

**Monday, November 25, 2019**

**Notes by Weston Carloss, Colorado**

**Attendance:**

Elias Toon (AZ), Ryan Templeton (AZ), Tiffany Anderson (AZ), Tina Suarez-Murias (CA), Curt Taipale, Weston Carloss (CO), Aislinn Johns (ID), Pascale Warren (ID), David Stroh (ND), Kerwin Singleton (NM), Ed Merta (NM), Steve McNeece (NV), Philip Allen (OR), Jay Baker (UT), Gary Huitsing (WA), Philip Gent (WA), Tim Allen (FWS), Tom Moore (WESTAR/WRAP)

**Action items that resulted from the call**

- Each state will review the Round 1 BART/RP control and cost spreadsheet created by Ryan (AZ), and update the Google Sheets document as needed.
- Each state will submit its final Q/d threshold information to Curt (CO) so he can create a summary table.

**AGENDA ITEMS**

**1. Volunteer for note taking.**

- Weston Carloss 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)**

- Reminder of last month's discussion about Arizona's hard work to develop a spreadsheet displaying the selected controls and cost effectiveness threshold information from BART and RP determinations during the first round of Regional Haze planning. This information should be a valuable resource to review the cost effectiveness thresholds and control technologies for specific source categories selected by each state in the first round. Ryan requested additional information/corrections from the other states. He also

made the spreadsheet available as a Google Sheet and shared a link to the document with the group so everyone can make edits.

**ACTION ITEM:** Each state should review Ryan’s spreadsheet and make additions/corrections as needed.

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

Curt continued the discussion from last month on how to determine remaining useful life for sources as this will greatly affect the amortization period used in the cost effectiveness step in the four factor analysis.

- **Reminder: Compliance Date = Date of SIP Approval + “Reasonable” Implementation Time for the Specified Control Technology**
  - SIPs must be submitted in 2021 and EPA generally takes around 2 years to approve. This places the SIP approval date around 2023, possibly 2024.
    - SCR may take up to 5 years to install and startup. This places the compliance date near the end of the 2028 planning period for Round 2. Other technologies, such as SNCR, take less time and should fall within the Round 2 planning period.
  - EPA doesn’t provide clear guidance for what is a “reasonable” implementation time
    - EPA guidance uses the phrase “as expeditiously as practicable” to account for the fact that some sources may require much longer to put controls into operation. Retrofits will generally require more time than new facilities and some sources may have very unique configurations or operating scenarios that make control installation difficult.
    - EPA Cost Control Manual may offer some guidance for specific control technologies.
- **Amortization Period = Retirement Date – Compliance Date**
  - The retirement date needs to be federally enforceable.
  - In Round 1, if a source did not provide a set retirement date, a 15-year or 20-year amortization period was chosen, depending on the source.
- **Tina asked the group: How do we address controls that may be installed after 2028? One example is facilities with regular maintenance outage schedules that may occur after 2028.**
  - Curt to Tina: In Round 1, EPA rejected EGU controls that would be installed after 2018 since these would be placed in service during the second planning period. Based on this, controls placed in service after 2028 would effectively be installed during the third planning period. These would probably be rejected by EPA for Round 2 SIPs.
  - On a related note, Washington mentioned that refineries would prefer to install controls during their standard maintenance cycles. Requiring an out-of-cycle

shutdown could cost the refinery millions in revenue, effectively increasing the cost of the controls and potentially making them too costly to install. However, following the maintenance cycles can make the controls cost effective, but may delay installation until after 2028.

- It's difficult to give general guidance on whether to delay the installation to Round 3 to lower the control costs, or spend more on controls to achieve the emissions reductions during Round 2. Each state should discuss maintenance schedules and the cost of out-of-cycle rebuilds/maintenance with its sources and weigh these costs against the required emission reductions to demonstrate reasonable progress.
- Tina asked the group: Which states have refineries, cement, and glass plants so they can consult with each other on how to address the timing of control installation.
  - WA – refineries, cement, and glass
  - MT – cement
  - UT – cement
  - OR – cement, possibly glass
  - CO – a refinery, cement, and glass

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

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

- California: No update.
- Colorado: Colorado has received submittals from 13 of the 20 sources on its list. Two sources are closing before 2021, and the state will not require four-factor analyses from these two sources. The remaining 5 sources should submit their analyses by mid-December 2019. Colorado is reviewing the analyses it has received.
- Idaho: Idaho contacted all sources via letters in August. The state has had follow-up communication with the sources and hosted in-person meetings. The facilities are working on their analyses which are due by December 1, 2019. The state has not received any analyses so far.
- Nevada: No update
- New Mexico: New Mexico has received four-factor analyses from all sources except an EGU, which is due the first week of December 2019. State is notifying Oil & Gas sources that they need to perform four-factor analyses on flares and processing facilities.
- North Dakota: North Dakota is scheduling meetings with environmental staff for EGUs. No additional updates.
- Oregon: Oregon is close to finalizing its list of sources and sending out letters to notify the sources.
- Utah: Utah is waiting on four-factor analyses which should arrive in late December 2019 or early January 2020.
- Washington: Washington has received many source analyses, which it's reviewing. It is awaiting analyses from one sector which are due on December 6, 2019. The state is reviewing the path forward for refineries and also looking at chemical and pulp/paper plants.

## 6. Other Topics?

- Idaho asked: Is there a master list or summary table of the final Q/d thresholds used for the sources in every state?
  - No one is aware of an existing table listing the final Q/d thresholds used by all states.
  - Curt offered to create a table if each state can send in its information.
    - The June 20<sup>th</sup> call had a presentation with an early version of a table which can provide a starting point for creating a final table.

**ACTION ITEM:** Each state should review send Curt the final Q/d thresholds used for its sources so he can create a summary table.

- Next call will be January 27th, 2020 at 10:00 MST. Curt will send the invite.