this week…will have to catch up later

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

-----Original Appointment-----
From: Behl, Betsy
Sent: Monday, July 29, 2019 8:43 AM
To: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Cc: Owens, Beth; Flaherty, Colleen; Henry, Tala; Brinkerhoff, Chris
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, July 31, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Adding Tala and Chris. If you cant make it we can schedule another time to talk.

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 7/30/2019 10:26:59 PM
To: Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: call in **Ex. 6 Personal Privacy (PP)**

We can meet as a GenX team and discuss the schedule and the proposal from NTP

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Monday, July 29, 2019 8:40 PM
To: Lambert, Jason <Lambert.Jason@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in **Ex. 6 Personal Privacy (PP)**

I'm also in RTP this week (Tuesday-Thursday) for a series of meetings (different from Beth and Jason). It is unlikely I'll be able to call in for this week's meeting. ☹

I'll be on the look out for any rescheduling, and if I can call in, I will.

Samantha

Samantha J. Jones, PhD
Director, Cincinnati Division (Acting)
National Center for Environmental Assessment (NCEA)
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
AWBERC A-133
(o) 513-569-7697; (m) 703-943-7990

From: Lambert, Jason
Sent: Monday, July 29, 2019 3:07 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: Re: Finalizing GenX and PFBS assessments: call in **Ex. 6 Personal Privacy (PP)**

Hi Betsy,

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From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Monday, July 29, 2019 2:46 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Brinkerhoff, Chris <Brinkerhoff.Chris@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I have to have my expert report on Fluoride to the Court on Thursday, so I don't have time for anything else this week...will have to catch up later

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

-----Original Appointment-----
From: Behl, Betsy
Sent: Monday, July 29, 2019 8:43 AM
To: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Cc: Owens, Beth; Flaherty, Colleen; Henry, Tala; Brinkerhoff, Chris
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, July 31, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Adding Tala and Chris. If you cant make it we can schedule another time to talk.

Appointment

From: Snowden, Belinda [snowden.belinda@epa.gov]
Sent: 8/28/2019 12:33:12 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Kraft, Andrew [Kraft.Andrew@epa.gov]; Schlosser, Paul [Schlosser.Paul@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]

Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
Location: DCRoomWest5231L/DC-CCW-OST

Start: 8/28/2019 1:00:00 PM
End: 8/28/2019 2:00:00 PM
Show Time As: Tentative

Recurrence: Weekly
every Wednesday from 9:00 AM to 10:00 AM
Required Attendees: Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Optional Attendees: Kraft, Andrew; Schlosser, Paul; Owens, Beth; Flaherty, Colleen

Updating room

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 8/27/2019 3:05:07 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Soares, Barbara [soares.barbara@epa.gov]
CC: Owens, Beth [Owens.Beth@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Finalizing GenX and PFBS assessments: c Ex. 6 Personal Privacy (PP)

Yes, I just confirmed that I did invite Andrew/Paul...if there are enough folks to participate, I would recommend continuing at least as an introduction and we can have follow up since Andrew and Paul are planning to attend tomorrow.

Wow! Busy summer trying to get us all together. ☺

Samantha J. Jones, PhD
Director, Cincinnati Division (Acting)
National Center for Environmental Assessment (NCEA)
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
AWBERC A-133
(o) 513-569-7697; (m) 703-943-7990

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, August 27, 2019 10:43 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

I think Samantha said she invited Andrew Kraft and Paul Schlosser to give us an update on what they are doing with the PBPK/toxicokinetic data for the next PFAS assessments which may be relevant to the PFOA/PFOS systematic review we are doing. If they are planning on attending tomorrow, I'd like to hear what they are doing. I'll be teleworking tomorrow but can open up the line at 9.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, August 27, 2019 10:38 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Soares, Barbara <soares.barbara@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)

Hi everyone. Just wanted to check in a few of the group are out of the office (Samantha, Beth, Greg, and Betsy). I am in late tomorrow (930am). Do others want to convene or should we cancel tomorrow?

-----Original Appointment-----
From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, February 06, 2019 4:15 PM
To: Behl, Betsy; Strong, Jamie; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Lambert, Jason; Lavoie, Emma; Bahadori, Tina; Soares, Barbara
Cc: Owens, Beth; Flaherty, Colleen
Subject: Finalizing GenX and PFBS assessments: call in Ex. 6 Personal Privacy (PP)
When: Wednesday, August 28, 2019 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/20/2019 7:34:30 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: pfbs

I heard that there was a decision to separate genx and pfbs and that the expectation is that pfbs is finished by December. We need to talk about genx. We need to ramp up and get it to a place that is closer to done before we hear back from ntp. The expectation is going to be to do it fast after that. Despite what our proposed schedule says.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/22/2018 6:22:25 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: HERO References vs. Our Bibliography

FYI

From: Lambert, Jason
Sent: Thursday, March 22, 2018 2:18 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Babcock, Amy <babcock.amy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: HERO References vs. Our Bibliography

Hi Tala,
Well that is certainly disconcerting. I have cc'd Samantha Jones as I would like make sure she is aware. I will see about getting Amy, myself, HERO et al. together to walk through this potential issue.

Jason C. Lambert, PhD, DABT
U.S. EPA, ORD, NCEA
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513) 569-7078 ph.
(513) 487-2539 fax
lambert.jason@epa.gov

From: Henry, Tala
Sent: Thursday, March 22, 2018 11:28 AM
To: Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Babcock, Amy <babcock.amy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: FW: HERO References vs. Our Bibliography

Jason,
We are 'QCing' the HERO pages that come up from the web page link.
We are finding issues of completeness.

Can you please work with Amy Babcock of my staff (cc'd here) to get this figured out?

Thanks much!

Tala R. Henry, Ph.D.
Director, Risk Assessment Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Babcock, Amy
Sent: Thursday, March 22, 2018 9:27 AM
To: Henry, Tala <Henry.Tala@epa.gov>

Subject: HERO References vs. Our Bibliography
Importance: High

Hi Tala,

The dimer acid studies in HERO match our bibliography, except for one typo.

There are several salt studies in our bibliography that do not appear in the GenX salt link. I am now going through those to see if they are in the open lit link, but I agree…I don't see how some of the studies currently in open lit ended up there.

Please see attached for details…

Thanks,
Amy

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/13/2018 2:07:54 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: joint workplan revisions PFBS/GenX
Attachments: detailed workplan comparison GenX PFBS 3.12.18 etl.docx

---

From: Jones, Samantha
Sent: Monday, March 12, 2018 6:25 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Lavoie, Emma <Lavoie.Emma@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: joint workplan revisions PFBS/GenX

Hi Betsy and Jamie,

This looks good! We've added some changes and highlighted a few items that would be good to walk through during tomorrow's call. See you soon!

Thanks, Samantha

From: Behl, Betsy
Sent: Wednesday, March 07, 2018 6:04 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: joint workplan revisions PFBS/GenX

See what you think. I think we need to talk to Peter and others about when the public meeting will be, but this gets us pretty close on other milestones and deliverables

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/4/2018 2:40:42 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: Just checking

FYI

From: Strong, Jamie
Sent: Wednesday, April 04, 2018 10:03 AM
To: Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: RE: Just checking

Good morning! We are plugging along. We do have a draft, but there are holes (Britt is working on the hazard syntheses by organ and we have no uncertainty/effects characterization section started). There are comments and things we still need to tweak/revise throughout. We do have the DR section written up and I sent the UF write up to Sam just see if it passes the laugh test. So we are getting there. I need to talk to Betsy today about process and the drop dead date to get the draft to OPPT. I think I need her to review first and we should prep OPPT for doc (UF in particular). Betsy sent a note to me this morning about scheduling the next stakeholder meeting for the 27th. That means we need to figure out content of slides soon and start that. It's just all too much, I am sure you two feel the same! I'm here if you want to chat.

Jamie

From: Lambert, Jason
Sent: Wednesday, April 04, 2018 8:59 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Owens, Beth <Owens.Beth@epa.gov>
Subject: Just checking

Good morning Jamie,
Beth and I are slogging along on PFBS; we of course have A LOT left to do to get a completed draft together but we are making progress. We wanted to check with you to see if you all are on target for GenX draft development (or behind a bit). Getting a feel for where you are with GenX will help us gauge whether we are ok with PFBs or I need to start working nights/weekends…Thank you

Jason C. Lambert, PhD, DABT
NCEA Senior Advisor for Alternative Methods
U.S. EPA, ORD, NCEA
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513) 569-7078 ph.
(513) 487-2539 fax
lambert.jason@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/17/2018 2:32:02 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: update on tox document development

FYI

From: Behl, Betsy
Sent: Tuesday, April 17, 2018 10:31 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Subject: update on tox document development

Study availability:
We need to confirm that all GenX studies are publically available (not just through the NC website). To that end:

1) Brittany will assemble a GenX bibliography
2) We will share that with OPPT for completeness check this week.
3) We will send to Samantha this week to cross check entries with studies in HERO
4) After we agree that all studies are included, we will deal with tagging
5) Studies need to be publically available next week. We will explore developing a docket to house the DuPont studies for GenX

Document status
Teams are doing great. OW shared a rough GenX draft last week and will send a version to OPPT tomorrow for their review.
PFBS should have a version to share with OW in the middle of next week.

Peer review questions
Charge questions are general. Britany will send around for review.
Feedback requested on changes on Friday (4/20)
We may be asked for these at meeting #2

Presentations for **meeting #2**
Jamie sent draft around last week.
Both presentations will be parallel format
We are not planning to include RfDs or UFs, but will describe all information considered for both
Will share drafts internally on Wednesday
Send to Peter etc on Friday (4/20)?
Planning for dry run with folks in EPA doing internal review (didn't discuss date. How about 4/30 or 5/1?). Betsy to ask Hannah to schedule
Slides need to be shared next (4/27) with stakeholders

From: Jones, Samantha
Sent: Tuesday, April 17, 2018 9:47 AM
To: Champlin, Anna <Champlin.Anna@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: Hi! I'm on the line if you want to open for the last few minutes :)

Sent from my iPhone

Appointment

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/12/2018 2:35:55 PM
To: Donohue, Joyce [Donohue.Joyce@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]

Subject: FW: CSS AOPDD Webinar - Conley - GenX effects in rats
Location: dial: 202-991-0477; conf code: 8342470; https://epawebconferencing.acms.com/css-aopdd/

Start: 9/18/2018 7:00:00 PM
End: 9/18/2018 7:45:00 PM
Show Time As: Tentative

-----Original Appointment-----
From: Villeneuve, Dan
Sent: Thursday, September 06, 2018 7:31 PM
To: Villeneuve, Dan; Strong, Jamie; Hines, Ronald; Abedini, Jaleh; Angrish, Michelle; Ankley, Gerald; Barron, Mace; Biales, Adam; Blackwell, Brett; Botteri, Nicole; Carleton, Jim; Carswell, Gleta; Cavallin, Jenna; Cheng, Wan-Yun; Chorley, Brian; Collette, Tim; Conley, Justin; Conolly, Rory; Corton, Chris; Degitz, Sigmund; Doering, Jonathon; Edwards, Stephen; Ekman, Drew; El-Masri, Hisham; Fay, Kellie; Franzosa, Jill; Fry, Meridith; Ge, Yue; Gessner, Lauren; Gilbert, Mary E.; Gray, Earl; Haselman, Jon; Hassan, Iman; Hazari, Mehdi; Herr, David; Hester, Susan; Hill, Thomas; Hines, David; Hornung, Michael; Hubal, Elaine; Hughes, MichaelF; Hunter, Sid; Ives, Cataia; Jarabek, Annie; Jensen, Kathleen; Jeremy Leonard; Joachim Pleil; Judson, Richard; Kahl, Michael; Kenyon, Elaina; Klinefelter, Gary; Kodavanti, Prasada Rao; Korte, Joe; Kosian, Pat; LaLone, Carlie; Laws, Susan; Leonard, Jeremy; Lyons, David; Miller, David; Miller-Dykeman, Ashley; Mills, Lesley; Mills, Marc; Mortensen, Holly; Moser, Ginger; Nelms, Mark; Nelson, Gail; Nelson, Garret; Olker, Jennifer; OShaughnessy, Katie; Phillips, Katherine; Pittman, Maureen; Pleil, Joachim; Ramasamy, Santhini; Scatterday, Allysan; Schreinemachers, Dina; Simmons, Jane; Stoker, Tammy; Suarez, Samuel; Suen, Alisa; Tal, Tamara; Tan, Cecilia; Teng, Quincy; Thai, Sheau-Fung; VanEmon, Jeanette; Veronesi, Bellina; Wang, Rong-Lin; Wehmas, Leah; Wilson, Vickie; Frithsen, Jeff; Cowden, John; Tietge, Joe
Subject: Fwd: CSS AOPDD Webinar - Conley - GenX effects in rats
When: Tuesday, September 18, 2018 2:00 PM-2:45 PM (UTC-06:00) Central Time (US & Canada).
Where: dial: **Ex. 6 Personal Privacy (PP)**

FYI.
Earl

Sent from my iPhone

Begin forwarded message:

> **From:** "Villeneuve, Dan" <Villeneuve.Dan@epa.gov>
> **To:** "Abedini, Jaleh" <abedini.jaleh@epa.gov>, "Angrish, Michelle" <Angrish.Michelle@epa.gov>, "Ankley, Gerald" <Ankley.Gerald@epa.gov>, "Barron, Mace" <Barron.Mace@epa.gov>, "Biales, Adam" <Biales.Adam@epa.gov>, "Blackwell, Brett" <Blackwell.Brett@epa.gov>, "Botteri, Nicole" <Botteri.Nicole@epa.gov>, "Carleton, Jim" <Carleton.Jim@epa.gov>, "Carswell, Gleta" <Carswell.Gleta@epa.gov>, "Cavallin, Jenna" <Cavallin.Jenna@epa.gov>, "Cheng, Wan-Yun" <Cheng.Wan-Yun@epa.gov>, "Chorley, Brian" <Chorley.Brian@epa.gov>, "Collette, Tim" <Collette.Tim@epa.gov>, "Conley, Justin" <Conley.Justin@epa.gov>, "Conolly, Rory" <Conolly.Rory@epa.gov>, "Corton, Chris" <Corton.Chris@epa.gov>, "Degitz, Sigmund"

<Degitz.Sigmund@epa.gov>, "Doering, Jonathon" <doering.jonathon@epa.gov>, "Edwards, Stephen" <Edwards.Stephen@epa.gov>, "Ekman, Drew" <Ekman.Drew@epa.gov>, "El-Masri, Hisham" <El-Masri.Hisham@epa.gov>, "Fay, Kellie" <Fay.Kellie@epa.gov>, "Franzosa, Jill" <Franzosa.Jill@epa.gov>, "Fry, Meridith" <Fry.Meridith@epa.gov>, "Ge, Yue" <Ge.Yue@epa.gov>, "Gessner, Lauren" <gessner.lauren@epa.gov>, "Gilbert, Mary E." <Gilbert.Mary@epa.gov>, "Gray, Earl" <Gray.Earl@epa.gov>, "Haselman, Jon" <Haselman.Jon@epa.gov>, "Hassan, Iman" <Hassan.Iman@epa.gov>, "Hazari, Mehdi" <Hazari.Mehdi@epa.gov>, "Herr, David" <Herr.David@epa.gov>, "Hester, Susan" <Hester.Susan@epa.gov>, "Hill, Thomas" <hill.thomas@epa.gov>, "Hines, David" <hines.david@epa.gov>, "Hornung, Michael" <Hornung.Michael@epa.gov>, "Hubal, Elaine" <Hubal.Elaine@epa.gov>, "Hughes, MichaelF" <Hughes.MichaelF@epa.gov>, "Hunter, Sid" <Hunter.Sid@epa.gov>, "Ives, Cataia" <Ives.Cataia@epa.gov>, "Jarabek, Annie" <Jarabek.Annie@epa.gov>, "Jensen, Kathleen" <Jensen.Kathleen@epa.gov>, "Jeremy Leonard" <jaleonar@ncsu.edu>, "Joachim Pleil" <Pleil@unc.edu>, "Judson, Richard" <Judson.Richard@epa.gov>, "Kahl, Michael" <Kahl.Michael@epa.gov>, "Kenyon, Elaina" <Kenyon.Elaina@epa.gov>, "Klinefelter, Gary" <Klinefelter.Gary@epa.gov>, "Kodavanti, Prasada Rao" <Kodavanti.Prasada@epa.gov>, "Korte, Joe" <Korte.Joe@epa.gov>, "Kosian, Pat" <Kosian.Pat@epa.gov>, "LaLone, Carlie" <lalone.carlie@epa.gov>, "Laws, Susan" <Laws.Susan@epa.gov>, "Leonard, Jeremy" <Leonard.Jeremy@epa.gov>, "Lyons, David" <Lyons.David@epa.gov>, "Miller, David" <Miller.DavidJ@epa.gov>, "Miller-Dykeman, Ashley" <miller-dykeman.ashley@epa.gov>, "Mills, Lesley" <Mills.Lesley@epa.gov>, "Mills, Marc" <mills.marc@epa.gov>, "Mortensen, Holly" <Mortensen.Holly@epa.gov>, "Moser, Ginger" <Moser.Ginger@epa.gov>, "Nelms, Mark" <Nelms.Mark@epa.gov>, "Nelson, Gail" <Nelson.Gail@epa.gov>, "Nelson, Garret" <Nelson.Garret@epa.gov>, "Olker, Jennifer" <olker.jennifer@epa.gov>, "OShaughnessy, Katie" <OShaughnessy.Katie@epa.gov>, "Phillips, Katherine" <Phillips.Katherine@epa.gov>, "Pittman, Maureen" <Pittman.Maureen@epa.gov>, "Pleil, Joachim" <Pleil.Joachim@epa.gov>, "Ramasamy, Santhini" <Ramasamy.Santhini@epa.gov>, "Scatterday, Allysan" <scatterday.allysan@epa.gov>, "Schreinemachers, Dina" <Schreinemachers.Dina@epa.gov>, "Simmons, Jane" <Simmons.Jane@epa.gov>, "Stoker, Tammy" <Stoker.Tammy@epa.gov>, "Suarez, Samuel" <Suarez.Samuel@epa.gov>, "Suen, Alisa" <suen.alisa@epa.gov>, "Tal, Tamara" <Tal.Tamara@epa.gov>, "Tan, Cecilia" <Tan.Cecilia@epa.gov>, "Teng, Quincy" <Teng.Quincy@epa.gov>, "Thai, Sheau-Fung" <Thai.Sheau-Fung@epa.gov>, "VanEmon, Jeanette" <VanEmon.Jeanette@epa.gov>, "Veronesi, Bellina" <Veronesi.Bellina@epa.gov>, "Wang, Rong-Lin" <Wang.Rong-Lin@epa.gov>, "Wehmas, Leah" <wehmas.leah@epa.gov>, "Wilson, Vickie" <Wilson.Vickie@epa.gov>, "Frithsen, Jeff" <Frithsen.Jeff@epa.gov>, "Cowden, John" <Cowden.John@epa.gov>, "Tietge, Joe" <Tietge.Joe@epa.gov>

Subject: CSS AOPDD Webinar - Conley - GenX effects in rats

Adverse maternal, fetal, and postnatal effects of oral gestational exposure to hexafluoropropylene oxide dimer acid (GenX) in Sprague-Dawley rats

[cid:image003.jpg@01D445FB.13A252E0]

Presenter: Dr. Justin Conley, Ph.D., NHEERL, Toxicity Assessment Division, Research Triangle Park, NC

Tuesday, September 18, 2018
3:00-3:45 PM Eastern (2:00-2:45 Central)

Dial-in: Ex. 6 Personal Privacy (PP)
Conf ID:
Adobe Connect URL: Ex. 6 Personal Privacy (PP)

If you encounter a busy signal when dialing in, try one of the alternative numbers found here: Ex. 6 Personal Privacy (PP)

Message

From: Jones, Samantha [Jones.Samantha@epa.gov]
Sent: 4/4/2018 2:53:22 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: GenX PFBS peer review discussion

Thanks!

From: Strong, Jamie
Sent: Wednesday, April 4, 2018 10:52 AM
To: Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX PFBS peer review discussion

This is simply the kick off…I assume they will want to know what kind of expertise we need (which we laid out in work assignment) but as for specific people no. They haven't started that yet.

From: Jones, Samantha
Sent: Wednesday, April 04, 2018 10:51 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX PFBS peer review discussion

DROPPED ERG…

Jamie, thanks for setting this up! Are there technical qualifications of potential reviewers to go over or is the step prior to that part?

-----Original Appointment-----
From: Strong, Jamie
Sent: Wednesday, April 4, 2018 10:39 AM
To: Strong, Jamie; Lambert, Jason; Owens, Beth; Jones, Samantha; Miller, Gregory; Jacobs, Brittany; Laurie Waite
Subject: GenX PFBS peer review discussion
When: Thursday, April 5, 2018 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5233AA/DC-CCW-OST

CALL IN: Ex. 6 Personal Privacy (PP)
CONF ID:

Kick off call for peer review of GenX and PFBS Toxicity Values

Message

From: Lambert, Jason [Lambert.Jason@epa.gov]
Sent: 4/21/2018 11:02:54 AM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: Re: charge questions
Attachments: charge questions genx pfbs 04 19 18bb_Lambert.docx

Good morning everyone. Sorry about not responding until now. I was out yesterday. If not too late, I have provided some comments and editorial suggestions for improving the charge question memo. It is all in track changes so keep what you like and throw away what is not that useful. Thank you

---

From: Behl, Betsy
Sent: Friday, April 20, 2018 5:59:44 PM
To: Strong, Jamie; Jacobs, Brittany; Bahadori, Tina; Lavoie, Emma; Gillespie, Andrew; Jones, Samantha; Lambert, Jason
Cc: Miller, Gregory; Owens, Beth; Champlin, Anna
Subject: charge questions

I think these look great. Any concerns sharing them with OPPT on Monday?

From: Strong, Jamie
Sent: Thursday, April 19, 2018 1:49 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)

Here are my edits, I have noted where ORD needs to fill in info for PFBS.

From: Jacobs, Brittany
Sent: Tuesday, April 17, 2018 9:15 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)

Good Morning everyone,

Below are the general charge questions sent to the contractor for your feedback by Friday 4/20 :

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Behl, Betsy
Sent: Monday, February 12, 2018 8:09 AM
To: Behl, Betsy; Bahadori, Tina; Lavoie, Emma; Strong, Jamie; Gillespie, Andrew; Jones, Samantha; Lambert, Jason
Cc: Miller, Gregory; Jacobs, Brittany; Owens, Beth; Champlin, Anna
Subject: coordination on document development: call in 202-991-0477, conf id: 1239896
When: Tuesday, April 17, 2018 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Coordination on toxicity values documents

Message

From: Behl, Betsy [Behl.Betsy@epa.gov]
Sent: 4/20/2018 9:59:44 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: charge questions
Attachments: charge questions genx pfbs 04 19 18bb.docx

I think these look great. Any concerns sharing them with OPPT on Monday?

From: Strong, Jamie
Sent: Thursday, April 19, 2018 1:49 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)

Here are my edits, I have noted where ORD needs to fill in info for PFBS.

From: Jacobs, Brittany
Sent: Tuesday, April 17, 2018 9:15 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)

Good Morning everyone,

Below are the general charge questions sent to the contractor for your feedback by Friday 4/20 :

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Behl, Betsy
Sent: Monday, February 12, 2018 8:09 AM
To: Behl, Betsy; Bahadori, Tina; Lavoie, Emma; Strong, Jamie; Gillespie, Andrew; Jones, Samantha; Lambert, Jason
Cc: Miller, Gregory; Jacobs, Brittany; Owens, Beth; Champlin, Anna
Subject: coordination on document development: call in Ex. 6 Personal Privacy (PP)
When: Tuesday, April 17, 2018 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Coordination on toxicity values documents

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/19/2018 5:48:30 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Bahadori, Tina [Bahadori.Tina@epa.gov]; Lavoie, Emma [Lavoie.Emma@epa.gov]; Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Champlin, Anna [Champlin.Anna@epa.gov]
Subject: RE: coordination on document development: call in Ex. 6 Personal Privacy (PP)
Attachments: charge questions genx pfbs 04 19 18.docx

Here are my edits, I have noted where ORD needs to fill in info for PFBS.

From: Jacobs, Brittany
Sent: Tuesday, April 17, 2018 9:15 AM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Lavoie, Emma <Lavoie.Emma@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Miller, Gregory <Miller.Gregory@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Champlin, Anna <Champlin.Anna@epa.gov>
Subject: RE: coordination on document development: call in 2 Ex. 6 Personal Privacy (PP)

Good Morning everyone,

Below are the general charge questions sent to the contractor for your feedback by Friday 4/20 :

Ex. 5 Deliberative Process (DP)

-----Original Appointment-----
From: Behl, Betsy
Sent: Monday, February 12, 2018 8:09 AM
To: Behl, Betsy; Bahadori, Tina; Lavoie, Emma; Strong, Jamie; Gillespie, Andrew; Jones, Samantha; Lambert, Jason
Cc: Miller, Gregory; Jacobs, Brittany; Owens, Beth; Champlin, Anna
Subject: coordination on document development: call in Ex. 6 Personal Privacy (PP)
When: Tuesday, April 17, 2018 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomWest5231M/DC-CCW-OST

Coordination on toxicity values documents

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/1/2018 8:28:15 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Harrison, Shirley [Harrison.Shirley@epa.gov]
CC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: Re: GenX Work Assignment and IGCE

Ugh hold on to this, I am on a call and there may be a modification to this WA to include another chemical.

From: Jacobs, Brittany
Sent: Thursday, February 1, 2018 1:59 PM
To: Harrison, Shirley
Cc: Miller, Gregory; Strong, Jamie
Subject: GenX Work Assignment and IGCE

Hello Shirley,

Attached are the work assignment for the GenX external letter peer review, the IGCE, and the forms that do not need to be signed. I am printing out the rest of the forms for Jamie to sign and she will send them to you tomorrow.

Thanks for your help!
Brittany

Message

From: Lambert, Jason [Lambert.Jason@epa.gov]
Sent: 4/27/2018 11:25:01 AM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]
Subject: RE: Task 0008: Pool of Proposed Reviewers

Hi Jamie,
I am quite familiar with several of these folks (i.e., their scientific acumen). Happy to get on a call Monday; my calendar is currently wide open Monday (which never happens). Take care

Jason C. Lambert, PhD, DABT
NCEA Senior Advisor for Alternative Methods
U.S. EPA, ORD, NCEA
26 West Martin Luther King Dr.
Cincinnati, OH 45268
(513) 569-7078 ph.
(513) 487-2539 fax
lambert.jason@epa.gov

From: Strong, Jamie
Sent: Friday, April 27, 2018 7:20 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Subject: Fw: Task 0008: Pool of Proposed Reviewers

We need to discuss these Monday if possible. I have some thoughts.

Jamie

From: Laurie Waite <Laurie.Waite@erg.com>
Sent: Thursday, April 26, 2018 7:19 PM
To: Strong, Jamie
Cc: Lambert, Jason
Subject: Task 0008: Pool of Proposed Reviewers

Dear Jamie,

ERG has reviewed the CVs of the candidates who responded to our search to conduct the peer review of EPA's draft toxicity assessments for Perfluoro(2-methyl-3-oxahexanoate) (GenX) and perfluorobutane sulfonate (PFBS). We are pleased to propose the following pool of 10 qualified candidates who have indicated willingness and availability to conduct this external peer review. Please find attached a CV for each candidate.

1	Karen Chou, Ph.D.; Associate Professor, Michigan State University	Reproductive/developmental toxicology, risk assessment
2	Tai Liang Guo, PhD, DABT; Professor, University of Georgia	Immunotoxicity, developmental exposures, familiar with risk assessment
3	Shruti V. Kabadi, Ph.D.; Regulatory Toxicology Reviewer, U.S. Food & Drug Administration	Toxicology, PFAS toxicity [with nutritional component], risk assessment
4	Lisa Kamendulis, PH.D.; Associate Professor, Department of Environmental Health, Indiana University	Liver toxicology, risk assessment, dose-response, PFOA research
5	Kurunthachalam Kannan, Ph.D.; Research Scientist, Wadsworth Center, New York State Department of Health	PFOA chemistry, toxicity, and hazard assessment
6	Gregory Kedderis, Ph.D.; Toxicology Consultant, North Carolina	Liver toxicity, benchmark-dose analysis, risk assessment
7	Resha Putzrath, Ph.D., DABT; Biological Scientist, Environmental Programs, Navy and Marine Corps Public Health Center, U.S. Navy	Dose-response, toxicology, risk assessment, has experience with PFAS (served on review boards for PFAS)
8	Andrew Salmon, Ph.D.; Scientific Advisor to the Director, Division of Scientific Affairs, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency	Benchmark-dose analysis, risk assessment
9	*Angela Slitt, Ph.D.; Associate Professor, Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island	Liver toxicology, PFOA/PFAS metabolism, some kidney toxicity
10	David "Alan" Warren, Ph.D.; Program Director, Environmental Health Science, University of South Carolina Beaumont	Benchmark-dose modeling, toxicology, risk assessment, hematotoxicity, immunotoxicity, some thyroid studies

*Note that ERG has not yet received a completed Conflict of Interest (COI) Analysis and Certification form from Dr. Slitt, however we have reviewed her CV and think it very likely that she does not have a COI. ERG will not make final selection until we have thoroughly vetted her COI form.

ERG has collected completed and signed COI analysis forms for all other candidates and reviewed these along with each candidate's CV. ERG has determined that the above candidates (with exception of a review of Dr. Slitt's form as noted above) do not have any conflict in conducting the review based on information provided.

Please let me know in writing if EPA feels these candidates collectively meet the technical expertise criteria for these reviews. EPA is free to provide comments on a lack of technical qualifications within the overall pool and/or any COI/Bias concerns not otherwise reported to ERG.

If EPA feels these candidates are sufficient to meet the technical expertise criteria for this review, ERG will then proceed with selecting and securing the services of five final reviewers and begin the reviews as soon as the final review materials are received.

Kind Regards,

Laurie

^<>^<>^<>^<>^<>^<>^<>^<>^
Laurie Waite
Senior Project Manager
Peer Review Services
Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02421
781-674-7362
Laurie.Waite@erg.com
^<>^<>^<>^<>^<>^<>^<>^<>^

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/27/2018 11:20:02 AM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Behl, Betsy [Behl.Betsy@epa.gov]; Owens, Beth [Owens.Beth@epa.gov]; Lambert, Jason [Lambert.Jason@epa.gov]
Subject: Fw: Task 0008: Pool of Proposed Reviewers
Attachments: Kurunthachalam_Kannan.pdf; Chou_Karen.pdf; Guo_Tai_L.PDF; Kabadi_Shruti_V.PDF; Kamendulis_Lisa_M.DOCX; Kedderis_Gregory_L.DOC; Putzrath_Resha_M.DOCX; Salmon_Andrew.docx; Slitt_Angela_L.DOCX; Warren_David_Alan.doc

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7	Resha Putzrath, Ph.D., DABT; Biological Scientist, Environmental Programs, Navy and Marine Corps Public Health Center, U.S. Navy	Dose-response, toxicology, risk assessment, has experience with PFAS (served on review boards for PFAS)
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Laurie

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Laurie Waite
Senior Project Manager
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Lexington, MA 02421
781-674-7362
Laurie.Waite@erg.com
^<>^<>^<>^<>^<>^<>^<>^<>^

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/19/2018 6:08:33 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: comparing PFOA to GenX-HELP

I don't understand this

From: Donohue, Joyce
Sent: Wednesday, September 19, 2018 2:07 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: comparing PFOA to GenX-HELP

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie
Sent: Wednesday, September 19, 2018 1:28 PM
To: Donohue, Joyce <Donohue.Joyce@epa.gov>
Subject: RE: comparing PFOA to GenX-HELP

One question, do you agree that the GenX beta half-life is similar between monkeys and rodents and that this differs from PFOA?

From: Donohue, Joyce
Sent: Wednesday, September 19, 2018 12:30 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: comparing PFOA to GenX-HELP

I included PFOS but you can remove it if you only want PFOA

From: Strong, Jamie
Sent: Wednesday, September 19, 2018 11:39 AM
To: Donohue, Joyce <Donohue.Joyce@epa.gov>
Cc: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: comparing PFOA to GenX-HELP
Importance: High

Joyce,
Can you please fill out these tables comparing environmental fate and TK issues for GenX and PFOA. Succinct summaries/statements are best. I have to brief Admin Wheeler on Friday and these questions came up previously when we briefed Dave Ross. I need something today if possible.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 3/13/2018 6:56:37 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PFOS DL: 3:30 TODAY 3-13

So FYI, the world will know we are doing something on GenX and PFBS imminently.

From: Lalley, Cara
Sent: Tuesday, March 13, 2018 2:55 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PFOS DL: 3:30 TODAY 3-13

Thanks- ok, so it sounds like it's Peter's call on which PFAS compounds to mention to the reporter. I'll let OGWDW know that state and ORD data is being used for GenX.

From: Behl, Betsy
Sent: Tuesday, March 13, 2018 2:50 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Lalley, Cara <Lalley.Cara@epa.gov>
Subject: Re: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PFOS DL: 3:30 TODAY 3-13

Peter said we are working on tox values for 7 PFAS starting with genx and pfbs. I heard that today. Not sure what he said yesterday.

Also I saw an email today that said Peter is the agency lead for PFAS. Peter showed it to me. It was from Ryan Jackson. That said, the only occurrence info is from states and ord for genx. The rest of the sentence is correct.

Sent from my iPhone

On Mar 13, 2018, at 2:37 PM, Strong, Jamie <Strong.Jamie@epa.gov> wrote:

> We haven't said publically we are working on GenX.
>
> ---
>
> **From:** Lalley, Cara
> **Sent:** Tuesday, March 13, 2018 2:00 PM
> **To:** Strong, Jamie <Strong.Jamie@epa.gov>
> **Subject:** FW: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PFOS DL: 3:30 TODAY 3-13
>
> Hello again! OGWDW wants to know if this sentence is correct and ok to say publicly, or if we need to let ORD (as the PFAS workgroup lead) decide what to say? Seems like ORD should decide what to say about occurrence data on GenX- is that right?
>
> EPA is currently working on developing toxicity values for additional PFAS such as PFBS and GenX. Occurrence data for PFBS was included in EPA's third UCMR. ORD for data on GenX?
>
> Thanks

From: Wadlington, Christina
Sent: Tuesday, March 13, 2018 1:28 PM
To: Lalley, Cara <Lalley.Cara@epa.gov>; Holsinger, Hannah <Holsinger.Hannah@epa.gov>
Subject: FW: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PFOS DL: 3:30 TODAY 3-13

I know that we have said this externally, but it's not written anywhere yet right? Would Betsy confirm or the PFAS workgroup(s)?

EPA is currently working on developing toxicity values for additional PFAS such as PFBS and GenX. Occurrence data for PFBS was included in EPA's third UCMR. ORD for data on GenX?

From: Fuld, John
Sent: Tuesday, March 13, 2018 11:32 AM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>
Subject: MEDIA INQUIRY - Bloomberg Environment re: EPA's Peter Grevatt - Comments PsFOS DL: 3:30 TODAY 3-13

<image002.png>**Office of Water**

Media Inquiry

John W. Fuld, Ph.D.
U.S. Media Relations Mgr.-Water
fuld.john@epa.gov

DATE: March 13, 2018

OUTLET: Bloomberg Environment

REPORTER: Amana Saiyid

TOPIC: EPA's Peter Grevatt - Comments PFOS

DEADLINE: 3:30 pm

OW PROGRAM OFFICE: OGWDW

PERTINENT INFORMATION:

QUESTIONS:

1. So my question is can the agency name of some of the PFAS compounds for which potential toxicity will be determined.

2. Are these compounds as ubiquitous as PFOA and PFOS for which the agency has already issued health advisories?

****
*

INFORMATION PUBLICLY AVAILABLE: (*LIST SOURCE WITH EACH ANSWER)*
Web-link or source material.
****
*

ANSWERS:

John W. Fuld, Ph.D.
U.S. Media Relations Manager, Office of Water
Environmental Protection Agency
1200 Constitution Ave
Washington DC 20460
Office: 202-564-8847
Cell: 202-815-6408
fuld.john@epa.gov
Memoria est mater omnium sapientia

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 11/21/2019 2:56:41 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Briefing sheet for systematic review discussion with OPPT
Attachments: GenX chemicals Response to Public Comments on Systematic Review_OPPT gMiller.docx

A few comments in redline. It looks like that big table is in there twice.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, November 21, 2019 8:55 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Briefing sheet for systematic review discussion with OPPT

Thanks for taking a look!

Britt

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 4/29/2020 4:52:27 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Greene, Sophie [Greene.Sophie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: all hands on deck

Here are answers for 8 and 10

When your office produces a health advisory, do staff use systematic review procedures, or some version of them in preparing the advisory?

a. **If you have guidance on how you prepare health advisories in your office, please provide a copy.**

OST/HECD/HHRAB has recently begun (starting around 2017) to employ systematic review procedures in preparing toxicological and microbial scientific assessments. Our understanding of the systematic review process has been shaped by our interactions with ORD staff; however, we've also had the opportunity to work with OPPT's systematic review process on at least one occasion (e.g. GenX).

Have any personnel from your office been detailed or asked to support IRIS or TSCA- related tasks?

b. If so, describe the work they were doing and how long they performed those tasks.

No OST staff have been detailed to the IRIS program or OPPT for TSCA related tasks since ___. OST/HECD/HHRAB frequently supports the IRIS program by reviewing and providing comments on assessments under development. IRIS has a well-established process for sharing draft work products for cross-agency review. This process includes opportunity for the discussion and resolutions of contentious scientific issues. OW also provides a program office perspective that often serves to improve the usability of the IRIS work products. Since TSCA was updated in 2016, OST/HECD/HHRAB has been a frequent contributor to the review of draft TSCA risk evaluations. Unlike IRIS, the TSCA program does not have a process in place to resolve differences of scientific opinion in its draft Risk Evaluations, thus making the value of OW's submitted comments often times unclear.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 12:43 PM
To: Greene, Sophie <greene.sophie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

This is great, thank you. I think it would be great if we could put up on Sharepoint. Can you do that with these responses incorporated? Greg is going to do a sweep through this afternoon.

From: Greene, Sophie <greene.sophie@epa.gov>
Sent: Wednesday, April 29, 2020 12:34 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany

<jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

Hi Jamie,

I don't know how you want this organized. I drafted some ideas in green below. Do you want to put this all into a sharepoint file or something?

---

2. In 2018, officials in your office gave us a hierarchy of sources to be used for chemical assessment information. This includes chemical assessment data from other EPA offices like the Office of Pesticide Programs, ATSDR, Health Canada, and California EPA. **Is this information still correct?**

Yes. Office of Water sometimes uses assessment sources other than the IRIS program when prioritizing compounds for regulation (SDWA: CCL), making regulatory determinations (SDWA: RegDet), updating existing health advisories (SDWA: HAs), and providing recommendations for Human Health Criteria (CWA: Human Health Criteria). These alternative assessment sources published by other EPA offices include health assessments derived in the Office of Water (Health Effects Support Documents), Human Health Risk Assessments from the Office of Pesticide Programs, and PPRTV documents. Health assessments published by other sources such as Health Canada, the WHO, CalEPA, and ATSDR may also be referenced. Health assessments published outside the EPA are only considered as the toxicological basis of a SDWA or CWA recommendation if the science underlying the assessment was published after EPA's last review of the literature. For example, if EPA last published a health assessment for a given chemical in 1995 and ATSDR finalized a Toxicological Profile in 2015 with toxicity values (MRLs) based on a study published in 2010, the ATSDR MRLs would be considered as a candidate values to be used in the surface water or drinking water guidance. When making decisions about which assessment should serve as the underlying basis of the toxicity values in an OW recommendation, OW considers if the assessment follows current EPA Guidance with respect to risk assessment, if the assessment is a "final" document (rather than a draft), and if the assessment has undergone a peer-review process. If there have been significant advances in the toxicological understanding of the compound in question since the most recent publication of an EPA assessment, OW may either update/derive a new HESD for this compound or recommend that IRIS develop a new/updated assessment.

a. Since 2018, has your office relied on any other sources of information? Please discuss the factors driving any change in use, and **please provide a list of any other sources used for chemical assessments.**

The only other assessment source that would be considered in an OW action not listed above is a publicly available, peer-reviewed TSCA risk assessment that derives oral RfDs or CSFs. Although TSCA risk assessments are listed as a potential source of toxicity information for SDWA or CWA health-based guidance values, to date there has not been a final TSCA document with a new derivation of oral RfDs or CSFs.

To summarize, health assessments considered as potential sources for toxicity values to be used in health-based guidance values in SDWA and CWA actions are:

- IRIS Assessments
- Office of Pesticides – Human Health Risk Assessment Documents
- OW Health Effects Support Documents and Health Advisories
- TSCA Health Assessments
- PPRTV Assessments
- ATSDR Toxicological Profiles
- CalEPA Public Health Goals
- Health Canada Drinking Water Guideline Technical Support Documents
- WHO Drinking Water Support Documents

From: Strong, Jamie
Sent: Wednesday, April 29, 2020 10:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: all hands on deck
Importance: High

HELP. So I am responsible for answering all these questions in advance of briefing Deborah and Jennifer and Charlotte on the upcoming GAO meeting on IRIS. I am overwhelmed and need your help. Sophie can you look at #2? Greg and Britt can you take a few minutes (not a lot because of GenX) and look through and help where you can. OGWDW took 3,6 and 9 but apparently the rest are mine.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 5:28:23 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Greene, Sophie [greene.sophie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: all hands on deck

thanks guys...truly appreciate it.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, April 29, 2020 1:27 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

My stuff is in the sharepoint. That's all I have for now. Let me know if you need to talk anything over.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 1:22 PM
To: Greene, Sophie <greene.sophie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

thanks all this gives me a great start. i appreciate it.

From: Greene, Sophie <greene.sophie@epa.gov>
Sent: Wednesday, April 29, 2020 1:17 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

Greg – I just shared a sharepoint file with you. Can you start editing the file instead of emailing?

Thanks!
Sophie

From: Miller, Gregory
Sent: Wednesday, April 29, 2020 12:16 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: all hands on deck

Q5
No criteria were shared at the Branch level to determine what IRIS assessments were needed by OW. OST/HECD/HHRAB cannot comment on the criteria used by OW to determine what chemicals to nominate during the 2018 cycle as we were not involved in those discussions. During the 2019 cycle,

OST/HECD/HHRAB recommended continued support for the ongoing IRIS assessments previously nominated by OW. No new chemicals were nominated by OST/HECD/HHRAB for the 2019 cycle.

From: Miller, Gregory
Sent: Wednesday, April 29, 2020 1:03 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Greene, Sophie <Greene.Sophie@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: all hands on deck

Q4

1. Since 2018, what guidance, if any, has your office received for submitting IRIS assessment requests?
   I cannot speak for the office in answering this question. No specific guidance has been provided to me for submitting IRIS assessment requests other than the direction offered in the ORD solicitation requests from Jennifer Orme-Zavaleta dated 8/10/18 and 9/9/19. These memos were not shared directly with the staff responsible for reviewing IRIS documents. Instead the memos where sent via email to Ed Ohanian who then forwarded them to HHRAB for consideration.

From: Miller, Gregory
Sent: Wednesday, April 29, 2020 12:52 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Greene, Sophie <Greene.Sophie@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: all hands on deck

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a. **If you have guidance on how you prepare health advisories in your office, please provide a copy.**
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---

2. In 2018, officials in your office gave us a hierarchy of sources to be used for chemical assessment information. This includes chemical assessment data from other EPA offices like the Office of Pesticide Programs, ATSDR, Health Canada, and California EPA. **Is this information still correct?**

Yes, Office of Water sometimes uses assessment sources other than the IRIS program when prioritizing compounds for regulation (SDWA: CCL), making regulatory determinations (SDWA: RegDet), updating existing health advisories (SDWA: HAs), and providing recommendations for Human Health Criteria (CWA: Human Health Criteria). These alternative assessment sources published by other EPA offices include health assessments derived in the Office of Water (Health Effects Support Documents), Human Health Risk Assessments from the Office of Pesticide Programs, and PPRTV documents. Health assessments published by other sources such as Health Canada, the WHO, CalEPA, and ATSDR may also be referenced. Health assessments published outside the EPA are only considered as the toxicological basis of a SDWA or CWA recommendation if the science underlying the assessment was published after EPA's last review of the literature. For example, if EPA last published a health assessment for a given chemical in 1995 and ATSDR finalized a Toxicological Profile in 2015 with toxicity values (MRLs) based on a study published in 2010, the ATSDR MRLs would be considered as a candidate values to be used in the surface water or drinking water guidance. When making decisions about which assessment should serve as the underlying basis of the toxicity values in an OW recommendation, OW considers if the assessment follows current EPA Guidance with respect to risk assessment, if the assessment is a "final" document (rather than a draft), and if the assessment has undergone a peer-review process. If there have been significant advances in the toxicological understanding of the compound in question since the most recent publication of an EPA assessment, OW may either update/derive a new HESD for this compound or recommend that IRIS develop a new/updated assessment.

a. Since 2018, has your office relied on any other sources of information? Please discuss the factors driving any change in use, and **please provide a list of any other sources used for chemical assessments.**

The only other assessment source that would be considered in an OW action not listed above is a publicly available, peer-reviewed TSCA risk assessment that derives oral RfDs or CSFs. Although TSCA risk assessments are listed as a potential source of toxicity information for SDWA or CWA health-based guidance values, to date there has not been a final TSCA document with a new derivation of oral RfDs or CSFs.

To summarize, health assessments considered as potential sources for toxicity values to be used in health-based guidance values in SDWA and CWA actions are:

- IRIS Assessments
- Office of Pesticides – Human Health Risk Assessment Documents
- OW Health Effects Support Documents and Health Advisories
- TSCA Health Assessments
- PPRTV Assessments
- ATSDR Toxicological Profiles
- CalEPA Public Health Goals
- Health Canada Drinking Water Guideline Technical Support Documents
- WHO Drinking Water Support Documents

From: Strong, Jamie
Sent: Wednesday, April 29, 2020 10:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: all hands on deck
Importance: High

HELP. So I am responsible for answering all these questions in advance of briefing Deborah and Jennifer and Charlotte on the upcoming GAO meeting on IRIS. I am overwhelmed and need your help. Sophie can you look at #2? Greg and Britt can you take a few minutes (not a lot because of GenX) and look through and help where you can. OGWDW took 3,6 and 9 but apparently the rest are mine.

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Appointment

From: Arzuaga, Xabier [Arzuaga.Xabier@epa.gov]
Sent: 5/28/2019 12:08:29 PM
To: Kraft, Andrew [Kraft.Andrew@epa.gov]; Davis, Allen [Davis.Allen@epa.gov]; Angrish, Michelle [Angrish.Michelle@epa.gov]; Taylor, MicheleM [taylor.michelem@epa.gov]; Druwe, Ingrid [Druwe.Ingrid@epa.gov]; Lizarraga, Lucina [Lizarraga.Lucina@epa.gov]; Kaiser, Jonathan [Kaiser.Jonathan-Phillip@epa.gov]; Noyes, Pamela [Noyes.Pamela@epa.gov]; Dishaw, Laura [Dishaw.Laura@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Soto, Vicki [Soto.Vicki@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]

Subject: IRIS PFAS SR Protocol & considerations for non-cancer liver effects
Location: Skype Meeting

Start: 5/28/2019 4:00:00 PM
End: 5/28/2019 5:00:00 PM
Show Time As: Tentative

Required Attendees: Kraft, Andrew; Davis, Allen; Angrish, Michelle; Taylor, MicheleM; Druwe, Ingrid; Lizarraga, Lucina; Kaiser, Jonathan; Noyes, Pamela; Dishaw, Laura; Strong, Jamie; Jacobs, Brittany; Miller, Gregory
Optional Attendees: Soto, Vicki; Jones, Samantha

Agenda:

- Non-cancer hepatic responses considered in PFAS assessments.
- Public comments on GenX.
- Hall et al 2012 criteria.
- Evaluation of mechanistic evidence.

Join Skype Meeting

Trouble Joining? Try Skype Web App

Help

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 10/1/2020 2:24:13 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: FW: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx
Attachments: PFBA_draft_UFd_September2020- HECD-OST_v5 JD.docx; PFBA_draft_UFd_September2020_v5 OST 10 1 20.docx

Sorry, I thought you guys were cc'd on Joyce's email yesterday. Attached here are the original comments Joyce sent and my attempt at integrating her most important edits and comments into our working draft. "PFBA_draft_UFd_September2020_v5 OST 10 1 20.docx" is the finished draft. Joyce's ruling is that GenX and PFBA are not structural analogs. Have a look and we can plot what comes next.

Greg

From: Donohue, Joyce <Donohue.Joyce@epa.gov>
Sent: Wednesday, September 30, 2020 2:09 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

Dear Greg:

Given that I was not able to get connected to the VPN this morning, I had sent your e-mail to my personal computer. I had lots of comments. You can delete any you feel are inappropriate.

I now can get to my files and want to look at the most recent papers I have saved for GenX before I respond to you regarding Gen-X. I did explain my stearic concerns regarding equating it with PFBA in my comments.

Joyce

From: JOYCE DONOHUE <Ex. 6 Personal Privacy (PP)
Sent: Wednesday, September 30, 2020 1:45 PM
To: Donohue, Joyce <Donohue.Joyce@epa.gov>
Subject: Re: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 10/1/2020 5:27:05 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

But GenX is a short chain PFAS though. I talked to BB about this issue this morning. I will set up time Tuesday to talk about GenX and this.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 01, 2020 10:24 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

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To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

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Joyce

From: JOYCE DONOHUE <Ex. 6 Personal Privacy (PP)
Sent: Wednesday, September 30, 2020 1:45 PM
To: Donohue, Joyce <Donohue.Joyce@epa.gov>
Subject: Re: FW: Requesting input on PFBA_draft database UF _September2020_v5.docx

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 7/21/2020 7:22:34 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: pfba

Great! Thanks Britt!

Jamie, can you take a quick look at my interspecies scaling comments when you get a chance. I went after them pretty hard but I think it was warranted after the email exchange yesterday. I'm debating whether to share them with IRIS before or after our Thursday meeting with Paul. I'll share the sharepoint doc with you next.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Tuesday, July 21, 2020 1:54 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: pfba

I added in a comment bubble with a summary of the discussion we had

---

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Tuesday, July 21, 2020 10:27 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Cc: Strong, Jamie <Strong.Jamie@epa.gov>
Subject: pfba

Brittany,
Can you summarize your understanding of what we agreed on with IRIS in the PFBA redline. It'll be good to have a record of our conversation.

Andrew's action items:

- Ex. 5 Deliberative Process (DP)

And here are the links Jason sent in the chat box:
https://pubmed.ncbi.nlm.nih.gov/?term=liver+aponecrosis

https://pubmed.ncbi.nlm.nih.gov/?term=liver+necroptosis

https://pubmed.ncbi.nlm.nih.gov/?term=liver+oncosis

Greg

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 7/21/2020 2:26:56 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Strong, Jamie [Strong.Jamie@epa.gov]
Subject: pfba
Attachments: McMullen2019_PPARa_omics_rat_human.pdf

Brittany,
Can you summarize your understanding of what we agreed on with IRIS in the PFBA redline. It'll be good to have a record of our conversation.

Andrew's action items:

- Ex. 5 Deliberative Process (DP)

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https://pubmed.ncbi.nlm.nih.gov/?term=liver+necroptosis

https://pubmed.ncbi.nlm.nih.gov/?term=liver+oncosis

Greg

Message

From: Kraft, Andrew [Kraft.Andrew@epa.gov]
Sent: 9/24/2020 12:17:47 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
CC: Davis, Allen [Davis.Allen@epa.gov]; Taylor, MicheleM [taylor.michelem@epa.gov]; Thayer, Kris [thayer.kris@epa.gov]; Jones, Samantha [Jones.Samantha@epa.gov]; Soto, Vicki [Soto.Vicki@epa.gov]
Subject: PFBA UFD writeup
Attachments: PFBA_draft_UFd_September2020_v5.docx

Hi Greg, Jamie, and Brittany,

Attached, please find the current writeup for the PFBA UFD decision. We are happy to discuss this with you.

In addition, we are still looking at the GenX chemicals UFD writeup (we are a bit laser focused on getting through today's Interagency meeting first). We are open to discussions on how we might make a few tweaks to each writeup to harmonize/avoid confusion across our two assessments. One preliminary thought we have is to subtly increase the

Ex. 5 Deliberative Process (DP)

Talk to you soon,
Andrew, Allen, and Michele

Andrew Kraft, PhD l Senior Science Advisor
Chemical and Pollutant Assessment Division l Center for Public Health and Environmental Assessment l U.S. EPA
1200 Pennsylvania Avenue, N.W. l Mail Code 8623R l Washington, DC 20460
Office: (202)564-0286 l Cell: (202)734-1420

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/14/2020 3:35:26 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFBA DB UF
Attachments: FINAL PFBA_ToxReview_AgencyReview_June2020_OW_8 11 20 revisions.docx

Here is the draft and our comments from August. See page 5-11 for the uncertainty factors.

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, September 14, 2020 11:29 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: PFBA DB UF

Ex. 5 Deliberative Process (DP)

From: Kraft, Andrew <Kraft.Andrew@epa.gov>
Sent: Monday, September 14, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFBA DB UF

Ex. 5 Deliberative Process (DP)

Allen Davis should also be on the call.

-Andrew

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, September 14, 2020 11:12 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFBA DB UF

Ex. 5 Deliberative Process (DP)

A call would be good and Greg should be there.

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Sent: Monday, September 14, 2020 11:09 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFBA DB UF

Ex. 5 Deliberative Process (DP)

Did you revise the UFD conclusion for GenX?

And, sorry Greg, I did not receive your voicemail.

-Andrew

Andrew Kraft, PhD l Senior Science Advisor
Chemical and Pollutant Assessment Division l Center for Public Health and Environmental Assessment l U.S. EPA
1200 Pennsylvania Avenue, N.W. l Mail Code 8623R l Washington, DC 20460
Cell: (202)734-1420

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, September 14, 2020 11:02 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: PFBA DB UF
Importance: High

Andrew,
I wanted to touch base with you on the PFBA assessment, specifically the DB UF. I know Greg left you a VM, but I wanted to follow up. We are currently in discussions with our upper management on our rationale for our DB UF for

Ex. 5 Deliberative Process (DP)

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Miller, Gregory [Miller.Gregory@epa.gov]
Sent: 9/14/2020 3:51:05 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: RE: PFBA DB UF

No, they don't present a debate between 3 or 10 for the UFd in the old draft. Andrew must be referring to the newer revised draft that we haven't seen yet. In fact, it looks like OLEM's comments on the old draft pushed the revisions to the UFd.

OLEM:

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, September 14, 2020 11:37 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBA DB UF

Ex. 5 Deliberative Process (DP) I don't have bandwidth to dig in here right now…budget stuff is through Wednesday.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Monday, September 14, 2020 11:35 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBA DB UF

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Ex. 5 Deliberative Process (DP)

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Sent: Monday, September 14, 2020 11:29 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Sent: Monday, September 14, 2020 11:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: PFBA DB UF

Ex. 5 Deliberative Process (DP)

reference the PFBS discussion on that point.

Allen Davis should also be on the call.

-Andrew

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Monday, September 14, 2020 11:12 AM
To: Kraft, Andrew <Kraft.Andrew@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Andrew Kraft, PhD l Senior Science Advisor
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Cell: (202)734-1420

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To: Kraft, Andrew <Kraft.Andrew@epa.gov>
Cc: Jones, Samantha <Jones.Samantha@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: PFBA DB UF
Importance: High

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Ex. 5 Deliberative Process (DP)

Thanks,
Jamie

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 3:46:37 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Greene, Sophie [greene.sophie@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: all hands on deck
Attachments: GAO 103997 Question set for EPA OW.pdf

Importance: High

HELP. So I am responsible for answering all these questions in advance of briefing Deborah and Jennifer and Charlotte on the upcoming GAO meeting on IRIS. I am overwhelmed and need your help. Sophie can you look at #2? Greg and Britt can you take a few minutes (not a lot because of GenX) and look through and help where you can. OGWDW took 3,6 and 9 but apparently the rest are mine.

Thanks,
Jamie

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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 4/29/2020 3:57:36 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]; Greene, Sophie [greene.sophie@epa.gov]
Subject: RE: all hands on deck

Okay so I have a meeting with OGWDW tomorrow afternoon. Sorry, I am completely overwhelmed right now. Sophie can you do the first sweep so that Greg and Britt can keep going on GenX? Britt and Greg if I need you to look at it I will let you know. Sorry again.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, April 29, 2020 11:56 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>
Subject: RE: all hands on deck

Sure, when do you need these back by? Like asap, later today or is tomorrow morning okay?

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, April 29, 2020 11:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Greene, Sophie <greene.sophie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: all hands on deck
Importance: High

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☎ Phone: (202) 566-0056 | ✉ strong.jamie@epa.gov

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/8/2018 2:58:26 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: IRIS Templates

Still got sent forward faster than GenX :-)

-----Original Message-----
From: Miller, Gregory
Sent: Thursday, November 08, 2018 9:58 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: IRIS Templates

Seriously. Talk about making a mountain out of a molehill

-----Original Message-----
From: Jacobs, Brittany
Sent: Thursday, November 8, 2018 9:50 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: IRIS Templates

Hallelujah

-----Original Message-----
From: Strong, Jamie
Sent: Thursday, November 08, 2018 9:39 AM
To: Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: IRIS Templates

-----Original Message-----
From: Behl, Betsy
Sent: Thursday, November 08, 2018 9:26 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>
Subject: FW: IRIS Templates

Final version Dave approved

-----Original Message-----
From: Mclain, Jennifer
Sent: Wednesday, November 07, 2018 5:26 PM
To: McDonough, Owen <mcdonough.owen@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Campbell, Ann <Campbell.Ann@epa.gov>; Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>; Tiago, Joseph <Tiago.Joseph@epa.gov>
Subject: RE: IRIS Templates

Owen
The revised IRIS forms are attached. Dave is in a closed door meeting right now so I left the hard copy in his in box.
Please let us know if you have any questions.
Thank you
Jennifer

-----Original Message-----
From: McDonough, Owen
Sent: Tuesday, November 06, 2018 5:32 PM
To: Mclain, Jennifer <Mclain.Jennifer@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Campbell, Ann <Campbell.Ann@epa.gov>; Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>
Subject: RE: IRIS Templates

Jennifer,

Per our discussion w/ Dave this evening, please take another shot at the "Need" section for each chemical and provide more narrative context for the need in plain language (a paragraph should do).

If you can get hard copies to Dave tomorrow, he will review and sign.

Thanks,
Owen

-----Original Message-----
From: Mclain, Jennifer
Sent: Tuesday, November 6, 2018 1:50 PM
To: McDonough, Owen <mcdonough.owen@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Campbell, Ann <Campbell.Ann@epa.gov>; Ross, David P <ross.davidp@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>; Ohanian, Edward <Ohanian.Edward@epa.gov>
Subject: RE: IRIS Templates

Owen
Please find attached the IRIS Assessment Request Forms for the IRIS assessments of highest priority to OW. Thanks to the folks in OGWDW and OST that pulled this together. Let us know if you have any questions.
Jennifer

-----Original Message-----
From: McDonough, Owen
Sent: Monday, November 05, 2018 4:50 PM
To: Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Best-Wong, Benita <Best-Wong.Benita@epa.gov>; Campbell, Ann <Campbell.Ann@epa.gov>; Ross, David P <ross.davidp@epa.gov>
Subject: IRIS Templates

Jennifer,

Can you please work with Deborah and Betsy to finalize the IRIS template forms for:

Ex. 5 Deliberative Process (DP)

Dave and Benita will then review and sign.

We'd like to share with ORD tomorrow COB.

Thanks,
Owen

Sent from my iPhone

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 11/13/2019 12:14:35 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: schedules

FYI

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Tuesday, November 12, 2019 5:33 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>
Subject: schedules

Eric, we need to do a revised schedule for GenX for a meeting with Dave next week. In order to do that I need schedules for the following:

- CCL (Lisa was going to give us this after our last meeting)
- DBPs (Ryan has spoken to Jamie about this but don't have a schedule)
- Six year review

Jamie's group has a lot of things to juggle and we anticipate push back on whatever schedule we come up with. We need these by the end of this week to work up a realistic schedule.

Thanks for your help, Betsy

Elizabeth (Betsy) Behl, Director
Health and Ecological Criteria Division, 4304-T
Office of Science and Technology, Office of Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

phone: 202.566.0788
room 5233H

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 2/12/2019 5:11:58 PM
To: Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
Subject: short notice
Attachments: Summary of Public Comment for GenX chemicals and PFBS.docx

Importance: High

Can one of you come to Deborah's biweekly and go through this? Its at 2pm today.

Jamie B. Strong | Chief, Human Health Risk Assessment Branch
Health and Ecological Criteria Division | Office of Science and Technology | Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, 4301-T, Washington, DC 20460
☎ Phone: (202) 566-0056 | strong.jamie@epa.gov

Message

From: Ravenscroft, John [Ravenscroft.John@epa.gov]
Sent: 3/7/2019 7:06:53 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; DAnglada, Lesley [DAnglada.Lesley@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Due COB Monday: Budget Hearing Factsheets

Hi Jamie. I took a look at the recHABs factsheet. No comments. Dates are fine and no values included, so I think we're good with it as is.

From: Strong, Jamie
Sent: Thursday, March 07, 2019 12:23 PM
To: DAnglada, Lesley <DAnglada.Lesley@epa.gov>; Ravenscroft, John <Ravenscroft.John@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Cc: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Subject: RE: Due COB Monday: Budget Hearing Factsheets

Just review from HECD perspective for factual correctness, do not rewrite. OGWDW needs to be lead on all except rec HABs.

From: Strong, Jamie
Sent: Thursday, March 07, 2019 10:16 AM
To: DAnglada, Lesley <DAnglada.Lesley@epa.gov>; Ravenscroft, John <Ravenscroft.John@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Due COB Monday: Budget Hearing Factsheets
Importance: High

Please take a look at the assigned factsheets and return to me **noon tomorrow**. Sorry for quick turnaround.

Britt-GenX and PFAS
Greg-perchlorate
John-HABs rec
Lesley-HABs DW

Jamie

From: Flaherty, Colleen
Sent: Thursday, March 07, 2019 10:06 AM
To: Thomas, Dana <Thomas.Dana@epa.gov>; Oliver, Jacques <Oliver.Jacques@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: FW: Due COB Monday: Budget Hearing Factsheets

See below. Please update these by Monday. THANKS!

From: Bankester, Lenny
Sent: Thursday, March 7, 2019 10:05 AM
To: Flaherty, Colleen <Flaherty.Colleen@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Lape, Jeff <lape.jeff@epa.gov>;

Ortiz, Agnes <Ortiz.Agnes@epa.gov>
Subject: Due COB Monday: Budget Hearing Factsheets

Good morning, Colleen,

This morning, we got a short-turnaround request from RMS regarding fact sheets for an upcoming budget hearing with the House Appropriations Committee on April 2. RMS asked for us to submit our responses to them by COB Tuesday, so I'm asking HECD to send me your updates by COB Monday to give me time for any follow up. Below are the topics related to HECD. I realize that OST is not the lead on all of these topics and will coordinate with OGWDW as necessary.

1. Nutrients
2. HABs Recreational Waters
3. HABs Drinking Water
4. PFAs
5. GenX PFBS
6. Perchlorate

Fortunately, we have a good starting point for each topic in the attached documents. These are the factsheets that were prepared for the Administrator's confirmation hearing in January and you can update these as needed. I've attached the general Factsheet Guidance document, as well.

Please let me know if you have any questions,

Lenny Bankester, CGFM

Lead Budget Analyst
Office of Science and Technology/RMIS
Office of Water

Phone: (202) 564-7827
AWL: (202) 279-1525

Message

From: DAnglada, Lesley [DAnglada.Lesley@epa.gov]
Sent: 3/7/2019 7:12:29 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Ravenscroft, John [Ravenscroft.John@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]; Miller, Gregory [Miller.Gregory@epa.gov]
CC: Flaherty, Colleen [Flaherty.Colleen@epa.gov]
Subject: RE: Due COB Monday: Budget Hearing Factsheets
Attachments: OW-11 HABs-Drinking Water_03-07-19_LD_KF.docx

Jamie,

Find the HABs in DW fact sheet. Katie Foreman reviewed the fact sheet concurrently as we were in a meeting.

Best,
~Lesley

~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~`~
Lesley V. D'Anglada, DrPH
Senior Microbiologist
Office of Science and Technology, Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460
Phone: 202-566-1125
EPA's Cyanobacterial HABs Website

From: Strong, Jamie
Sent: Thursday, March 07, 2019 12:23 PM
To: DAnglada, Lesley <DAnglada.Lesley@epa.gov>; Ravenscroft, John <Ravenscroft.John@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
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Subject: FW: Due COB Monday: Budget Hearing Factsheets
Importance: High

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Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Nagle, Deborah <Nagle.Deborah@epa.gov>; Lape, Jeff <lape.jeff@epa.gov>; Ortiz, Agnes <Ortiz.Agnes@epa.gov>
Subject: Due COB Monday: Budget Hearing Factsheets

Good morning, Colleen,

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Fortunately, we have a good starting point for each topic in the attached documents. These are the factsheets that were prepared for the Administrator's confirmation hearing in January and you can update these as needed. I've attached the general Factsheet Guidance document, as well.

Please let me know if you have any questions,

Lenny Bankester, CGFM

Lead Budget Analyst
Office of Science and Technology/RMIS
Office of Water

Phone: (202) 564-7827
AWL: (202) 279-1525

Message

From: Strong, Jamie [Strong.Jamie@epa.gov]
Sent: 9/30/2020 7:43:52 PM
To: Miller, Gregory [Miller.Gregory@epa.gov]; Jacobs, Brittany [jacobs.brittany@epa.gov]
Subject: FW: Rescheduling the peer review of GenX

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, September 30, 2020 3:42 PM
To: Nagle, Deborah <Nagle.Deborah@epa.gov>
Subject: Rescheduling the peer review of GenX

Deborah,

I wanted to let you know that we sent a note to the contractor who runs the external peer review to inform them that the peer review of GenX, scheduled to begin 9/25/2020 would be delayed. We estimated the earliest possible date for the peer review to begin is at the end of October, as an engagement with OMB's TWG is needed before the peer review can begin. We had allowed for a 4-week engagement with the TWG, as was done for PFBS, beginning at the end of August. Based on that we indicated to the contractor that the earliest we could begin the peer review, if we hear this week, would be toward the end of October. Peer reviewers have been identified and were all available to begin the review of the GenX assessment this week. We will have to confirm their availability when we have greater clarity about the schedule.

Also, the period of performance on the peer review contract ends in December. We can extend that into 2021, but we need to initiate paperwork for the extension sometime in November.

It would be good to have clarity about our schedule soon so we can plan accordingly.

Thanks, Betsy

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 10/3/2019 5:27:52 PM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]
BCC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: PFBS and GenX chemicals DRAFT PWS
Attachments: TO PWS Peer Review for GenX and PFBS Follow Up_clean_Current copy_9'30'19_sjj_JCL again_sjjagain_BLJ gMiller.doc

Looks good. I made a few minor editorial changes. We might be able to get a little more specific with the charge questions based on our conversations yesterday, but I'm reluctant to get into it. NTP's input might completely alter the shape of the draft. So probably best to be vague. If Jamie has another opinion on the questions, then we can talk more. Go ahead and send it to Jamie.

Greg

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 1:06 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Hi Greg,

Attached are my edits (**Ex. 6 Personal Privacy (PP)**

Britt

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 3, 2019 12:02 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBS and GenX chemicals DRAFT PWS

Ha. Ok. No problem.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 11:59 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Ex. 6 Personal Privacy (PP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, October 3, 2019 11:53 AM

To: Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: PFBS and GenX chemicals DRAFT PWS

Can you take the first pass since you were the lead the first time around? I'll chime in once you've been through it. I guess keep the wording as vague as possible so we can adapt it to our needs when we know more.

Thanks

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, October 3, 2019 11:51 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>
Subject: Re: PFBS and GenX chemicals DRAFT PWS

Hi Greg,

How do you want to provide edits for this? Do you want me to look at it and then send to you when I'm done or vice versa?

I think we will need another task for GenX, but I don't think we can provide draft charge questions yet without having a better idea of the edits we will make to the document.

Britt

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, October 3, 2019 11:04 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: PFBS and GenX chemicals DRAFT PWS

Here it is

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Wednesday, October 02, 2019 10:50 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>; Behl, Betsy <Behl.Betsy@epa.gov>
Cc: Lambert, Jason <Lambert.Jason@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>
Subject: PFBS and GenX chemicals DRAFT PWS

Hi,

Here's the draft PWS in which we are incorporating text to request a peer review by the same 5 reviewers plus a couple of extra. Take a look, I believe the GenX chemicals option could be easily incorporated. I've asked Dahnish to find out how feasible it is to include.

Note the text and specificity in the charge questions will likely change as we finalize the document but this is to help the contractors cost out.

Thanks,
Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)

National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
AWBERC A-133
(o) 513-569-7697; (m) 703-943-7990

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 4/30/2020 2:24:42 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
BCC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: RE: GenX Updates 4/30
Attachments: GenX RfD w BW3_4 & UF _ RfD v4_28_20 UFd 10 - last check v1.xlsx

Ex. 5 Deliberative Process (DP)

Greg

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 9:56 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

Ex. 5 Deliberative Process (DP)

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 8:37 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX Updates 4/30

Done. I changed the candidate RfDs to 1 sig fig too.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 8:28 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

Yeah it was one sig fig in the public comment draft.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 8:22 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

but I am pretty sure our prev rfd was one sig fig.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 8:20 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

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Sent: Thursday, April 30, 2020 7:37 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

ok

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 7:36 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

Greg can you do that while I look at doc?

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 7:32 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

There is a response to everything, but there are a few comments that say things like "this part of the comment needs a response." I think if someone wants to get working on updating our responses where we say we aren't changing the database UF that would be helpful. I've tried to highlight where we need to do that, but not sure if I got them all.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 7:16 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

For the ones that say need response (I thought Greg and I had a response for everything) is there anything Greg or I can do?

I will go through doc and explain to Betsy that the RTC will come next week.

Jamie

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 6:23 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX Updates 4/30

Hi and Good Morning,

I think the assessment is ready for the last sweep through before we send it to Betsy. I went through the response to comments and I think we have made all of the edits to the assessment that we said we would. I made some additional

Ex. 5 Deliberative Process (DP)

Let me know if you want to chat about any of this. Outside of incorporating comments from ORD and Bevin and Sue, I think we are pretty much done with the assessment!

Britt

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 4/30/2020 12:24:55 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: GenX Updates 4/30

I can do one sig fig. Not a problem.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 8:22 AM
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Ex. 5 Deliberative Process (DP)

Let me know if you want to chat about any of this. Outside of incorporating comments from ORD and Bevin and Sue, I think we are pretty much done with the assessment!

Britt

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 5/1/2020 10:51:26 AM
To: Jacobs, Brittany [Jacobs.Brittany@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
Subject: RE: GenX Updates 4/30

Yay!

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 4:43 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

Woohoo! That's something to celebrate!

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Thursday, April 30, 2020 4:21 PM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: GenX Updates 4/30

Guys, I think the doc is clean and ready for Betsy! I cannot express the gratitude I have for this tremendous lift under really difficult circumstances. You are a great team.

I will let you take a look, but I plan to send to her tomorrow.

Jamie

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Thursday, April 30, 2020 3:18 PM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: GenX Updates 4/30

I've been through the RTC and Draft and cleaned up where I could. Please check/edit my update of the UFd in the RTC.

From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Thursday, April 30, 2020 3:02 PM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

I've gotten through the comments

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Sent: Thursday, April 30, 2020 10:22 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX Updates 4/30

Following up, I made another sweep through. Still a few things for you two to look at. Let me know when you take a look.

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Sent: 5/19/2020 6:03:56 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
BCC: Miller, Gregory [Miller.Gregory@epa.gov]
Subject: FW: GenX materials for ORD review
Attachments: Mode of Action_GenX Chemicals Assessment_4.27.20 (003)_Lambert edits_sjj.docx; UF Section_4.27.20_sjj.docx

I added Samantha's UF Section edits to our document.

From: Jones, Samantha <Jones.Samantha@epa.gov>
Sent: Friday, May 1, 2020 11:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: GenX materials for ORD review

Hi Jamie,

We've reviewed the two documents and they look good. We've included some small comments in the UF write-up but overall your selections are well-justified. The MOA write-up is nicely done. It's always good to see controversial topics like this one being addressed in a critical and in-depth manner instead of the superficial soundbites that seem to get tossed around! We made some recommendations in the MOA section that we'd be happy to talk about further.

Thanks!
Samantha

Samantha J. Jones, PhD
Associate Director, Center for Public Health and Environmental Assessment (CPHEA)
National Program Director, Health and Environmental Risk Assessment (HERA) Research Program
Office of Research and Development (ORD)
US Environmental Protection Agency (EPA)
RRB 71210, Washington, DC
(o) 202-564-6794; (m) 703-943-7990

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Tuesday, April 28, 2020 8:38 AM
To: Owens, Beth <Owens.Beth@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>; Jones, Samantha <Jones.Samantha@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: GenX materials for ORD review

Good Morning Samantha, Jason and Beth,

Hope you all are doing well and staying healthy!

Attached are a few sections of the updated GenX chemicals toxicity assessment for your review as discussed, we appreciate you taking the time to do this for us.

The first is the updated mode of action section (Word document: Mode of Action_4.27.20). There are a few specific comments in the document we wanted your thoughts on, but please edit/provide suggestions for clarity and accuracy as you see fit. Did we leave anything out? Let us know if you want to see any of the other cited studies.

The second section we wanted for your review are the UF write-ups (UF Section_4.27.20), particularly the the subchronic to chronic UF and the database UF as we are proposing to change these from UFs of 3 to 10. Do these write-ups justify a 10?

Thanks again for being willing to review parts of our updated GenX chemicals assessment, we really appreciate the help. Let us know if you have any questions.

All the best,

Jamie

Message

From: Miller, Gregory [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0E889CDC40224A5484182092E4824FA7-GMILLE03]
Sent: 7/8/2020 1:48:23 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

Ok. I'll accept my track changes redline in the document too.

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 9:47 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Looks good to me!

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 9:43 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Revision below. What do you think?

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 9:17 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

I don't see the problem but that's me.

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 9:05 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Also, see Section 5.3 in the BW3/4 guidance. Trying to see if there's a better way to write this portion.

From: Miller, Gregory
Sent: Wednesday, July 8, 2020 9:00 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <Jacobs.Brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

This is the passage from the assessment that needs further thought:

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 8, 2020 8:57 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

ok. Let me take the dog out and I will give you a call before my 10am meeting.

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We should talk. I'm thinking about edits to BW3/4

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Sent: Wednesday, July 8, 2020 8:53 AM
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Subject: RE: Request for your review of revised GenX assessment

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From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 8:45 AM
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Subject: RE: Request for your review of revised GenX assessment

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Subject: RE: Request for your review of revised GenX assessment

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To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

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From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 8:22 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

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From: Strong, Jamie <Strong.Jamie@epa.gov>
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To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

is the link to the RTC the same?

From: Miller, Gregory <Miller.Gregory@epa.gov>
Sent: Wednesday, July 08, 2020 7:45 AM
To: Jacobs, Brittany <jacobs.brittany@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

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From: Jacobs, Brittany <jacobs.brittany@epa.gov>
Sent: Wednesday, July 8, 2020 7:39 AM
To: Strong, Jamie <Strong.Jamie@epa.gov>; Miller, Gregory <Miller.Gregory@epa.gov>
Subject: RE: Request for your review of revised GenX assessment

Ex. 5 Deliberative Process (DP)

From: Strong, Jamie <Strong.Jamie@epa.gov>
Sent: Wednesday, July 08, 2020 7:15 AM
To: Miller, Gregory <Miller.Gregory@epa.gov>; Jacobs, Brittany <jacobs.brittany@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
Importance: High

well well well

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, July 07, 2020 4:24 PM
To: Behl, Betsy <Behl.Betsy@epa.gov>; Strong, Jamie <Strong.Jamie@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
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Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

Only comments are:

1)

2)

Ex. 5 Deliberative Process (DP)

3)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
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Tala, would it be helpful to set up a meeting for you on this? any idea of when you will be done with your review?

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As always, we value your opinion and appreciate OPPT's support!

Thanks,

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Message

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Sent: 7/8/2020 1:05:18 PM
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Subject: RE: Request for your review of revised GenX assessment
Attachments: bw3_4 guidance final.pdf

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Cc: Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: Request for your review of revised GenX assessment
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Betsy/Jamie,
I reviewed, focusing on sections 5, 6, & 7. Todd Stedeford also took a quick look.

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Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Behl, Betsy <Behl.Betsy@epa.gov>
Sent: Wednesday, July 1, 2020 10:02 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Subject: FW: Request for your review of revised GenX assessment
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Sent: 10/14/2020 5:11:48 PM
To: Strong, Jamie [Strong.Jamie@epa.gov]; Jacobs, Brittany [Jacobs.Brittany@epa.gov]
Subject: FW: Request for your review of revised GenX assessment

Importance: High

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Sent: 7/7/2020 8:23:31 PM
To: Behl, Betsy [Behl.Betsy@epa.gov]; Strong, Jamie [Strong.Jamie@epa.gov]
CC: Henry, Tala [Henry.Tala@epa.gov]
BCC: Stedeford, Todd [Stedeford.Todd@epa.gov]
Subject: RE: Request for your review of revised GenX assessment

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