

Ames, Rodger

From: Huth, Alexander@ARB <Alexander.Huth@arb.ca.gov>
Sent: Tuesday, October 09, 2018 12:44 PM
To: Herron-Thorpe, Farren (ECY); Tom Moore; Ames, Rodger
Cc: Huber, Stephanie@ARB; Suarez-Murias, Christine@ARB
Subject: RE: Remaining California inventory updates for regional haze modeling

Hi Farren –

I had not taken that note into account, thanks for pointing it out. In which case, I advise discarding the file named `Add dairy cattle dust to appropriate SCC.csv` from the set of base year updates that I submitted on Friday, to avoid double-counting.

Thanks,
Alex

From: Herron-Thorpe, Farren (ECY) <fher461@ECY.WA.GOV>
Sent: Tuesday, October 9, 2018 10:48 AM
To: Tom Moore <tmoore@westar.org>; Huth, Alexander@ARB <Alexander.Huth@arb.ca.gov>; Ames, Rodger <Rodger.Ames@colostate.edu>
Cc: Huber, Stephanie@ARB <Stephanie.Huber@arb.ca.gov>; Suarez-Murias, Christine@ARB <christine.suarez-murias@arb.ca.gov>
Subject: RE: Remaining California inventory updates for regional haze modeling

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Hi Alex,

I just wanted to confirm that these dust from hooves changes take into account EPA's note in their 2014 NEI v2 TSD (Section 4.3.3.1).

Dust Kicked up by Hooves

"There did not exist separate animal-specific SCCs for dust kicked up by hooves (or feet); therefore, all animals were aggregated to the one available SCC (for "Beef cattle", SCC 2805001000) for 2014v2. We decided to wait until the 2017 NEI cycle to separate out the dust kicked up by hooves/feet emissions by animal type. For 2014v2 purposes this SCC represents the total for all livestock."

Can you confirm you took this into account?

Thanks,

Farren L. Herron-Thorpe
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From: Tom Moore [<mailto:tmoore@westar.org>]
Sent: Monday, October 08, 2018 12:07 PM
To: Huth, Alexander@ARB <Alexander.Huth@arb.ca.gov>; Ames,Rodger <Rodger.Ames@colostate.edu>
Cc: Huber, Stephanie@ARB <Stephanie.Huber@arb.ca.gov>; Suarez-Murias, Christine@ARB <christine.suarez-murias@arb.ca.gov>; Herron-Thorpe, Farren (ECY) <fher461@ECY.WA.GOV>
Subject: RE: Remaining California inventory updates for regional haze modeling

Hi, Alex and all – thanks for sending this. I am copying Farren Herron-Thorpe as well.

*Tom Moore, WRAP Air Quality Program Manager
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Western Regional Air Partnership | www.wrapair2.org*

From: Huth, Alexander@ARB [<mailto:Alexander.Huth@arb.ca.gov>]
Sent: Friday, October 5, 2018 5:17 PM
To: Ames,Rodger <Rodger.Ames@colostate.edu>
Cc: Huber, Stephanie@ARB <Stephanie.Huber@arb.ca.gov>; Suarez-Murias, Christine@ARB <christine.suarez-murias@arb.ca.gov>; Tom Moore <tmoore@westar.org>
Subject: Remaining California inventory updates for regional haze modeling

Hi Rodger –

Attached are our last set of updates to the v2 base year inventory for regional haze modeling. These are all nonpoint updates in FF10 format (as best I'm able to reproduce it).

A few notes on monthly activity values, to pass on to the modelers:

- Our activity profiles are normalized to sum to 100% over the 12 months; there are rounding errors (8.3 * 12 isn't quite 100).
- In some cases we have more than one monthly profile aggregated together into a single record in the attached FF10 files. This can happen when, for example, portions of a county are under the jurisdiction of different local agencies, which assign different monthly profiles. In aggregating these to the county level, I've averaged the profiles together rather than drop them entirely or favor one arbitrarily – since I don't have time to review them individually.
- I've provided these profiles as we have them in our own database, warts and all, so you'll see gaps where they haven't been reported. We often assume uniform activity in these cases but it's certainly not always appropriate so I'll leave it up to the modelers what assumptions they want to make when the data is not there.

Of the sectors that I previously identified as possibly needing updates:

- Two files in the attached 1) remove cattle husbandry dust from solid waste categories and 2) re-add some of those dust emissions to an appropriate SCC. I say "some" because:
 - o The dust that was re-moo-ved (ha) comes from three distinct categories on our end: dairy cattle; range cattle; and feedlot cattle.
 - o Dairy cattle dust is re-added because there is an available SCC with no contrary estimate from EPA.
 - o Feedlot cattle dust is NOT re-added because there is a wildly different (~25x larger) estimate from EPA in the correct SCC. Our methodology relies on herd population numbers from 2000, that's old enough for me to be wary of overruling EPA without the ability to do an in-depth comparison and update our methodology.
 - o Range cattle dust is NOT re-added because I didn't find an appropriate SCC and the emissions are pretty small—less than 1% of EPA's feedlot dust estimate, which I suspect is too high already.

- Three files in the attached assert "hard zeros" for various pollutants and counties in sectors relating to industrial boilers, oil and gas, and poultry husbandry. These should have been submitted in the first place and their absence allowed EPA to "gap-fill" with non-zero estimates of their own
- Though I had previously mentioned some discrepancies in commercial/institutional combustion sectors, after looking into it I decided not to make updates here because we do genuinely have data gaps in these categories and so it's appropriate for EPA to have added some emissions.
- I don't recall whether I previously mentioned residential oil combustion but similar situation there, in that a discrepancy I had identified in the emissions turned out to be due to EPA estimating kerosene emissions, for which we have no estimate of our own, therefore no update to provide.

Let me know if you have any comments or concerns.

Thanks,
Alex

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