**REGIONAL HAZE PLANNING WORK GROUP**

**EMISSIONS INVENTORY & MODELING SUBCOMMITTEE**

**Notes of teleconference**

**July 30, 2020**

**Action Items that resulted from the call**

* States review WRAP Point Source Emissions Excel spreadsheet and submit any necessary corrections to the 2028OTB or RepBase emissions by End-of-Business Thursday, August 6
* States must submit any additional source controls for the PAC2 modeling run by Thursday, September 10.
* States with Cogeneration facilities should request state-specific emissions data from Tom Moore/Ramboll to double check that emissions are accurately split between EGU and non-EGU and that the emissions are not double counted.

**AGENDA ITEMS**

1. **Roll call**
* **AK – Molly Birnbaum (?)**
* **AZ – Elias Toon, Ryan Templeton (?), Tiffany Anderson (?)**
* **CA – Tina Suarez-Murias**
* **CO – Curt Taipale, Dale Wells, Kevin Briggs (?), Weston Carloss**
* **ID – Aislinn Johns**
* **MT – Rhonda Payne**
* **ND – David Stroh**
* **NM – Kerwin Singleton (?), Mark Jones**
* **NV – Steven McNeece, Sig Jaunurajs (?)**
* **OR – Brandy Albertson (?), D Wu, Jeff Stocum (?), Kristen Martin (?)**
* **SD – Rick Boddicker**
* **UT – Jay Baker W**
* **WA – Farren Herron-Thorpe**
* **WY – Tyler Ward**
* **EPA – Gail Tonnesen**
* **NPS – Mike Barna, Pat Brewer**
* **Ramboll – Ralph Morris, Tejas Shah**
* **WESTAR – Mary Uhl**
* **WRAP - Tom Moore**

**2. Volunteer for note taking**

Weston Carloss, CDPHE-APCD

**3. Approve meeting notes from last call**

Notes approved without changes.

**4. Review of WRAP Point Source Emissions Excel spreadsheet**

* Excel workbook has 7 tabs
	1. README - descriptions of the other 6 tabs and instructions for States
	2. Q Compare – Contains columns indicating if 2014v2 should be different than RepBase (Green header row), if RepBase should be different than 2028OTB (Green header row), calculated difference between 2014v2 and RepBase (Yellow header row), calculated differences between RepBase and 2028OTB (Yellow header row), and comments for Ramboll on necessary corrections for RepBase or 2028OTB (Blue header row)
	3. ReadmeDataListings – Explains column headings for the remaining 4 tabs which include: Facility ID, Facility Name, Lat, Long, FIPS, NAICS Code, NAICS Description, State, CO, NH3, NOx, PM10, PM2.5, SO2, and VOC
		+ Note that facilities marked “True” in the Multiple Entries column are listed in the inventory multiple times. This generally occurs for cogeneration facilities.
	4. WRAP 2028OTB point emissions – Lists emissions (CO, NH3, NOx, PM10, PM2.5, SO2, and VOC) for each facility based on the current 2028OTBa modeling run. These emissions are based on EPA’s 2028v1 modeling for most source categories (except WRAP Fossil EGUs, WRAP O&G, WRAP On-road Mobile, WRAP Non-road Mobile, Fires, Natural, and Boundary Conditions)
	5. WRAP RepBase point emissions – Lists emissions (CO, NH3, NOx, PM10, PM2.5, SO2, and VOC) for each facility based on the current RepBase data.
	6. WRAP 2014v2 point emissions – Lists emissions (CO, NH3, NOx, PM10, PM2.5, SO2, and VOC) for each facility based on the current 2014v2 data.
	7. All\_Scenarios - Lists emissions (CO, NH3, NOx, PM10, PM2.5, SO2, and VOC) for each facility including the 2014v2, RepBase, 2017 NEI, and 2028OTBa data.
* Each state should review the emissions for the facilities in their state.
* If any corrections are needed, please write clear, concise comments describing the required correction in the Comments column (Blue Header) on the Q Compare tab.
	1. Review the PDF titled “WRAP RH modeling platform emissions data sources by sector July30\_2020draft” before submitting comments. This PDF was attached to the meeting invite email and includes a table that lists the source of emissions data for each source sector in the upcoming “new RepBase2”, existing “2028OTBa”, and upcoming “new 2028OTBa2”. Reviewing this table should help states avoid writing unnecessary comments that will require additional review time for Ramboll.
		+ **States do not need to submit comments for changes to emissions that are already planned for the scenarios labeled “new RepBase2” or “new 2028OTBa2.” For example, states do not need to submit comments that instruct Ramboll to update “WRAP Non-EGU Point” emissions for 2028OTBa to use 2014v2 emissions because that is already planned for the “new 2028OTBa2” scenario.**
	2. All comments are due to Tom Moore/Ramboll by close of business Thursday, August 6

**Curt** – Do states need to resubmit FF10 emissions files for all sources, or only those that require changes from Ramboll?

**Farren** – FF10 files are only required for sources that need to be corrected by Ramboll.

**Farren** - If a state submitted emission corrections by the week of July 24, these updates (primarily double-counting of O&G emissions) are not reflected in the current Excel spreadsheet, but Ramboll will be making these changes. States do not need to resubmit these corrections this week.

**Farren** – Please write short, concise comments describing the required emissions data corrections in the Excel spreadsheet “Q Compare” comments column.

**David** – He’s not planning to submit comments for corrections if all of the following criteria are met: the source is anything other than an EGU or O&G source, the source is not close to a class 1 area, and the required correction is

<100 TPY. These minor corrections are unlikely to impact visibility and create additional work for Ramboll.

**Farren** – I agree. Please limit the number of corrections to just substantial changes so we can speed up Ramboll’s turnaround on the emission data that we all need for our SIPs.

**Tom** – Please consider that the emissions for each source will be used in generating the WEP/AOI Rank Point file. If there are errors in a source’s emissions that will lead to push back from source (attributing “too much” of the impairment to that source), it may be worth making the corrections even if they seem minor.

**Elias** – How are certain non-EGU categories handled, such as airports and railyards, handled in the different scenarios?

**Farren** – Based on a preliminary review, I think the 2028 data assumes some small changes in airport, which I think includes only landing and take-off, and railyard emissions, but I haven’t done a thorough review of those sources.

**Tejas** – Airport emissions actually includes emissions from landing, take-off, and ground support equipment. Airport and railyard emissions are clearly defined in 2014v2 and RepBase, and 2014v2 and RepBase use the exact values. Airport and railyard are categorized differently in 2028OTBa because EPA changed the categorization for these sectors. Do we want to use the 2014v2 airport and railyard emissions for 2028OTBa2, or do we want to use EPA’s updated airport emissions which were revised a couple of weeks ago.

**Dale** – I think EPA revised the airport emissions based on FAA projections.

**Farren** – I think we should leave airport numbers at the 2014v2 values because it’s difficult to predict post-pandemic travel trends 8 years from now and states are unable to regulate landing and take-off emissions, which are the primary source of emissions at airports. States also have very little ability to change railyard emissions.

**Tom** – I agree that we should keep airport emissions the same.

**General group consensus** – Leave airport and railyard emissions as is because they’re difficult to forecast and states have very little ability to regulate either source category.

**5. Highlights by Tom of some of the changes between the current 2028OTBa and upcoming 2028OTBa2**

* O&G for O&G WRAP States – 2028OTBa2 will include corrections to the WRAP-2028-O&G which double counted some sources
* O&G for non-O&G WRAP States – 2028OTBa2 will change from EPA 2028v1 modeling results back to EPA 2016v1
* O&G for non-WRAP States - 2028OTBa2 will change from EPA 2028v1 modeling results back to EPA 2016v1
* WRAP Non-EGU Point – 2028OTBa2 will change from EPA 2028v1 modeling results back to WRAP 2014v2
* Non-WRAP Non-EGU Point - 2028OTBa2 will change from EPA 2028v1 modeling results back to EPA 2016v1
* Other (Non-Point) 12WUS2 – 2028OTBa2 will change from EPA 2028v1 modeling results back to **EPA (?)** 2014v2
* Other (Non-Point) 36US - 2028OTBa2 will change from EPA 2028v1 modeling results back to EPA 2016v1
* Can/Mex/Offshore 12WUS2 - 2028OTBa2 will change from EPA 2028v1 modeling results back to EPA 2016v1

**Farren** – Do we need to add comments in the Excel file telling Ramboll to make changes to RepBase or 2028OTBa2 that are already listed in the table you just reviewed?

**Tom – No, you only need to make comments in the Excel spreadsheet if Ramboll needs to make changes other than those described in the table (“WRAP RH modeling platform emissions data sources by sector July30\_2020draft” which was attached to the meeting invite email).**

**5. Emissions from Cogeneration facilities**

* **Farren –** If your state has cogeneration facilities and you’re worried how the emissions are tracked (EGU vs. non-EGU) and if the emissions may be double-counted, please contact Tom Moore/Ramboll for a state-specific list of these sources. This will allow you to spot discrepancies that you may want Ramboll to correct. For example, EPA may group most of the emissions at a facility as EGU emissions, even though the state doesn’t consider the source an EGU. I think EPA splits the emissions based on SCC code, but I’m not 100% sure.
* **Farren –** I will try to send out a spreadsheet listing these cogen facilities by the end of the week.

**7. Other Topics?**

Next call: Thursday, August 27