Message

From: Orme-Zavaleta, Jennifer [Orme-Zavaleta.Jennifer@epa.gov]
Sent: 9/29/2017 7:23:16 PM
To: Linkins, Samantha [Linkins.Samantha@epa.gov]
CC: Sinks, Tom [Sinks.Tom@epa.gov]; Watkins, Tim [Watkins.Tim@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Maguire, Megan [Maguire.Megan@epa.gov]; Gilliland, Alice [Gilliland.Alice@epa.gov]; Martin, Lawrence [Martin.Lawrence@epa.gov]
Subject: Re: Request from the Royal Netherlands Embassy on PFOA and GenX

I am fine w sharing

Jennifer Orme-Zavaleta, PhD
Office of Research and Development
Office Ex. 6 Personal Privacy (PP)
Cell 9

On Sep 29, 2017, at 3:03 PM, Linkins, Samantha <Linkins.Samantha@epa.gov> wrote:

Hello,

I'm just checking in to see if we have anything to share with Mr. Wijmenga. I received a few articles (attached) from Andy Lindstrom via OCIR and OECA that we can include in what we share, plus a little info that I pasted below. I'm happy to help compile info if that's helpful.

From Andy:

"It looks like the GenX concentrations in their factory effluent were a little higher than what we've seen here in Fayetteville (we were in the range of 10s of ug/L), but their drinking water concentrations are lower (~ <10 ng/L). Wilmington's finished drinking water was at one point over 600 ng/L.

I think it is very important to advise these folks that we found the other polyether compounds noted in the Sun et al. 2016 paper and Strynar et al. 2015 at elevated concentrations as well. Please see these structures below from Sun et al.:

<image003.jpg>

I think all of these compounds are coming from the use of HPFO and folks should be on the lookout for these as well.

Please note that these are polyether analogs of the legacy carboxylic acids. They may have similar toxicities and kinetics."

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US EPA
Washington, DC
Office: 202-564-1834
Cell: Ex. 6 Personal Privacy (PP)

From: Linkins, Samantha
Sent: Thursday, August 31, 2017 10:55 AM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Sinks, Tom <Sinks.Tom@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <strynar.mark@epa.gov>

Cc: Maguire, Megan <Maguire.Megan@epa.gov>; Gilliland, Alice <Gilliland.Alice@epa.gov>; Martin, Lawrence <Martin.Lawrence@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy on PFOA and GenX

Hi all –

Just wanted to check in on this and also let you know that Mr. Wijmenga sent some more info. I've pasted his email below and included his attachments.

Dear Ms Linkins,

Thank you for the update on the collection of information. With regard to your question relating to sampling methods: our lab supplied me with a summary of the analytical method they are using to detect GenX in water. If necessary the lab technicians would be available to share further details.

We have two separate measurement campaigns running: one on GenX in surface water and a second one in drinking water.
The measurements in surface water are performed by our own services. For the drinking water tests a notification has been sent to all drinking water suppliers requesting them to test for GenX in drinking water.

Surface water:
In spring 2017 several samples were taken from discharge points of the factory in Dordrecht. Both in the direct emission to surface water and in the indirect discharge (sewer to the WWTP) GenX was detected. Furthermore, surrounding surface water, both upstream and downstream was sampled several times, almost all samples contained GenX (also referred to as FRD or HFPO-DA). I have attached the report, it was published in June. Unfortunately there is only a Dutch version available.
Figure 4.2a gives GenX-concentrations in the discharge to the WWTP and in the discharge of the WWTP to the surface water. The reduction in concentration is considered to be only a dilution effect.
Figure 4.2b shows the GenX-concentrations in the discharge directly from the factory on surface water (5 points were sampled).
Figure 4.2c gives the surface water concentrations at several locations, levels found are between <6 – 144 ng/L.
Our German colleagues have also done some sampling of GenX in surface water, which is of interest to us as the river Rhine flows through Germany to the Netherlands. There is a scientific article on their findings (attached).

Drinking water:
Not all drinking water companies have informed us yet about the levels they are measuring in their processes. The water companies with sources close to the factory have reported low levels of GenX, 4 to 6 ng/L, after treatment. The untreated water from some specific sources contains higher levels, reportedly up to 20 ng/L. When all data have been submitted a report will be drawn up, expected to be ready in October.

I am looking forward to any information you can share.

With kind regards,

Jan Wijmenga
.....
Directorate for Environmental Safety and Risks
Ministry of Infrastructure and the Environment
Rijnstraat 8 | The Hague
P.O. Box 20901 | NL-2500 EX | The Hague

The Netherlands
.....
T +31 70 456 6867
E jan.wijmenga@minienm.nl
W www.government.nl/ministries/ienm

Van: Linkins, Samantha [mailto:Linkins.Samantha@epa.gov]
Verzonden: donderdag 24 augustus 2017 19:30
Aan: Wijmenga, J. (Jan) - DGMI <Jan.Wijmenga@minienm.nl>; Peelen, Jan <JR.Peelen@minbuza.nl>; Phillips, Anna <Phillips.Anna@epa.gov>; Doroski, Brenda <Doroski.Brenda@epa.gov>; Emmerson, Caroline <Emmerson.Caroline@epa.gov>; Jones, Davis <Jones.Davis@epa.gov>
CC: Jong, Bart de <bart-de.jong@minbuza.nl>; WAS-IM <WAS-IM@minbuza.nl>
Onderwerp: RE: request from NL: experts working on PFOA and GenX

Mr. Wijmenga,

Thank you for your email with background and additional information on your GenX issue. We are happy to share the GenX-related studies and information to the extent it is permitted by law. We are currently collecting and reviewing the information, and we hope to share this information with you within the next two weeks.

We would also appreciate having whatever you can legally share about the studies you are conducting, particularly what sampling methods you are using to measure GenX and what levels you are finding.

Thank you,
Sam

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US Environmental Protection Agency
Washington, DC

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US EPA
Washington, DC
Office: 202-564-1834
Cell Ex. 6 Personal Privacy (PP)

From: Orme-Zavaleta, Jennifer
Sent: Thursday, August 17, 2017 12:17 PM
To: Sinks, Tom <Sinks.Tom@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Maguire, Megan <Maguire.Megan@epa.gov>; Gilliland, Alice <Gilliland.Alice@epa.gov>; Martin, Lawrence <Martin.Lawrence@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy on PFOA and GenX

Sure, happy to help

How about if everyone sends me what they have by noon Wed the 23rd and we'll pull it together

Jennifer Orme-Zavaleta, PhD
Director, National Exposure Research Laboratory
USEPA Office of Research and Development
109 TW Alexander Dr MC 305-01
RTP, NC 27711

Ex. 6 Personal Privacy (PP) (cell)
orme-zavaleta.jennifer@epa.gov

From: Sinks, Tom
Sent: Thursday, August 17, 2017 12:15 PM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Maguire, Megan <Maguire.Megan@epa.gov>; Gilliland, Alice <Gilliland.Alice@epa.gov>; Martin, Lawrence <Martin.Lawrence@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy on PFOA and GenX

Can you coordinate the response?

From: Linkins, Samantha
Sent: Thursday, August 17, 2017 11:56 AM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Maguire, Megan <Maguire.Megan@epa.gov>; Gilliland, Alice <Gilliland.Alice@epa.gov>; Sinks, Tom <Sinks.Tom@epa.gov>; Martin, Lawrence <Martin.Lawrence@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy on PFOA and GenX

Hi again,

We heard back from the Netherlands Directorate for Environmental Safety and Risks, and he said that they are looking for any information or studies we have on GenX or alternative compounds and also said they can share information on their current investigations. I've pasted his email below. What information and studies can we send back to him?

From: Wijmenga, J. (Jan) - DGMI [mailto:Jan.Wijmenga@minienm.nl]
Sent: Thursday, August 17, 2017 11:34 AM
To: Peelen, Jan <JR.Peelen@minbuza.nl>; Phillips, Anna <Phillips.Anna@epa.gov>; Doroski, Brenda <Doroski.Brenda@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>; Emmerson, Caroline <Emmerson.Caroline@epa.gov>; Jones, Davis <Jones.Davis@epa.gov>
Cc: Jong, Bart de <bart-de.jong@minbuza.nl>; WAS-IM <WAS-IM@minbuza.nl>
Subject: RE: request from NL: experts working on PFOA and GenX

Dear EPA colleagues,

Thanks to my colleague at the NL embassy in DC for establishing this contact and thanks for the opportunity to have an exchange on PFOA and GenX with EPA staff. At this moment our interest mainly lies in GenX (CAS-number 62037-80-3), as we are investigating the possible health effects associated with the emission of GenX to air and water from a factory owned by Chemours in Dordrecht, NL.

To give a brief sketch of the situation in the Netherlands: the Chemours factory was previously used by DuPont for the production of fluoropolymers (a.o. PTFE), which used PFOA in the production process until 2012 when it was phased out in lieu of GenX. In 2015 Chemours took over the responsibility for the operation of the plant, I assume under similar conditions as in the USA.

Our interest in the case started after an (initially very limited) study, published in April 2016, showed that people living in the vicinity of the factory have been exposed to concentrations of PFOA that could have led to health effects. A subsequent blood measurement campaign confirmed these results in May 2017. As PFOA has been phased out already for some years, there is now a keen interest in further information on the alternative substances that are used (commonly referred to as 'GenX').

We have already published results of research carried out by our National Institute for Public Health and the Environment (RIVM) on GenX, but have not been able so far to conclude for all relevant routes of exposure that no health effects are expected. Confronted with an increasing pressure from municipalities and drinking water companies, with low (but increasing) quantities of GenX also measured in surface and drinking water far away from the factory, we are very interested to know whether the EPA has any additional information on the substance. GenX was registered by Chemours at the European Chemicals Agency (ECHA), so a basic set of information is available to us, but we are lacking a reliable bioaccumulation study (preferably in fish), and are also looking for additional information on the degradation product E1 (CAS # 3330-15-2).

A process has been initiated to formally request studies from Chemours, but it may take some time before this process can be concluded. If the EPA already has access to such information, we would appreciate it if this could be shared with us. Furthermore, we have some indications that also crops grown in the vicinity of the source may take up considerable quantities of GenX, but have not found any literature on crop uptake and are now planning to launch a study shortly to follow-up on this. Also on this aspect any information that the EPA would have access to is highly appreciated!

From our side it would of course be possible to share information on the investigations we are running with regard to PFOA or GenX.
Thanks in advance for your time and I am looking forward to a fruitful exchange.

With kind regards,

Jan Wijmenga
.....
Directorate for Environmental Safety and Risks
Ministry of Infrastructure and the Environment
Rijnstraat 8 | The Hague
P.O. Box 20901 | NL-2500 EX | The Hague
The Netherlands

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US EPA
Washington, DC
Office: 202-564-1834
Cell: Ex. 6 Personal Privacy (PP)

From: Orme-Zavaleta, Jennifer
Sent: Monday, August 14, 2017 12:45 PM
To: Linkins, Samantha <Linkins.Samantha@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy

<Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Sauerhage, Maggie <Sauerhage.Maggie@epa.gov>; Maguire, Megan <Maguire.Megan@epa.gov>; Gilliland, Alice <Gilliland.Alice@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy on PFOA and GenX

Might be good to learn what methods they are using to measure PFAS and Genx, and what levels they are finding.

The question that came up at the end of the NC call remains open about water treatment methods to remove these cmpds from water. Adding in Alice Gilliland from NRMRL as well

Keep us posted

Jennifer Orme-Zavaleta, PhD
Director, National Exposure Research Laboratory
USEPA Office of Research and Development
109 TW Alexander Dr MC 305-01
RTP, NC 27711

Ex. 6 Personal Privacy (PP) (cell)
orme-zavaleta.jennifer@epa.gov

From: Linkins, Samantha
Sent: Monday, August 14, 2017 12:36 PM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Sauerhage, Maggie <Sauerhage.Maggie@epa.gov>; Maguire, Megan <Maguire.Megan@epa.gov>
Subject: FYI: Request from the Royal Netherlands Embassy on PFOA and GenX

Hey all,

FYI - The Netherlands is dealing with a similar Chemours/GenX issue and has reached out to EPA for assistance. They largely seem to be asking for enforcement assistance, so OECA is taking the lead. However, we might be getting some requests for help in the future. No action needed at this time, just a heads up. OSA is also aware of this.

-Sam

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US EPA
Washington, DC
Office: 202-564-1834
Cell: Ex. 6 Personal Privacy (PP)

From: Linkins, Samantha
Sent: Monday, August 14, 2017 12:27 PM
To: Emmerson, Caroline <Emmerson.Caroline@epa.gov>; Klasen, Matthew <Klasen.Matthew@epa.gov>
Cc: Phillips, Anna <Phillips.Anna@epa.gov>; Doroski, Brenda <Doroski.Brenda@epa.gov>; Jones, Davis <Jones.Davis@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy to contact experts working on PFOA and GenX

Anna and Brenda (and Caroline and Davis),

ORD is also happy to help out however we are needed. Lawrence Martin in the Office of the Science Advisor is the point person for the cross-agency workgroup, but you can also contact me with the specific needs and I can track down the appropriate experts in ORD.

-Sam

Samantha Linkins
Science Communication Specialist and Congressional Lead
Office of Research and Development, US EPA
Washington, DC
Office: 202-564-1834
Cell Ex. 6 Personal Privacy (PP)

From: Emmerson, Caroline
Sent: Friday, August 11, 2017 11:15 AM
To: Klasen, Matthew <Klasen.Matthew@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>
Cc: Phillips, Anna <Phillips.Anna@epa.gov>; Doroski, Brenda <Doroski.Brenda@epa.gov>; Jones, Davis <Jones.Davis@epa.gov>
Subject: RE: Request from the Royal Netherlands Embassy to contact experts working on PFOA and GenX

Matt,

I hope that you are doing well too.

Davis Jones and I can help coordinate this request. Davis is the Associate Director for International Enforcement in OECA's Office of Federal Activities, International Compliance Assurance Division.

Thanks,

Caroline

Caroline Emmerson
Director, Policy and Legislative Coordination Division
Office of Administration and Policy
Office of Enforcement and Compliance Assurance
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
202-564-1716
emmerson.caroline@epa.gov

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From: Klasen, Matthew
Sent: Friday, August 11, 2017 10:46 AM

To: Emmerson, Caroline <Emmerson.Caroline@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>
Cc: Phillips, Anna <Phillips.Anna@epa.gov>; Doroski, Brenda <Doroski.Brenda@epa.gov>
Subject: Fw: Request from the Royal Netherlands Embassy to contact experts working on PFOA and GenX
Importance: High

Caroline and Sam,

Hope your Fridays are going well.

I'm contacting you with a non-Congressional request to see if you might be able to find the right person or people to field an international request that came in to me from OITA. My guess is that you both may be well-positioned in your offices to help track down folks who could help. See more below.

As you can see below, this came my way as a result of my facilitation of the GenX North Carolina call on Wednesday, but my Congressional perch doesn't make me the right person to take the lead on this one. From the looks of it, it seems to me like someone in OECA or someone in ORD might be best to take this one on. I was thinking perhaps OECA because it sounds like the Dutch folks are interested in an enforcement focus. And I was thinking perhaps ORD because I know OSP is coordinating cross-agency work on PFCs more generally, so OSP might be the best single point of contact on a request like this that could lead to contacts involving multiple offices.

Can you take a look and let Anna and Brenda in OITA know if you have suggestions for the right people to take this one on?

Thanks,
Matt

Matt Klasen
U.S Environmental Protection Agency
Office of Congressional Affairs
WJC North 3443P
202-566-0780
cell Ex. 6 Personal Privacy (PP)

From: Phillips, Anna
Sent: Wednesday, August 9, 2017 4:27 PM
To: Klasen, Matthew
Cc: Pierce, Alison; Doroski, Brenda
Subject: FW: Request from the Royal Netherands Embassy to contact experts working on PFOA and GenX

Hi, Matthew –

I was given your name by OCSPP as the coordinator for incoming information requests concerning PFOA and GenX. I would appreciate your advice on how we can respond to the attached request from the Royal Netherlands Embassy to facilitate contacts with their environmental enforcement office in the Netherlands. Additional details are provided in the Embassy's request below.

Thank you in advance for your guidance on this. Please let me know if you have questions or would like to discuss further.

Best,
Anna

~~~~~~

Anna Phillips
Program Manager for Europe
U.S. Environmental Protection Agency (EPA)
Office of International & Tribal Affairs
Washington, D.C. 20460

Tel: (+1) 202.564.6419
E-mail: phillips.anna@epa.gov
http://www2.epa.gov/international-cooperation

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Please consider the environment before printing this message.

From: WAS-IM [mailto:WAS-IM@minbuza.nl]
Sent: Thursday, July 27, 2017 1:09 PM
To: Phillips, Anna <Phillips.Anna@epa.gov>
Cc: Jong, Bart de <bart-de.jong@minbuza.nl>; WAS-IM <WAS-IM@minbuza.nl>
Subject: request from NL: experts working on PFOA and GenX
Importance: High

Dear Anna,

Hope you are well. I hope you can help me in a matter concerning the substances 'PFOA' and 'GenX'. Could you provide us with some contacts at the EPA and the North Carolina DEQ that are currently exploring the possible negative effects of this substances? The environmental enforcement office of our ministry would love to get in touch with them to compare notes.

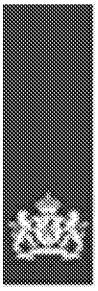
The past year, there has been discussion about the use of a substance called 'PFOA' in the Netherlands. This was used by DuPont-affiliate Chemours. Residu ended up in the river system near Rotterdam in rather high concentrations, causing concern with citizens and the organizations that control water & environmental quality. The possible consequences of PFOA were not clear, but there are indications that it could be a public safety hazard. The case is politically very sensitive in the Rotterdam region and our minister has been summoned by parliament twice already to answer questions and defend the enforcing efforts of the ministry and its agencies.
Dupont actually phased out the use of the substance and replaced it with what the media calls 'GenX'. Traces of this substance are already found in the rivers, causing new concerns. My ministry wants to handle this proactively and wants to compare notes with the US, since you seem to have the same issue:

- Dupont has been using PFOA in a Ohio facility as well. This also caused concerns on public health. A group sued Dupont. The case was settled $700 mln earlier this year. In this case, the data and motivations of the research done in the NL was actually part of the evidence.
- Chemours has a facility in NC. NC DEQ seems to talk to Chemcours about the possible risks of GenX. Needless to say, our colleagues would love to be part of that conversation.

Please let me know if you can help us.

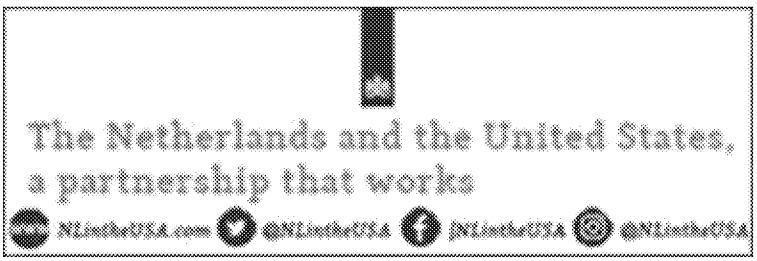
Best,

Jan Peelen
Attaché for Infrastructure and the Environment



<!--[if !vml]--><!--[endif]-->Embassy of the Kingdom of the Netherlands
Office for Infrastructure and the Environment
4200 Linnean Avenue NW
Washington D.C, 20008, USA

T +1 202 274 2730
M +1 202 600 6256
E jr.peelen@minbuza.nl
<image009.jpg>@JanRPeelen



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<Strynar et al. 2015.pdf>

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