WRAP – Oil and Gas Work Group Call Agenda

Tuesday, June 11, 2019 (90 minutes) 10:00 am (AK), 11:00 am (PT), Noon (MT), 2:00 pm (ET)

1. Welcome/Introductions (Amanda Brimmer)

- Rotating Call Note Taker Mark Jones to take notes.
- Roll Call: Amanda Brimmer, Molly Birnbaum, Mark Jones, Darla Potter, Curt Taipale, Dale Wells, Jeffery Vukovich, Eileen Steilman, Kirsten King, Andrea Stacy, Amnon Bar-Ilon, Ryan Templeton, Jennifer Snyder, Leslie Vaculik, Rebecca Harbage, Theresa Alexander?, Roslyn Higgin, Debbie Miller, Rajashi Parikh, Tennille Denetdeel, Angela Seligman, David Stroh.

2. Review Agenda (Amanda Brimmer)

completed

3. Announcements

- June 20 noon RHPWG Quarterly Outreach Webinar (Amanda Brimmer)
 - o Will include OGWG update, Regional haze work groups updates and states
 - o Encouraged to attend and participate
- WESTAR/WRAP Regional Haze Principles of Engagement (Amanda Brimmer)
 - Approved by board last year how we go through the process on deliverables for each of the work groups for completing inventories, surveys, what not.
 - Welcoming participation, particularly the tribes and other groups not engaged
- RHPWG EI & Modeling Protocol Subcommittee 2014 Shakeout Modeling Revisions (Amanda Brimmer)
 - List of revisions include:
 - California submitted a complete replacement of 2014 emissions for all anthropogenic sources.
 - O&G source emissions were adjusted for selected relevant states, based on the work of the O&G workgroup
 - Pima County (Arizona) submitted emissions changes
 - 5 non-EGU facilities to be added
 - 1 O&G facility to be added
 - 3 non-EGU facility datasets to be replaced
 - 1 EGU facility dataset to be replaced
 - North Dakota identified 1 facility to be switched from O&G sector to non-EGU sector
 - model boundary conditions changes (international anthropogenic emissions vs international natural emissions) were adjusted to account for over-predictions of sulfur and ozone
 - o response to comments minimal

4. OGWG Road Map Phase II (Amnon Bar-Ilan – Ramboll)

- See presentation WRAP OGWG: O&G EI Phase II Update
- Task 1 Base Year Inventory (v2) (memo, OGWG drive including spreadsheet)

- o Review of Baseline 2014 inventory was requested by June 18, 2019
 - UPDATE: Deadline has been updated to June 25th
- WRAP V1 to V2 inventory updates by agencies and operator survey responses
- John noted still issue of tank control capture efficiency
 - Project Management Team agreed upon continued use of 100% except for other CO areas (Dale Wells) different values
- Summarized inventory changes from V1 and V2 NOx and VOC
 - Williston decreased Hp hr per spud. Hydraulic more efficient at process
 - Fracturing engines substantial increase
 - Per hp, substantial V1 input functions
 - Shift in the technology that is being used and longer lateral wells. More or larger engines
 - · Increased use of artificial lift.
 - Decline in liquids production
 - · Need for artificial assisted lift
 - Some basins changes resulting in methodology and # of sources;
 How we are developing the inventory rather than reflecting production and controls.
 - Permian or Powder increase in activity that increase is moderated by control programs
- o Changes with time from 2008 to 2014-2016 shown
 - Powder River has changed type of production over time
 - 2008 Emissions CBM Powder now more conventional oil and gas development with the new technology available..
- Some draft slides look at EPA derived intensity per unit of production
 - Not reflected in the report
 - Green river, Denver, Piceance, --- control programs and inventory consistent methodology
 - Perhaps show effect of control programs to address NOx emissions ---- downward trend
 - Great Plains, one of most emissions intensity basis ----- but not that much activity.
 - Some changes with time are due more to methodology of the inventory.
 - Capturing sources not in previous inventories
- Task 2 Forecast Scenarios (OTB controls)
 - o Initial info in a few weeks to later in the Summer
- Task 3 Forecast Scenarios (Additional Reasonable controls)
- Status, Schedule, & Looking Ahead
 - Ramboll has a slide in their progress report about processing and timing for the work to accomplish 2017 NEI application of the OGWG survey results as "factors" in the EPA nonpoint tool.
 - We don't have that work in our contract with Ramboll, nor do we have it in the WRAP Workplan which describes the OGWG effort.

- EPA has asked for input into NEI 2017 V2 tool by June 30th, 2019
- o It was decided a call with states and EPA would be set up to discuss ASAP.
- Call with Jeff V. for 2016v1 + projections and Jennifer for 2017 NEI, so we can
 outline those milestones to address with Ramboll beyond the core western
 regional modeling support tasks they already have.

5. Tribal Minor Source Inventory (Tennille Denetdeel – Navajo Nation EPA)

- See <u>presentation</u> "Navajo Nation Minor Source Regulations."
- Require all new minor sources and those under going a modification to obtain a "unitary permit" contain both preconstruction and operating permit
- Existing sources must obtain an operating permit if they are above the minor source threshold
- Sources below the minor source threshold must register
- The Tribal Minor New Source review rule will remain in place until the NN Minor Source Rule has been approved
- The NNEPA AQCP/OPP will respond to comments
- Take the regulations and get approval from the Navajo Nation Resource and Development Committee
- # sources (oil and gas registration) 158 oil and gas facilities
 - o sources under tribal NSR. ---- 2443 tons NOx and 437 tons VOC
 - o thresholds are 5-10 tons per year of pollutants
- Program and staffing for implementing it
 - o Fees fund staff under that program
 - o 2-3 additional staff for the minor source
 - o Annual inspections, recordkeeping, etc.

6. RHPWG Control Measures Subcommittee (Curt Taipale - CDPHE)

- See RHPWG _ Control Measures Subcommittee Oil and Gas Coordination presentation
- diverse membership
 - o Task 5 –Allows states flexibility in approach
 - Q/d analysis work that Ramboll did all Class I areas in Midwest Alaska and Hawaii, Default settings
 - State level or look at class 1 area
 - o EPA guidance 80% of emissions thresholds recommended guidance
- Notifying the companies and looking at 4-factor analysis
 - o Some states working on control analysis now.
 - o Analysis done by the end of the year need to estimate 2028 emissions.
 - State methodology: Many states using Q/d of 10 screening of greater than 25 tons per year
- Ramboll developed tool to look at Q/d for WRAP states
 - o NOx, SO2, and PM emissions
 - Oil and gas area source categories, some states considering categorical 4 factor analysis
 - Depends on states permitting thresholds
 - In CO low thresholds
 - CO did analysis they will share for First RH SIP

• Colorado's initial RH 4-factor analysis will be provided to the OGWG

7. Next Steps & Planning for Next Calls (Mark Jones)

- Reminder that comments are requested by June 18th on the Baseline 2014-2016 OG EI for the WESTAR-WRAP Region (UDATED to June 25th)
- Another project management call to be held TBD. Let co-chairs know if you would like to attend.
- Next Call August 13, 2019
 - o Volunteer notetaker needed.
- Website Posting OGWG Materials www.wrapair2.org/OGWG.aspx
 - All presentations and notes will be presented on website and links to draft documents including inventory spreadsheets.