

Thursday, October 31, 2019

Notes by Ed Merta, City of Albuquerque

Attendance:

Tim Allen (FWS), Jay Baker (UT), Rick Boddicker (SD), Philip Gent (WA), Gary Huitsing (WA) Scott Inloes (WA), Aislinn Johns (ID), Rob Leteff (WY), Steve McNeece (NV), Ed Merta (Abq), Tom Moore (WESTAR/WRAP), Michael Orman (OR), Rhonda Payne (MT), Kerwin Singleton (NM), David Stroh (ND), Tina Suarez-Murias (CA), Curt Taipale (CO), Weston Carloss (CO), Ryan Templeton (AZ), Elias Toon (AZ), Mary Uhl (WESTAR), Aaron Worstell (EPA Region 8),.

Action items that resulted from the call

- Curt to send his control measures subcommittee email list to Ryan, Ryan will then add to the spreadsheet the information sent by North Dakota and EPA info that he still needs to do. Ryan says this might take a while, there's quite a bit in there. He will update the spreadsheet with the ND/EPA info, will put the updated version in a Google doc where other states can edit it, update the spreadsheet with their information. Ryan will distribute a link to this Google doc to Curt's email list. If states have trouble accessing Google docs, they can send their updated information to Ryan, who will add it himself. Ryan asks that states doing this please put their information in the same format and organization that is used in the spreadsheet -- contact Ryan with questions.
- Jay will send a message to the Regional Haze Planning Work Group email distribution list, asking for their input on changes to the control measures cost threshold spreadsheet and letting people know how to add the information.
- Aaron from EPA Region 8 will add information to the control measures cost threshold spreadsheet regarding:
 - Navajo Generating Station BART
 - Four Corners Generating Station BART
 - BART and reasonable progress control measures information from FIPs for Region 8 (with notation on which actions are in litigation).
- Curt will send Colorado technical support documents for four factor analyses to Aislinn Johns of Idaho.
- Ryan will send Pascale Warren at the state of Idaho copies of presentations given to Arizona permitting staff on four factor analysis process for Regional Haze.

AGENDA ITEMS

1. Volunteer for note taking.

Ed Merta volunteered.

2. Approve meeting notes from last call.

Approved without revisions.

3. Workbook summary of BART and RP controls and costs from Round 1 WRAP RH SIPs (Ryan)

Arizona has developed a spreadsheet displaying cost effectiveness threshold information from BART and reasonable progress determinations during the first round of Regional Haze planning. Ryan presented the spreadsheet during the call to see if other states might find the spreadsheet helpful and might be able to help edit and update it.

Ryan related that as part of its control measures assessment for the second round of Regional Haze planning, Arizona thought it would be helpful to look back at SIPs from the previous round and compile information about cost-effectiveness determinations in previous BART and reasonable progress (RP) actions. Such information might be applicable to sources being looked at in the second round.

Arizona started by looking at first round RP sources with a focus on NO_x controls, hoping to build an inventory of cost information on previously considered control measures and thus get sense of what is considered reasonable as cost for a control strategy. Arizona built a spreadsheet of such information, then decided to look at other pollutants, beyond just NO_x, focusing on Western states. The goal was to get a better idea of what a reasonable cost per ton might be, in order to have a better basis for decisions in this round of planning. The spreadsheet was not intended to be something to rely on entirely, but Arizona thought it would be good place to start, to have a history of dollars per ton thresholds in mind when holding conversations with regulated sources about their four factor analyses.

Ryan walked through the spreadsheet on the call. It was put together by laboriously locating and then sifting through the Regional Haze SIP submittals of Western states. The spreadsheet shows:

- which state was doing a particular four factor evaluation;
- the facility;
- the potential control measure and pollutant being evaluated;
- whether the evaluation was part of a BART or RP determination;
- annualized costs;
- emission reduction obtained;
- any visibility benefits that were modeled;

- dollars per ton (or deciview, if applicable);
- whether or not EPA approved the control measure as "reasonable."
- a comments field for information on the other three factors, which was filled in for some but not all of the sources in the spreadsheet;
- the internet link from which the SIP was obtained.

Ryan said it was VERY cumbersome to go through individual SIPs and pull this information out. Sometimes there may have been multiple iterations of analysis in an action that Arizona's spreadsheet didn't catch. For example, analysis might have differed between a proposed versus final action; maybe a FIP was done after submittal of a SIP. So Arizona can't say with 100% certainty that all info in spreadsheet is correct.

But Arizona wanted to roll this out for other states to look at. The spreadsheet is limited in the number of instances it records.

If there's interest among other states, Arizona's spreadsheet could be expanded, reviewed for up to try to make it more up to date and current. It could be built upon and expanded.

Ryan reported that, prior to today's call, he sought and received feedback on the spreadsheet from two other states: David Stroh from North Dakota, Curt Taipale with Colorado. Arizona has also shared the spreadsheet with EPA, and they provided additional information -- but this information is not in the version being displayed on today's call. Arizona can add that information if there's interest.

Aaron from EPA Region 8 said Don Shepherd of National Park Service went through a similar effort for BART actions in round 1 of Regional Haze planning. Don's spreadsheet broke sources out into EGU vs. non EGU, SO₂ vs. NO_x. Aaron doesn't know if what Don came up with is readily available; someone might want to check on that, see if there's sources not included on Arizona's spreadsheet (Aaron's sense is that this is in fact the case)

David Stroh: says in his comments to Arizona he sent in North Dakota specific information. He suggests other states could send information of the own to help complete this spreadsheet, have all the info in one place.

Curt noted that the North Dakota edits aren't yet in the spreadsheet version being discussed on today's call.

Jay Baker: can we add more information on the other four factors, not just cost, so we have information on how that weighed into the control measures decisions?

Ryan to Jay: we focused on cost, but there is a comments section that does not have a lot of detail but does briefly cover especially noteworthy considerations related to the other three factors that may have played key role in the control measures decision.

Tom: had dinner with Philip Gent from Washington this week, he shared interesting info on their first round planning, covering how parts of their SIP turned into FIPs on point sources. Can Washington share their info? on this

Philip is on call -- he says that, in one case, an evaluation was done by Washington for an aluminum smelter, for BART, the control measure in question (wet scrubbers) was deemed not economically feasible, EPA disagreed, said the control was feasible, decided to do FIP. But after discussion of certain confidential business information, EPA decided that for this particular facility wet scrubbers were not feasible even though nationally they are. In a second case, Washington did an evaluation for a refinery, for a BART action -- analysis showed that the timeframe for control implementation would be outside of timeframe of the first planning period. Again, there was a FIP process but the same outcome resulted -- EPA came to the same conclusion as the state. So EPA's ultimate decision was just to go with encouragement to consider controls during the second planning period. Lots of EPA effort for not much outcome.

Tom to Philp: can you put down some data and notes on these two actions in the spreadsheet?

Philip: we can take a look at it, see what we can do, but says he can't promise a time frame due to current workload.

Elias of Arizona: says he wants to be protective of Ryan's time, asks if we can we make the spreadsheet a Google doc for editing by the subcommittee, have states go in and edit themselves as opposed to states flooding Ryan with emails and making him responsible for editing.

Curt: most people can share Google docs but California & maybe others have problem with this, due to the technology implementation at their agencies. Curt says he can certainly post the spreadsheet, or if Ryan wants to post it and send the link to everybody we could do that.

Ryan: maybe better for Curt to take charge of this.

At this point the group held a discussion of the possible logistics of sharing and editing the document. Curt wants to respect that it's Ryan's document.

ACTION ITEM: Curt to send his control measures subcommittee email list to Ryan, Ryan will then add to the spreadsheet the information sent by North Dakota and EPA info that he still needs to do. Ryan says this might take a while, there's quite a bit in there. He will update the spreadsheet with the ND/EPA info, will put the updated version in a Google doc where other states can edit it, update the spreadsheet with their information. Ryan will distribute a link to this Google doc to Curt's email list. If states have trouble accessing Google docs, they can send their updated information to Ryan, who will add it himself. Ryan asks that states doing this please put their information in the same format and organization that is used in the spreadsheet -- contact Ryan with questions.

Ryan noted that three people worked for Arizona on pulling info out of other state SIPs and this was extremely labor intensive.

Curt: Colorado had a situation where the state's Regional Haze plan was approved but then litigation by environmental groups happened, some of the controls that were in the SIP actually changed as result. So it's not necessarily one document you need to look at to get the whole story. You may have to follow the trail further in the Federal Register, and this can be difficult → hard for other states to know, looking in from outside, what the final outcome was.

Phil: when the aluminum smelter source (discussed above) updated its Title V, there were notes on what the underlying requirements were, they have to pull in all the underlying requirements for the Title V process -- that's one way to find out what are final requirements that ended up on a source. Title V permit acts as final word.

Tina: suggests that the Regional Haze planning work group could send something out to all contacts for that group, asking them to fill out information. Jay said he could do that. Curt notes that most states are on distribution list for Control Measures subcommittee, maybe not Hawaii and Alaska.

ACTION ITEM: Jay said he's happy to send out a message to the Regional Haze Planning Work Group.

Tom: would information on the BART process for Navajo Generating Station and Four Corners Generating Station also be useful? Could Aaron of EPA Region 8 take that on?

ACTION ITEM: Aaron: yes, he can add those, can also put Region 8 FIPs in the spreadsheet, they're in litigation but can indicate this in comments.

4. More discussion on EGU retirements and accounting for useful life in the four factor analysis

Curt says a number of states have said they want to discuss this topic. Didn't have to address this in first plan period. In this round, a lot of coal EGUs facing retirement, or have retired, wasn't clear in first round that this would eventually happen. Cost of generating coal fired power has changed, renewable energy much more competitive. How to approach remaining useful life of coal EGUs in four factor analysis is a valid concern. Curt opens floor to specific questions.

Aaron of EPA Region 8: key issue is how to figure out amortization period for cost effectiveness factor in four factor analysis. He has raised this with national work group of EPA and HQ. Feedback he got: amortization should begin on the compliance dates; for example, don't use 20 year life for SNCR and 30 year life for SCR; for the amortization period, use the time span that dates from initial compliance date up through retirement date, which has to be federally enforceable.

Curt to Aaron: that's the answer I expected. Let's think this through out loud about compliance date. State goes through 4 factor analysis, decides on a control, based on a retirement date to be memorialized in permit. Would the beginning compliance date be the date when EPA approves states SIP, with an effective date sometime after that approval?

Aaron to Curt: Aaron didn't get clear answer on that. In the round 1 reasonable progress and BART actions, generally the compliance date in Region 8 typically was five years after EPA's final approval of the SIP. That made sense with, for example, SCR or a scrubber; the compliance date following EPA approval just depended on which particular control technology was involved and how long it takes to implement it. For this round, five years might be excessive. EPA has discussed whether compliance date should continue to be linked to EPA approval, but Aaron's

personal, unofficial opinion is that states would probably want the confidence of knowing that EPA has approved the control before requiring compliance. This is just his personal view, he emphasizes, not an official EPA position.

Curt: Regional Haze rule in Round 1 said controls had to be installed "as expeditiously as practicable" but no later than 5 years, or words to that effect?

Aaron to Curt: yes, that's exactly what it was.

Curt: I haven't read EPA guidance extensively.

Tina: she points out that there is a two year CAA time period for SIP approval, but the visibility improvement from control measures has to happen by 2028, right? Because that's the modeled date WRAP is going with for projected visibility improvements?

Aaron to Tina: I don't know. If EPA approved a SIP by 2023 (two years after 2021 due date), and there's a control that only takes two years to put on at a facility, like SNCR, then sooner than 2028 would be doable.

Curt to Tina: once you get to under 15 year remaining useful life, amortization period is shorter and thus cost is much more expensive.

Tina: 5 years after 2023 (two year limit) is 2028. Could we just use that as the compliance date?

Curt: I think that might be too long of a period. In first round, a lot of states got SIPs to EPA in period 2010 to 2012. Colorado submitted its SIP in 2011, EPA approved it in 2012 or so. Sources had basically until end of 2017 for Colorado to put on controls -- this date was obtained by counting from effective date of EPA approval. A lot of sources tried to drag out compliance to the very end of the specified compliance period.

Tina: she clarifies that CAA requires two years after submittal for EPA to issue approval/disapproval. If calendar works the way it's written, 2 years after 2021 would be 2023, five years later is 2028.

Curt: hopefully EPA puts something in writing.

Aaron: during the call, he looks at the August 2019 guidance, pg. 45, relays what he's looking at to the call. The guidance addresses compliance deadline. Gist is that compliance deadlines should be specific to the source and the particular control technology. For example, for SNCR, experience shows installation is doable in two years, then that's what you should do. Guidance doesn't seem to address how EPA approval date is factored in. Source has to be meeting emission limits by the "compliance date."

Curt: sources tend to install controls long before compliance deadline to make sure they can actually comply. Thanks Aaron for looking into that.

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

Curt conducts a roll call of air agencies, asking for an update on their status.

Albuquerque: received draft analysis from its only source on September 16. Albuquerque has responded with detailed comments, source is on course to deliver revised draft by November 22.

Arizona: is working with 12 point sources right now, they are all doing their own analysis. They are supposed to get analysis to state by December 1. Arizona is answering questions from sources as we go. Will get back to them with requests for revisions, has a team working on this so not overloading any individual. Nonpoint sources: state is looking at four source sectors, working with stakeholders on information regarding cost, feasibility, all the other four factor info. Arizona will do its own internal four factor analysis for these four sectors, based on input from stakeholders.

California: has existing programs in place, has no facilities over 4000 tons combined emissions. Is trying to line up facilities on Q/d list with existing control programs, verify what current levels of control are; we may not have any improvements to be gotten from those facilities but don't know for certain yet. There are other programs in California that may have already forced stringent level of control. We were told we had to verify that.

Curt to Tina: you don't have to worry about a lot more controls due to nonattainment area requirements.

Tina: yes, legally stronger controls are in place. We do actually have two sources over 5000, one is an airport, one is military base. We're working with districts on these to see what else could be done within legal considerations.

Colorado: we have requested submittals from a number of companies, due date was September 30. We got 13 submittals. Two sources are closing before 2021, state will not require for factor analysis for them. Other sources asked for more time, we're working with them to get analyses by a variety of dates in November and December. Colorado is working on reviewing the analyses we have received.

Idaho: has contacted all sources via letters in August. Has followed up with calls and communications with each facility from Q/d list, has also held in person meetings. They facilities are starting work on their analyses with a due date of December 1. We've had some facilities asking for extension, which doesn't leave much time for agency to make decision. Agency already had not much wiggle room with the December 1 date. What does it mean if they don't give us any information? Facilities are requesting four factor analyses templates. We've given them examples from North Dakota and referred them to EPA guidance. Have any other states have provided a four factor template for their sources?

Curt: I haven't really seen anything like that from states. He can give some examples of four factor technical support documents that Colorado has done, which show what kind of info is in the analysis.

ACTION ITEM: Aislinn - yes, if Curt could send that it would be helpful. Some of the facilities taking their time on starting despite our calls, we'll see how it goes.

Curt: one technique to motivate them, state can say it will do the estimates itself -- remind sources they're the experts and it's in their interest to provide the information.

Aislinn: we've been talking to permit staff about how to do four factor analysis, feedback from them is that it's their first time doing Regional Haze, they want to know what to look out for. Idaho is reaching out to EPA Region 10, asking what would be key approvability issues. Will be asking this of other states, researching key factors to keep in mind.

Ryan: we're working with our permit group as well. We put together a couple of presentations on what's involved in a four factor analysis and how to do cost analysis, referring to EPA Cost Manual and the steps in that resource. As discussed earlier in this call, Arizona has also been referring to previous BART and reasonable progress determinations for specific types of facilities.

ACTION ITEM: Ryan says he can send Idaho the presentations that were delivered to permit staff.

Aislinn: yes, great! Please send to Pascale at Idaho.

Montana: has 17 sources subject to analysis. Analyses were submitted September 30, state is now reviewing. We can share these if others would find it helpful.

Nevada: most of their sources have begun their analysis. State trying to decide how to approach airports. Looking at some area categories.

New Mexico: working with 23 sources, November 1 deadline to submit analyses. Have gotten some already, starting review next week. One company requested two week extension, another early December. State granted both of those. Working with a couple volunteers with major source permitting staff to review submitted analyses.

North Dakota: all analyses that we have received are online at agency website. State has responded and received revisions. State wants consistent approach on interest rates, choosing correct control measures. See our website, Regional Haze section. Next steps: selecting measures that will be determined as necessary to make reasonable progress.

Oregon: no report.

South Dakota: sent letters to sources in July, gave them until end of October to submit, are waiting for those.

Utah: working with 10 sources, meeting with them now, working with them to get their analyses done.

Washington: working with 19 sources. Met with sources from one sector on analyses due December. 6. Will be meeting today with sources from another sector. Washington will be addressing other sources by approaches outside the scope of four factor analysis, those approaches will go into the SIP, are on the books/on the way.

Wyoming: working with sources to get analyses submitted by mid-November.

6. Other Topics?

Next call will be November 25, Curt will send invite.