**REGIONAL HAZE PLANNING WORK GROUP**

**CONTROL MEASURES SUBCOMMITTEE**

**Notes of teleconference**

**Tuesday, May 26, 2020**

**Action Items that resulted from the call**

* Agenda for June 22 call of the subcommittee will include discussion of letters states have received from Sierra Club and National Parks Conservation Association.
* Curt would like to hear feedback on the Google platform used for today's call. He will use it for the June 22 call unless feedback suggests we should do otherwise.

**AGENDA ITEMS**

**1. Roll call**

Abq (Ed Merta), AZ (Elias Toon), CA (Tina Suarez-Murias), CO (Curt Taipale & Weston Carloss), HI (Mike Madsen), ID (Aislinn Johns), NV (Steve McNeece), NM (Mark Jones & Kerwin Singleton), ND (David Stroh), OR (D Pei Wu), UT (Jay Baker), WY (Lea McKinley), EPA Region 8 (Aaron Worstell), NFS (Kirsten King), WRAP (Tom Moore).

**2. Volunteer for note taking**

Ed Merta from City of Albuquerque volunteered.

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

Notes approved without changes.

**4. Quick update on each state's four-factor work**

Curt asked states to include any information they may want to share on tons per year emission thresholds for individual emission units at a facility below which the unit might be excluded from four factor analysis.

Abq. On course to finish gathering bulk of information and analysis on potential control measures from Albuquerque's only four factor source (Portland cement facility) by end of June. Will then begin writing up draft results of the analysis and preliminary determinations on cost effective control measures.

AZ. Has completed cursory look at three sources, have passed results along to EPA for their feedback, part of an effort to avoid surprises in comment period later. AZ is sending out emails for additional input on nonpoint sources. Arizona described the process it used to identify emission units that would be subject to a four factor analysis by saying that the state included emissions from all emission points in a facility for the state's Q/d source selection procedure, then based on the results the state selected sources that accounted for 80% of pollutants emitted as those that would be subject to a four factor analysis.

CO. Still doing technical analysis for the facilities Colorado is reviewing; there have been a few write ups on four factor analyses the state has reviewed from facilities. At this point Colorado has nothing to share regarding any determinations that have been made based on the state's review. Please email Curt Taipale of Colorado with any questions.

HI. Need to contact facilities for additional info on analyses the state has received so far. Example of issues that have arisen include interest rate and time horizons used in cost analysis; some equipment that has an air quality permit was not subjected to a four-factor analysis and should have been due to the existence of the permit. On the call the state summarized several other specific issues that have arisen.

ID. Has received initial four factor reviews from facilities. State havs requested additional info from some. Idaho is in contact with EPA Region 10 and has received some feedback from EPA, which has been helpful identifying potential issues. Idaho is working through this EPA feedback and as a result will have to request more info from some facilities. Idaho has receive some assistance from Region 10 on how to calculate fuel switch cost per ton and is working through the info received on that subject.

NV. Have finished review of four factor analyses from facilities, got comments from EPA on these, no big surprises there. Now prepping to send requests for additional info from facilities to fine tune the analysis, hope to have determinations closer to beginning of July. In response to a question from New Mexico, Nevada said it "did get a good amount of comments" from EPA, which went into some depth did raise some flags (for example, use of a 30-year time horizon for a cost analysis on SCR, and other factors that might affect a dollar per ton calculation).

ND. North Dakota submitted emission reduction data in March to WRAP for modeling of potential additional controls, hasn't changed any determinations since then. Is evaluating some additional info, currently finishing draft determinations that will go into SIP. Will hold off formalizing decisions until later this summer.

NM. State is continuing four technical feasibility and cost analysis, has gone back and forth a few times with sources, has begun posting on state's web site the facility responses to state's requests for more information. June 15 is state's next milestone -- New Mexico plans to be ready to discuss and re-engage with industry on information that was included in the state's submittal for WRAP's first modeling run for potential additional controls. State will consult with sources on any additional info that might need to change for the second additional controls model run by WRAP. It will take a couple of weeks to engage with all sources to get their feedback. State is planning a stakeholder outreach listening session on Regional Haze planning for late June.

OR. Oregon said seven facilities out of thirty initially identified for four factor analysis will not have to conduct analysis, based on revised emissions estimates in which Q/d came out to less than 5. So the remaining four factor analyses will be coming in during the period June 1-15, state is getting some in now.

UT. Is reviewing four factors they've got back so far. Has one source still having trouble submitting its analysis and are in touch with them, others have all submitted. State is doing back and forth with those, double checking numbers and data. Jay initiated an email to some states asking about thresholds below which small emission sources within a point source can be excluded from four factor analysis -- Utah did not set this for its process. May need to request additional info from facilities. Jay says thanks to states that provided info on thresholds within facilities.

WY. Wyoming got a majority of requested four factors back, still waiting for a few, reviewing and analyzing what we have.

**5. Area source four-factor review**

Curt (CO): referred to email correspondence on this. Are there questions on this?

Steve (NV): I was one who sent an email on this, just want to get some discussion on this point. EPA region keeps asking us how we're going to tackle area sources, this seems to be recurring topic. Are any states examining this at all and have they had discussion with EPA?

Curt (CO): we've had some discussion on past calls. Every Western state has different permitting/reporting thresholds, that makes it tough in some states that have higher thresholds for permitting or reporting -- they won't have enough information to do a four-factor analysis. Colorado has nonattainment areas and thus really low thresholds, so a source that is an area source in other states is a point source in Colorado, which thus has enough info to do an analysis. Higher threshold means there is not enough info to do a technical analysis, e.g. you don't know the horsepower of engines. For oil and gas, sources have little heaters that are fired at a separator to keep it warm, but a lot of states (including Colorado) don't require permits for these, each is small individually but there are thousands of them, making them a potential large collective source of NOx. There's not a lot you can do with these other than insulate the separator. If you don't have data on the source it's hard to get a dollar per ton cost effectiveness calculation and thus can't go to rulemaking.

Tom (WRAP): seems to me that area source four factor analysis is a huge lift, you need a mechanism to get the information, like a registration program or a permitting program, otherwise the first question a Board or Commission will ask is something like, we see what you want to do but how are you going to do it?

Curt (CO): if you don't know how many sources there are, how much they emit, you can't do a rulemaking. Area source review by Colorado in first Regional Haze planning round reached this conclusion.

Tom (WRAP). Here's an example of what would be necessary for a rulemaking. Several years ago, EPA created a tribal NSR registration program for oil and gas; it did not require a permit, just a registration, requiring sources to report information that could help in a four factor analysis; thus, in theory EPA would have such information available for registered sources after several years and would know more about these sources. But before that program existed there would be no way to regulate the sources.

Curt (CO): even in EPA's realm you can't regulate without information. So a first step a state could consider, is to evaluate minor source programs and decide whether the reporting thresholds a state has are something that could be lowered. This could begin the process of building information base for future regional haze planning. Not enough time to do it with this plan, maybe it could be done in future.

Elias (AZ): we're looking at non-point sources, doing it top down, so we look at National Emissions Inventory (NEI) reported emissions instead of information for individual permitted sources. Arizona is looking at NEI emissions using the 80% threshold from EPA's August 2016 first draft Regional Haze guidance (which said state should do four factor analyses for sources responsible for 80% of total emissions of visibility impairing pollutants). With this approach we identified what's contributing bulk of NOx and PM10 emissions, so we're focusing on paved roads, mining/quarrying, institutional/nonresidential construction dust -- it's a PM10 dominated analysis. Since we're using a top down approach, not looking at individual sources, for construction sites we might (for example) put regulations in to reduce speed vehicles travel at a facility or require that loading of trucks be done only on leeward side, or require counties to pave a certain amount of unpaved roads per year or not build more unpaved roads. It's true that we don't know where all the construction sites are (per Tom and Curt's observations above), but available information for paved/unpaved roads does offer some granularity for determining cost effectiveness; mining/quarrying and nonresidential construction is harder. We're trying to work with construction industry, FLMs, NGOs to see what cost data we can get, trying our best to see what we can come up with.

Curt (CO): we are looking at a coal mine. A state might have major stationary sources with fugitive/nonpoint type sources within the major stationary source, e.g. blasting. But there are physical limits to what speed limits, watering, dust suppression requirements you can put in permit. I tend to regard area sources as those things that aren't registered or permitted; you know you're dealing with an emission source but you don't know what discrete emissions are.

D (OR): we looked at NEI for the state like Arizona did, looked at major contributing sectors, we did crude approximation for counties that touch a Class I Area boundary or are close, then looked at source contribution. We found mobile nonroad equipment to be a concern for NOx. We also looked at emissions from prescribed fire, residential wood combustion, unpaved road dust, crops/livestock; we have other programs that address these things, but we're looking at information from NEI for mobile nonroad diesel.

**6. More discussion on potential extra 2028 model run over summer**

Curt (CO): Tom had indicated earlier that the additional run would occur in July, depending on timing of state decisions based on four factor reviews they've been working on. In Colorado we're still working through our reviews, will not have that done by July. Curt opened the floor to other states, to discuss what would they like to see based on their timing requirements.

Aislinn (ID): we're interested in a second model run for controls, but things are moving kind of slow, not sure how much new information we'll have ready by July, so that's our concern.

Mark (NM): we've been thinking about this a bit, it's come up several times. We've adjusted our schedule realizing we need to have some stakeholder input at this stage rather than later. We'd like to see the results of the first model run before making a decision on controls to model for the second. Given the need to work with facilities getting their feedback on results of control analysis so far, and the goal of holding a stakeholder meeting by end of June, meeting a July 1 deadline to submit emission reduction data to WRAP by July 1 for modeling would be really tough. Mid-July would be possible but still tight. Our preference would be for end of July or beginning of August.

D (OR): we're on similar timeline as New Mexico. Four factors coming in from facilities June 1-15, we have extremely tight timeline to review these, go back and forth with facilities. Soonest we could get something to WRAP for control measures modeling would be mid-July or early August.

Ed (Abq): seconded New Mexico's remarks in favor of a submittal to WRAP in late July or early August.

Curt (CO): acknowledges how challenging it is to go through four factor analyses, engage with facilities and stakeholders to make informed decisions. Any other states want to weigh in?

Elias (AZ): we're finalizing our four factors by end of August.

Tom (WRAP): we plan to present initial control measures model run results on Regional Technical Operations group call in early June (this call has not been scheduled yet). We hope to show the states how different visibility projections could be affected at Class 1 Areas. That's a "big sledgehammer" -- changing emissions from a few sources in limited geographic areas means that visibility in some Class I Areas will be affected, others won't be; it will be informative to see which is which. For the second control measures model run, we're happy to flex forward in time, to July 15 or July 31. In my mind, I don't see the second model run as closely linked to what goes into a permit or anything like that, it's really an additional layer of "what if" data. There will be additional corrections in the second control measures run, including possible minor emission increases to account for updated data, as well as additional emission reductions. WRAP will flex the date based on state input but Tom emphasizes this is a what if exercise, not a finalized visibility estimate.

Mark (NM) question for Tom: after we provide emission reduction data for second model run, how long will it take to get results after that?

Tom (WRAP): I'd like to allow a month from the due date, but these are very targeted changes; it takes a week to 10 days to have computers run the modeling; there's some setup and QA and questions before starting; then post processing, all of which adds up to about a month.

Mark (NM) to Tom: what if we wanted to do mid-August submittal to WRAP for the second run, would that be too long to wait?

Tom (WRAP): if states that are going to submit proposed reductions want to wait as late as September, that's also fine, it's up to you all. Some states will be much further along with more formal consultations with FLMs, so later info is less useful to them; they would need to do some explaining to stakeholders regarding availability of results; but a delay in the submittal date until early fall would be compatible with the workload at WRAP. It's not super complicated to do the modeling once we have the inputs, so we're hoping states can think through what the results of the first control measure run mean in two or three weeks. So maybe we defer due date until after you've had a chance to look at the results of the first run.

Curt (CO): said he likes Tom's approach.

**7. Other Topics?**

Next call: Mon. June 22, 10:00 a.m. MDT.

After discussion it was agreed that letters sent to states by Sierra Club and National Parks Conservation Association would be discussed on the next call.

Curt asked for feedback on the Google platform used for today's call. He will plan on using it next time unless there is feedback suggesting we should do otherwise.