

Monday, July 22, 2019

Notes by Ed Merta, City of Albuquerque

Attendance:

Pat Brewer (NPS), Amanda Brimmer (Denver RAQC), Rebecca Harbage (MT), Craig Henrikson (MT), Sig Jaunarajs (NV), Aislinn Johns (ID), Kristen Martin (OR), Ed Merta (Albuquerque), Tom Moore (WRAP), Tina Suarez-Murias (CA), Kerwin Singleton (NM), Curt Taipale (CO), Elias Toon (AZ).

Action items that resulted from the call:

- Curt will send out a Doodle poll for the week of September 23 to schedule the next call.

1. Approve meeting notes from last call

Approved without revision

2. Volunteer for note taking

Ed Merta of City of Albuquerque volunteered to take notes.

3. Discuss any follow-up questions on Q/d screening tools

Curt opened by asking for any questions on this topic.

Tina asked for an explanation of the TSS map displaying facilities with emissions (Q) greater than 4,000 tons per year. Curt offered to do this off-call and Tina accepted.

The group discussed recent communications by the National Park Service (NPS) with individual states, regarding Q/d calculations. The focus of the discussion differing WRAP and NPS approaches to using the Q/d method as an approach to screening sources for four factor analysis. The discussion addressed the extent to which the two approaches might result in different lists of sources identified as subject to the four factor analysis. Other topics covered in the discussion: the potential for confusion among states receiving data produced by two different Q/d approaches; the extent to which additional Q/d data from NPS could be useful for a weight of evidence analysis; how to address the fact that NPS information covered National Forest Service areas; the NPS role in advocating for visibility improvements on NPS lands; efforts by state air agencies to balance control measures analysis of multiple facilities with available sources.

4. Identifying O&G area sources and state specific point source thresholds

Curt noted that he had asked states to be ready to discuss their thresholds for distinguishing between point and area sources in screening sources for a four factor analysis.

The following is a brief, non-quantitative overview of the discussion. For details and specific numbers on thresholds for emissions reporting and permitting, and for state specific categorization of area, minor, and point/Title V sources, please contact representatives of individual states.

Some of the major points of the discussion were as follows.

Curt described Colorado's thresholds for emissions reporting and for permitting, noting that the thresholds were much lower in the nonattainment area around Denver. In that area, for example, the threshold for a source to report emissions is 1 ton per year for NO_x, a level that in other states might not require an emissions report. Similarly, the nonattainment area threshold for permitting in the Denver area is 5 tons per year for NO_x, 2 tons per year for VOCs and as low as 1 ton per year for particulates. In general, Colorado's emissions reporting system often creates detailed data for very small sources. For example, a 25 horsepower engine at an oil and gas point source may be required to report.

Elias described how Arizona's approach differed from Colorado. Area sources, for example, are not required to report emissions; rather, a registration simply keeps a source on file. The NEI data being used for this Regional Haze planning period does allow county-level area source data to be generated for the state. Arizona used this data to take a Q/d approach capturing 80% of emissions for the state, including from area sources such as paved and unpaved road dust, construction dust, agriculture/livestock dust, and mining dust. Elias noted that coarse mass dominates visibility impairment at most of the Arizona Class 1 Areas above the Uniform Rate of Progress. Arizona will be performing a four factor analysis for the category of unpaved road dust. That analysis may look at paving of roads and other control measures, such as street sweepers, chemical palliatives, and reduction in trips on mining roads.

Ed stated that Albuquerque, in cooperation with New Mexico, is focusing its Regional Haze efforts on Title V sources and deferred to New Mexico on the subject of area sources.

Kerwin stated that New Mexico permits sources above the 10 tons per hour / 25 tons per year thresholds but lacks accurate inventory data for minor/area sources. The state is currently working on an initiative to reduce ozone precursors, which will entail emission work and analysis of area sources, but it's not clear at this point how that effort might tie in with Regional Haze. The state's Regional Haze control measures analysis will deal with Title V sources.

Aislinn described Idaho's efforts as focusing on Title V sources, although analysis of species extinction on Most Impaired Days at Class 1 Areas indicated a role for both point sources and fires.

Curt noted the challenge of doing a four factor analysis when you're not totally clear on how many sources there are and what their emissions are, with emissions reporting thresholds for states seeming to tend toward the higher side. Such limited data would require an approach based on average cost and that would likely come out as too expensive, Curt said.

Tina said that California had nonattainment areas in much of the state. She didn't have the minimum reporting thresholds for these areas ready at hand, but state emissions staff have put together a special regional haze inventory, by county, district, and year. She said that most sources in the oil and gas category are listed as stationary sources. She made note of district-to-district variation in oil and gas regulations, which may set performance standards that are category-wide or source specific. Tina has a good handle on district by district stationary and area sources that affect Class 1 areas. California will break down statewide data into smaller pieces for analysis, to answer questions like whether a source or type of source has enough emissions to affect a Class 1 Area. California plans to look at major sources in other states that might have an impact but not out of state area sources.

Curt followed up with additional information on Colorado. The state is aware that NO_x emissions from engines in Colorado do affect Class 1 areas but typically these sources are not captured by the Q/d approach in a source by source manner. Instead, thousands of engines are sprinkled around the state. Thus Colorado will look at engines as category, not as individual point sources. Curt noted that in many cases enforcement actions have provided the state with detailed data on the cost effectiveness of emission controls for engines. This is because the sources subject to enforcement often have to provide such data in connection with mitigation efforts, which can be imposed in lieu of a fine. Thus, Colorado often has unexpectedly detailed cost data related to engine controls -- Curt cited a 46 horsepower engine as an example. The state is evaluating enforcement-related data in the current Regional Haze planning efforts.

Sig stated that Nevada is focusing on Title Vs. The state has thresholds, varying by pollutant, below which sources are not required to get a permit and for which data is thus limited. Nevada has no gas production, only a handful of oil wells, as well as agricultural engines and pumps limited in number compared to other Western states.

Tom observed that he has visited lots of Class 1 Areas and noted that sources can be found inside their boundaries. Such sources are closest to the ambient air quality monitors and thus can have the biggest measured visibility impact at a site, more so even than area sources that have greater emissions but are further away. This might be a topic worth bringing up in consultation with federal land managers. He noted that the Q/d method looks at just source strength plus proximity to a Class 1 Area and thus is not per se an analysis of the "impact" of a source. This is a subtle distinction but could be important. For example: small towns often exist near national parks as a gateway for visitors; these towns might produce emissions that aren't regulated but could still have an impact on a Class 1 Area monitor nearby.

Curt followed up on Tom's point, noting that in Colorado a highway goes through Rocky Mountain National Park. Emissions associated with that highway aren't controllable. The nearby town of Estes Park has a lot of emissions from traffic and from restaurants, neither of which are controllable. This is an example of the "veneer" of anthropogenic emissions that will always exist near Class 1 Areas, beyond the ability of states to control. This means that the notion of an eventual return to "natural conditions," free of any visibility issues related to anthropogenic emissions, is problematic.

5. Update on each state's four-factor work

Curt reported that Colorado held a stakeholder meeting, which included regulated sources, environmental groups, and federal land managers. Colorado has also held some meetings one on one with sources. Some sources tried to make the case that an improved emissions inventory should result in their being excluded from four factor analysis but Colorado did not agree. One on one meetings have also been held with federal land manager and environmental groups. Sources have not yet submitted detailed technical work.

Kerwin reported that, last week, New Mexico contacted 23 sources [*notetaker's comment: one other source is in Albuquerque, which has contacted that source. -Ed M.*] subject to four factor analysis by phone and followed this up with letters, notifying the sources that they will be subject to the analysis. In the near future New Mexico will hold a phone call with all the Q/d sources. Will put on a webinar for general public in near future.

Craig report that Montana has been talking with 17 facilities over the last few months, fielding questions on the four factor analysis process. One example of a topic covered: assumptions around "on the way/on the books" projections -- sources need to understand that when looking at possible additional controls, they must include controls that are on the way or on books, not just controls in effect at the time of the 2014 baseline emissions year. One source mistakenly tried to interpret language in WRAP's control measures analysis protocol as justifying exclusion of BART sources from four factor analysis, with the apparent assumption that the WRAP document set forth a regulatory standard in this regard. Montana corrected this view, noting that the WRAP document was non-binding guidance for states, not a regulatory document directed at industry.

The group on the call subsequently discussed Craig's observation that Selective Catalytic Reduction (SCR) may now be a feasible control technology for Portland Cement Plants. Craig stated that SCR seemed to be in use at a few more facilities in recent years than was the case during the first Regional Haze planning period.

A BART source on pg. 15 of WRAP protocol -- maybe listing controls would be enough, not full 4 factor. Would that be valid? Portland cement. They think SCR now feasible, thus having SNCR may not be good enough. We told them CM protocol is guidance for states to consider, not a regulatory document for industry to cite in this way. Catalyst costs have come down of late. States may want to check into this.

The discussion of Portland cement plants also noted that some of these facilities are now using tire derived fuel (TDF) as a method of NO_x reduction. The extent of the reduction, though, depends on details of the facility's production volume and kiln design.

6. Other Topics?

Possible topics to address in a future call:

- Discussion of role of area sources and mobile sources in four factor analysis and factors governing whether or not a state should consider these categories in the analysis. Examples: what is "residential combustion and what importance could it have in an analysis of area sources?
- How to account for expected closure of coal fired EGUs in four factor analysis when the closure is not yet legally enforceable.

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