Date: July 18, 2018 at 5:03 PM

To: Ames,Rodger rodger.ames@colostate.edu
Cc: Cao, Jim@ARB Jim.cao@arb.ca.gov



Hi Rodger,

Attached please find a correction data file of point sources emissions containing 13 facilities. The data is from CARB's CEIDARS in the year of 2014. If the file you receive is okay, please give me a reply. Sometimes there are problems with sending data files by email. If you have any questions, please feel free to let me know. Thanks.

Jim

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From: Cao, Jim@ARB

Sent: Tuesday, July 17, 2018 3:16 PM

To: Tom Moore <tmoore@westar.org>; Ames,Rodger <Rodger.Ames@colostate.edu> **Cc:** Huber, Stephanie@ARB <Stephanie.Huber@arb.ca.gov>; Huth, Alexander@ARB

<Alexander.Huth@arb.ca.gov>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol

Subcommittee call of June 28th

Hi Tom and Rodger,

I work on the portion of reviewing point sources. One of the items in round 1 comment process is to review point sources emissions of the top 20 EGU and NonEGU sources. I compared the NEI point sources emissions of NOX, SOX and VOC with those in the California Emission Inventory Development and Reporting System (CEIDARS). The emissions in 2014NEIv2 were from https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data. The majority of facilities I reviewed show identical emissions in CEIDARS and NEI. Discrepancies in emission values are identified in four EGU facilities and nine NonEGU facilities. Therefore, correct emission data for these 13 facilities has been obtained from CEIDARS for the year of 2014 and compiled into a correction data file. The data components in the file are based on the information in the samples provided by Rodger Ames. I will send the correction data file to Rodger tomorrow, before the deadline of July 20, 2018. If you have any questions, please feel free to let me know. Thanks.

Jim



From: Huber, Stephanie@ARB

Sent: Tuesday, July 10, 2018 9:18 AM

To: Tom Moore <<u>tmoore@westar.org</u>>; Cao, Jim@ARB <<u>Jim.cao@arb.ca.gov</u>>; Ames,Rodger

<Rodger.Ames@colostate.edu>

Cc: Huth, Alexander@ARB < <u>Alexander.Huth@arb.ca.gov</u>>; <u>fher461@ECY.WA.GOV</u>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol

Subcommittee call of June 28th

Hi Tom,

We should be able to get you updated data and documentation by July 20.

Stephanie Huber, Ph.D., Manager Emission Inventory Development Section Air Quality Planning and Science Division Air Resources Board 916-323-2664 stephanie.huber@arb.ca.gov



From: Tom Moore < tmoore@westar.org>
Sent: Tuesday, July 10, 2018 8:41 AM

To: Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>>; Ames,Rodger < <u>Rodger.Ames@colostate.edu</u>> **Cc:** Huber, Stephanie@ARB < <u>Stephanie.Huber@arb.ca.gov</u>>; Huth, Alexander@ARB

<<u>Alexander.Huth@arb.ca.gov</u>>; <u>fher461@ECY.WA.GOV</u>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol

Subcommittee call of June 28th

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Hi, Jim and all – thanks for the clarification. I appreciate CARB's willingness to evaluate the emissions modeling and air quality modeling as that moves along.

In regard to my highlighted question below, please advise. Thank you.

Tom Moore, WRAP Air Quality Program Manager
Western States Air Resources Council (WESTAR) | e: tmoore@westar.org | o: 970.491.8837
Western Regional Air Partnership | www.wrapair2.org

From: Cao, Jim@ARB [mailto:Jim.cao@arb.ca.gov]

Sent: Tuesday, July 10, 2018 9:33 AM

To: Tom Moore <<u>tmoore@westar.org</u>>; Ames,Rodger <<u>Rodger.Ames@colostate.edu</u>> **Cc:** Huber, Stephanie@ARB <<u>Stephanie.Huber@arb.ca.gov</u>>; Huth, Alexander@ARB <Alexander.Huth@arb.ca.gov>; fher461@ECY.WA.GOV

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol Subcommittee call of June 28th

Regarding the statement of "Once we have our modeling contract in place we could give you more specifics if necessary", what I meant was that the correction files for point sources will follow the samples Rodger provided, and in case there would be a need for more changes from us, we will follow up with them. Thanks.

Jim

From: Tom Moore < tmoore@westar.org>
Sent: Monday, July 09, 2018 12:56 PM

To: Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>>; Ames,Rodger < <u>Rodger.Ames@colostate.edu</u>> **Cc:** Huber, Stephanie@ARB < <u>Stephanie.Huber@arb.ca.gov</u>>; Huth, Alexander@ARB < Alexander.Huth@arb.ca.gov>; fher461@ECY.WA.GOV

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol Subcommittee call of June 28th

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Hi, Jim and all – just closing the loop on CA input on the 2014 NEIv2 review. I wasn't sure what the highlighted statement meant, below. Attached are the notes from the June 28th call.

Do you folks at ARB have an idea when you could let us know the scope of your comments? It would be helpful to have the comments and the revised data, so the scope of needed changes by the modeling contractor are clearer, by July 20th.

Thanks

Tom Moore, WRAP Air Quality Program Manager
Western States Air Resources Council (WESTAR) | e: tmoore@westar.org | o: 970.491.8837
Western Regional Air Partnership | www.wrapair2.org

From: Cao, Jim@ARB [mailto:Jim.cao@arb.ca.gov]

Sent: Friday, July 06, 2018 9:18 AM

To: Ames,Rodger < Rodger.Ames@colostate.edu>

Cc: Tom Moore < tmoore@westar.org>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol

Subcommittee call of June 28th

Thanks Rodger. The information you provided is very helpful. I will follow up with the needs as the modeling project moves forward.

Jim

From: Ames, Rodger < Rodger. Ames@colostate.edu >

Sent: Thursday, July 05, 2018 9:19 PM **To:** Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>> **Cc:** Tom Moore < <u>tmoore@westar.org</u>>

Subject: Re: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol

Subcommittee call of June 28th

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Hi Jim,

We will use EPA's 2014v2 NEI modeling platform as a base for the WAQS modeling, so the inventory files from the EPA platform could be used as an example. The inventories by sector are available at

ftp://newftp.epa.gov/Air/emismod/2014/v2/2014fd/emissions/by_sector/

These are generally csv files that have annual total emissions by pollutant and SCC, among other fields. Once we have our modeling contract in place we could give you more specifics if necessary. At this point I'm trying to catalog updates that states provide, so we're not quite at the point where we need model ready inputs.

Thanks, Rodger

On Jul 5, 2018, at 9:48 AM, Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>> wrote:

Hi Rodger, I am working on the data and will let you know the size of files when I complete them. I do submissions of point sources from the California

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Emission Inventory Development and Reporting System (CEIDARS) to NEI. In this modeling project, what is the format of files I should organize the data into? It would be helpful If you could provide me with or point me to sample files. Thanks.

Jim

From: Ames,Rodger < Rodger.Ames@colostate.edu>

Sent: Wednesday, July 04, 2018 4:34 PM **To:** Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>> **Cc:** Tom Moore < <u>tmoore@westar.org</u>>

Subject: Re: please review draft notes from RHPWG Emissions Inventory & Modeling

Protocol Subcommittee call of June 28th

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Hi Jim,

Can you give me an idea of the size of the files you are planning to add to the review? If they are too large to conveniently email I can provide you with ftp upload instructions to one of our servers. If you want to discuss via phone, it is probably easier for me to call you. If so, let me know when you are available and I will give you a call.

Thanks, Rodger

On Jul 3, 2018, at 4:51 PM, Cao, Jim@ARB < <u>Jim.cao@arb.ca.gov</u>> wrote:

Thanks Tom.

Jim

From: Tom Moore <<u>tmoore@westar.org</u>>
Sent: Tuesday, July 03, 2018 3:50 PM
To: Cao, Jim@ARB <<u>Jim.cao@arb.ca.gov</u>>

Cc: Rodger

Ames Rodger.Ames@colostate.edu <Rodger.Ames@ColoState.EDU>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol Subcommittee call of June 28th

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Hi, Jim – I copied Rodger on this reply, thanks for sending those files for him to post. He is working remotely, so you and he can work telephone contact by E-Mail. Thanks and Happy July 4th.

Tom Moore, WRAP Air Quality Program Manager
Western States Air Resources Council (WESTAR) | e: tmoore@westar.org | o: 970.491.8837
Western Regional Air Partnership | www.wrapair2.org

From: Cao, Jim@ARB [mailto:Jim.cao@arb.ca.gov]

Sent: Tuesday, July 03, 2018 2:59 PM **To:** Tom Moore < tmoore@westar.org> **Cc:** Cao, Jim@ARB < Jim.cao@arb.ca.gov>

Subject: RE: please review draft notes from RHPWG Emissions Inventory & Modeling Protocol Subcommittee call of June 28th

Hi Tom, this is Jim Cao with CARB. I am doing the review on the point sources of California on 2014NEIv2. Based on the last call of June 28, correction data files will be sent to Rodger. I would like to get Rodger's contact email and phone for asking some questions related to sending data files. Thanks.

Jim

Jim Cao, Ph.D., P.E.
Air Resources Engineer
California Air Resources Board
Air Quality Planning & Science Division
Emission Inventory Development Section
(916) 322-7078
jcao@arb.ca.gov

<image001.png>

From: Tom Moore < tmoore@westar.org > Sent: Thursday, June 28, 2018 11:47 AM

To: Herron-Thorpe, Farren (ECY) < fher461@ECY.WA.GOV>; Higgin,

Roslyn, NMENV

<<u>Roslyn.Higgin@state.nm.us</u>>; <u>scoe@mt.gov</u>; <u>bharprin@ndep.nv.gov</u>; <u>kevin.briggs@state.co.us;Mark.Jones@state.nm.us</u>; **Shawn**

McClure <u>Shawn.McClure@colostate.edu</u><<u>Shawn.McClure@colostate.e</u> <u>du</u>>; <u>repayne@mt.gov</u>; <u>Huber</u>, <u>Stephanie@ARB</u>

<<u>Stephanie.Huber@arb.ca.gov</u>>; <u>Toon.Elias@azdeq.gov</u>; <u>curtis.taipale</u> <u>@state.co.us</u>; <u>jeremy.neustifter@state.co.us</u>; <u>jbaker@utah.gov</u>; <u>mike_b</u> arna@nps.gov; Templeton.Ryan@azdeq.gov; Dale

Wells <u>dale.wells@state.co.us</u> <<u>dale.wells@state.co.us</u>>; <u>Cindy.Hollenberg@state.nm.us</u>; Cao, Jim@ARB <<u>Jim.cao@arb.ca.gov</u>>; Huth,

Alexander@ARB

<<u>Alexander.Huth@arb.ca.gov</u>>; <u>abrimmer@raqc.org</u>; <u>tyler.ward@wyo.g</u> <u>ov</u>; Martin, Kristen

<KMartin@mt.gov; fforsgre@ndep.nv.gov; patricia f brewer@nps.go

v; jhuy461@ecy.wa.gov; Suarez-Murias, Christine@ARB

<<u>christine.suarez-murias@arb.ca.gov</u>>; Berg, Earl

<<u>Earl.Berg@state.sd.us</u>>; <u>ashley.brakke@state.sd.us</u>

Cc: Rodger

Ames Rodger.Ames@colostate.edu <Rodger.Ames@ColoState.EDU>

Subject: please review draft notes from RHPWG Emissions Inventory &

Modeling Protocol Subcommittee call of June 28th

Importance: High

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Hi, all – thanks to Farren for moving us through the agenda this morning, to Roslyn for these notes, and to you all for participating.

Please review the attached notes by Tuesday July 3rd. Send any edits to Farren or Roslyn. We will then post today's call materials and notes with any edits as well as those from future calls to the Subcommittee webpage at: http://www.wrapair2.org/RHP_InvMod.aspx. We will also post them while we doing the EI review steps we discussed today, to: We will also post them while we doing the EI review steps we discussed today, to: Western U.S. regional analysis - 2014 NEIv2 Emissions Inventory Review for Regional Haze Modeling

Thanks to Farren for the link to the EPA SCC list that has "sector" for each SCC: https://ofmpub.epa.gov/sccwebservices/sccsearch/, which will be posted on the wiki.

Look forward to the next Subcommittee call on July 26th. Please complete your initial remaining review efforts by Thursday July 21st and E-Mail comment documents and data files to Farren, Rodger, and me.

Thank you.

Tom Moore, WRAP Air Quality Program Manager Western States Air Resources Council (WESTAR) \mid e: $\underline{tmoore@westar.org} \mid$ o: 970.491.8837

Western Regional Air Partnership | www.wrapair2.org



CARB Point Source...018.zip