Message

From: Bhagavan Krishnaswamy [bkrishnaswamy@baaqmd.gov]
Sent: 8/25/2021 10:32:46 PM
To: Connolly, Scott [Connolly.Scott@epa.gov]
CC: Carol Allen [CAllen@baaqmd.gov]
Subject: RE: EPA Region 9 Comments on AB&I Foundry HRA

Thank you Scott. It was nice talking to you too. Be well.

From: Connolly, Scott <Connolly.Scott@epa.gov>
Sent: Wednesday, August 25, 2021 3:27 PM
To: Bhagavan Krishnaswamy <bkrishnaswamy@baaqmd.gov>
Cc: Carol Allen <CAllen@baaqmd.gov>
Subject: RE: EPA Region 9 Comments on AB&I Foundry HRA

Great talking with you folks today.

As promised here is the AP-42 emissions document and the EPA information request.

From: Bhagavan Krishnaswamy <bkrishnaswamy@baaqmd.gov>
Sent: Tuesday, August 24, 2021 9:34 AM
To: Connolly, Scott <Connolly.Scott@epa.gov>
Cc: Riedel, Brian <riedel.brian@epa.gov>
Subject: RE: EPA Region 9 Comments on AB&I Foundry HRA

FYI – I sent you a Teams meeting invite for tomorrow between 2.15 to 3.30 pm. Carol has a meeting from 1 to 2 pm, and I have my 1:1 with my manager at 3.30 pm.

From: Bhagavan Krishnaswamy
Sent: Tuesday, August 24, 2021 7:53 AM
To: Connolly, Scott <Connolly.Scott@epa.gov>
Cc: Riedel, Brian <riedel.brian@epa.gov>
Subject: RE: EPA Region 9 Comments on AB&I Foundry HRA

Hi Scott,
I will check Carol's availability and keep you posted. Thank you.
Bhagavan

From: Connolly, Scott <Connolly.Scott@epa.gov>
Sent: Tuesday, August 24, 2021 7:32 AM
To: Bhagavan Krishnaswamy <bkrishnaswamy@baaqmd.gov>
Cc: Riedel, Brian <riedel.brian@epa.gov>
Subject: FW: EPA Region 9 Comments on AB&I Foundry HRA

Hi Bhagavan,

Roshni is on a temporary assignment in another section, but as the main author of the comments I would be happy to have a discussion with you and Carol about the comments. I'm available all tomorrow afternoon, but only between 1 and 2 on Thursday. I'd prefer to use Teams, if you are able to set up a virtual meeting.

Let me know what works best for you.

Scott

Scott Connolly, Environmental Engineer
Enforcement and Compliance Assurance Division – Air Section
US Environmental Protection Agency, Region 9
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75 Hawthorne St. (ENF-2-1), San Francisco, CA 94105

United States Environmental Protection Agency

From: Brahmbhatt, Roshni
Sent: Thursday, August 19, 2021 5:16 PM
To: Riedel, Brian <riedel.brian@epa.gov>; Connolly, Scott <Connolly.Scott@epa.gov>
Cc: Chan, Janice <Chan.Janice@epa.gov>
Subject: Fwd: EPA Region 9 Comments on AB&I Foundry HRA

FYI

Roshni Brahmbhatt | Pronouns: she/her
Acting Chief, Fuels Enforcement Branch
Air Enforcement Division
U.S. Environmental Protection Agency
Email: Brahmbhatt.Roshni@EPA.gov
Work Phone: 415-972-3995
Cell Phone: 415-697-5673

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Begin forwarded message:

> **From:** Bhagavan Krishnaswamy <bkrishnaswamy@baaqmd.gov>
> **Date:** August 19, 2021 at 4:34:08 PM PDT
> **To:** "Brahmbhatt, Roshni" <brahmbhatt.Roshni@epa.gov>
> **Cc:** Carol Allen <CAllen@baaqmd.gov>
> **Subject: FW: EPA Region 9 Comments on AB&I Foundry HRA**
>
> Good afternoon Roshni.
> Carol Allen and I would like to go over and get some clarification on your comments before the draft HRA is finalized. Please advise of a time and day that works best for you. Please also advise if we should call you via Teams, or 415-972-3995. FYI – Anytime after 3 pm tomorrow, or August 25th and 26th will work for Carol.
> Thank you,
> Bhagavan

From: Brahmbhatt, Roshni <brahmbhatt.Roshni@epa.gov>
Sent: Tuesday, June 8, 2021 4:58 PM
To: Carol Allen <CAllen@baaqmd.gov>
Cc: Juan Ortellado <jortellado@baaqmd.gov>; Connolly, Scott <Connolly.Scott@epa.gov>
Subject: EPA Region 9 Comments on AB&I Foundry HRA

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Dear Carol Allen,

Thank you for the opportunity to provide comments on the HRA conducted at AB&I by Bay Area Air Quality Management District. Please see our comments below.

1. It appears that the HRA does not consider emissions from core making machines. The AB&I facility includes Shell core making as a specific item in its annual emission inventories, but it does not appear that the HRA contains these emission sources in its analysis and it does not contain any explanation or commentary on these emissions. These emission units are sources of Toxic Air Contaminants (TACs) such as Toluene, Naphthalene, Acetaldehyde, Phenol, Benzene, Formaldehyde, Hexane and o-Cresols, chemicals already included in the HRA from other facility sources. To ensure that the HRA is inclusive of all potential sources of TAC risk, we recommend including this source in the assessment. In addition to being included in other areas of the HRA these chemicals are also identified by EPA's Risk-Screening Environmental Indicators (RSEI) (https://www.epa.gov/rsei/rsei-toxicity-weights) and EPA's Integrated Risk Information System (www.iris.epa.gov) as chemicals with cancer and/or health risks.

2. The HRA does not acknowledge that emissions and facility activity may be variable from year to year and that 2017 data might not fully reflect current emissions, source-specific throughput, and total health risks. For example, the 2017 Emissions Inventory lists total TACs and Reportable emissions at 4.09 tons per year (tpy), but both 2015 and 2018 had higher total TACs emissions numbers, at 5.24 tpy and 4.63 tpy, respectively. Additionally, 2017 was a low year for iron melted with 2015, 2016, 2018 and 2019 having higher values. It may be helpful to fully acknowledge to the risks from the facility to include the highest actual emissions or how risks might be impacted by variable production.

3. The HRA mentions that the inventories were adjusted based on recent source testing and other changes at the facility. It would help the reader to identify which TACs more clearly were adjusted and how those inventories compare to other reported inventories for this facility (in 2017 and in more recent years like 2018 and 2019). For example, the HRA lists facility emissions of Formaldehyde, at 32 lbs/year, but the 2017 Emissions inventory lists 1480 lbs/year, the 2018 Emissions Inventory lists 1173 lbs/year and the 2019 Emissions inventory lists 1073 lbs/year. Also in another example, the HRA lists Benzene emissions at 1420 lbs/year, but the 2017 Emissions inventory lists 2724 lbs/year, the 2018 Emissions Inventory lists 3334 lbs/year and the 2019 Emissions inventory lists 2556 lbs/year. This trend appears to be consistent for other reported pollutants as well.

4. The HRA relies on facility reported emissions data, some of which is based on emissions testing conducted at the facility. The analysis reported in the HRA for hexavalent chromium appears to rely on appropriate testing and recent sampling dataat numerous sources at the facility, but for other TACs the HRA appears to rely on older testing data, using non-stationary source test methods for organic TAC emissions. It also appears that testing for specific organic TAC emissions did not occur at most emission units at the facility, indicating that data

quality used to support the HRA is variable by chemical. For example,the HRA references Benzene emissions that was determined using emissions testing conducted on unit S2_B5(B5S2) in 2012 that uses an ambient air test method (TO-15) instead of a stationary source test method, resulting in reliance on data that was generated from a test method not approved for this application. It's also worth noting that data for TACs at the cupola were also conducted with this method. It might benefit the reader to acknowledge data variability and uncertainty in the HRA and how it may contribute to uncertainty about the direction and magnitude of the modeled TAC health risks.

Sincerely,

Roshni Brahmbhatt
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Enforcement and Compliance Assurance Division
US EPA, Region 9
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Preferred Pronouns: She, Her

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