 

**Questions and Answers for emissions data inputs from States**

**for the Potential Additional Controls regional modeling scenario**

**draft - January 24, 2020 - draft**

Background

Questions about the inputs from states for emissions reductions that states want evaluated with Potential Additional Controls Emissions for SO2, NOx, and/or PM in the regional modeling are presented, and answers drafted, for discussion. The intent of this draft document is provide guidance that all states can follow, and there may need to be additional questions and answers added.

**Question 1)** Is it possible to receive an example of data already submitted to WRAP for a particular facility, which WRAP regards as adequate to meet its modeling needs? For example, has North Dakota submitted such data?

***Answer 1)***  *EGU and non-EGU emissions from 2014 NEI v2 in FF10 format are the default for Representative Baseline and 2028 OTB/OTW inputs (which is what’s being used for your state, unless you submit something else).  We only need from you the lines that are changed.  Or, you could ask to replace an entire facility with your new records.  Let me know if you need the Oil and Gas point emissions too, there is a tool from the Oil and Gas Work Group to enable those states to make estimates of potential emissions changes to put in a FF10 file.*

***ND Answer)*** *Yes, “Representative Emissions” data was submitted in June 2019, “2028 OTB/OTW” data was submitted in November 2019. The next submittal is for additional 2028 controls and planned for February/March. This submittal will contain the numbers ND wants evaluated to determine the impact our projected 2028 control numbers have on the visibility modeling. The FF10 file open in an Excel spreadsheet, once you are familiar with the layout and inputs, it’s straightforward to replace the existing data with the updated numbers the state wants modeled.*

*The files ND submitted in June and Nov. could be shared with those interested.*

**Question 2)** Our understanding is that WRAP needs a number at an “SCC-level” that captures annual emissions reductions as of 2028 from emission sources at a facility, if one assumes that one or more control measures are installed and operational at one or more sources within the facility. Can you direct us to a spreadsheet or other document displaying the assumed 2028 “no additional controls” (beyond on the books/on the way) emissions levels that we will use as the basis for calculating the reduced emissions due to new controls? Does WRAP need emission reduction numbers for NOx, SO2, PM, or other pollutants from each emission source within a facility, or only from the facility as a whole?

***Answer 2)*** *Need the estimated emissions you want modeled… at the SCC/release point / unit level. (Same as FF10)*

***ND Answer)*** *Source unit specific inputs are required. States provide the 2028 OTB/OTW “no additional controls” estimates to WRAP; and this is the starting point sources to use when evaluating additional reasonable controls (through the 4F analysis). It is the state’s responsibility to provide the “new” projected tons of emissions with 2028 controls. 2028 control projects, from ND, will be based off the information we have reviewed within the 4F reports we have received.*

**Question 3)** Our understanding is that WRAP needs an emission reduction level for 2028 that a state will send in FF10 format, i.e. SMOKE ready flat file format. Is this correct?  We also understand that the data should be sent as a CSV file within a text editor, rather than as an Excel document, to cut down on formatting issues. Is this correct? Are there any other format requirements that states should meet? Could you describe some of what a FF10 format is and how to create it?

***Answer 3)*** *Yes, FF10.  You can use Excel, just be cautious with commas and quotes, which Excel will mess with.  Sometimes facility names have commas in them. Excel will put quotes around those names so csv formatting is maintained.  If you already have 5 digits in your FIPS, you don’t have to worry about Excel dropping a leading zero (only a concern for Alaska, Arizona, California, Colorado). Sometimes SMOKE will be unable to read FF10 rows where the facility name isn’t quoted (e.g. long names). Farren will check the FF10 files you submit for formatting and put quotes around all facility names as needed.*

***ND Input)*** *Might be helpful to walk through a facility/stack in Excel to demonstrate this. There is a large number of data/rows/columns in the .csv files, which could be daunting if you are unfamiliar with seeing these. But once you know where to look and what to look for it becomes more straightforward.*

**Question 4)** Does WRAP need to know the type of control measure being installed at each emission source, or only the reductions in NOx, SO2, PM that will result from the control being installed?

***Answer 4)*** *For the purposes of modeling, we just need the FF10 files.*

***ND Answer)*** *Only tpy numbers for the FF10 files are needed for modeling. These tpy numbers should, however, stem from a 4F analysis or other information the state has.*

**Question 5)** NMED and Albuquerque have asked their sources to examine control measures only for SO2 and NOx. Is it acceptable for NMED and Albuquerque to submit emission reductions data to WRAP that address only these two pollutants?

***Answer 5)*** *That’s fine but we need to know the unit/release point that is undergoing the reduction.  Then we (or you) can make the FF10 file accordingly.*

***ND Input/Response)*** *Yes, if NM determined that only NOx and SO­2 were having significant impacts on the visibility in their CIAs, these should be the pollutants targeted for updates in the FF10 files. The reduction data will be submitted with updated tpy numbers, not tpy reduction numbers.*

*I.E., if a unit at a facility has projected emissions of 3,000 tpy for 2028 OTW/OTB, and 1,500 tpy with 2028 PAC, you would submit one FF10 file for the 2028 OTW/OTB at 3,000 tpy for this unit and another FF10 file for the PAC at 1,500 tpy for this unit. All facility/unit/emissions are updated in 1 FF10 file for 1 modeled scenario. Results in up to 3 FF10 files (after 2014 data) with unit specific information.*

*Example Table:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SO2 (tons/year)** |  |  |  |  |
| **Facility** | **2014 Base Case** | **2016-2018 Representative Case** | **2028 OTB/OTW** | **2028 PAC\*** |
| Coyote Station | 12,777 | 12,994 | 12,994 | 1,373 |
| GRE CCS 1 | 7,885 | 3,458 | 2,740 | 2,740 |
| GRE CCS 2 | 7,940 | 3,400 | 2,743 | 2,743 |

\* Subject to change

**Question 6)** Facilities that are performing four factor analyses for NMED or Albuquerque are emissions from a variety of years to quantify annual emission reductions that would result from installing controls. Some facilities, for example, choose to use reported emissions data from 2016, or an average of annual reported emissions from multiple years, such as 2016 to 2018. It is okay to supply WRAP with data based on use of these varying emissions years?

***Answer 6)*** *It’s totally up to you (and your facility) to determine what Potential Additional Controls scenario, in terms of SO2, NOx, and/or PM emissions changes from 2028 OTB emissions rates, that you want modeled.*

***ND Answer)*** *Yes, and this will likely vary amongst the sources being analyzed. Some ND facilities used operating load/rate data from the previous 3 years paired with an emissions rate from the last 1.5 years (to determine representative or future emissions). This can happen when operations have been consistent for the last 3 years, but a control project only came online 1.5 years ago. The source should get credit for the new lower rate, but the recent 1.5 year of operation may not be adequate to capture what the representative/future load (capacity) should be, so more historical data is used to represent current/future operations. The key is for states to be able to defend the numbers used which are modeled and will likely be part of the SIP package.*

**Question 7)** Our understanding is that by early March, WRAP plans to begin modeling 2028 emissions control scenarios based on tentative assessments by each state of possible control measures that might be installed at each facility. In other words, a state sending emissions reductions data to WRAP by early March does not constitute or require a final decision by the state on legally enforceable control measures to be installed at a facility. By when should states plan to make such a decision in order to facilitate definitive WRAP modeling of Reasonable Progress Goals for 2028?

***Answer 7)*** *The current target date for states’ inputs is no later than March 16th. Keep in mind this modeling scenario is a “what if” / “best guess” scenario and we don’t expect all reductions to actually occur like we do for the OTW/OTB scenario.  There is no further WRAP modeling currently budgeted after the PAC case.*

***ND Answer)*** *Ideally, the information provided from 2028 emissions controls (projected tons) is based off 4F analysis received from the sources and reviewed by the States. The final state decision isn’t “made” until a SIP package is submitted to EPA, and the implementation of any controls project won’t happen until after EPA approval of the SIP. Since there is currently only one planned run for 2028 emissions controls, it is important the number(s) provided to WRAP are as accurate as possible. ND has informed sources we plan to make our “final proposed” control decisions by mid-summer of 2020. WRAP modeling should be complete by then and ND will know whether or not (based on the PAC numbers modeled), what our path forward is (need additional controls, looks like we’re meeting our RPG, etc.).*