WRAP – Oil and Gas Work Group Call Agenda (and notes)

Tuesday, August 14, 2018 (90 minutes) 10:00 am (AK), 11:00 am (PT), Noon (MT), 2:00 pm (ET)

1. Welcome/Introductions (Mark Jones)

- a. Rotating Call Note Taker Andrea Stacy & Darla Potter
- b. Welcome new OGWG participants
- c. Roll Call: Amanda Brimmer, Molly Birnbaum, Stephanie Huber, Alex Huth, Curt Taipale, Dale Wells, Eileen Steilman, Adam Rookey, Mark Jones, Dave Aguirre, Darla Potter, Sharay Dixon, Jennifer Snyder, Ann Mebane, Andrea Stacy, Theresa Alexander, Tom Moore, John Grant, Frank Forsgren, Jay Baker, Tina Suarez-Murias, Gail Tonnesen, Kevin Briggs

2. Review Agenda (Mark Jones)

3. Announcements

a. MJO 2016 Modeling Platform Effort (Tom Moore):

This effort is to develop a national collaborative modeling platform; the goal is broad national participation. Currently a number of EPA OAQPS staff, as well as representative from MJOs and numerous states participating. The base year for the platform is off the NEI cycle (year 2016). It requires substantial inventory and other modeling platform development work. Sector workgroups include, mobile, EGU, non-EGU point sources & oil and gas efforts – if folks on the OGWG are interested in the oil and gas aspect, please talk with Tom Moore. Plan to have a robust modeling platform with a 2016 beta version and first try 2023/28 projections in late 2018 and a more complete 2016v1 and second try 2023/28 projections by next March. The following wiki page provides additional information for those who would like to learn more about the effort: http://views.cira.colostate.edu/wiki/wiki/9169.

b. WRAP Workplan Implementation Guidance – Communication/Coordination (*Darla Potter*)

Darla would like to notify the OGWG of a recent Communication/Coordination document that was developed by the WRAP Technical Steering Committee (TSC). The OGWG has essentially been following the guidelines this document. The goal of the document is to establish consistency in communication across project teams, subcommittees and workgroups. The document includes guidelines for website posting documents and work products as well as coordination. Another Implementation Guidance is under development for completion, dissemination, and sharing of work products and deliverables and will be brought forward to the OGWG when complete. Please send any questions to Darla Potter.

c. RHPWG – Emissions Inventory & Modeling Protocol Subcommittee update (*Tom Moore*) This is an umbrella group under WRAP organization to gather feedback from RH planners across the region. The group Chair is Farren Herron-Thorpe with WA Dept. of Ecology. The purpose is to facilitate states taking ownership of the data and identify

questions that need to be answered. Essentially it helps states have a more full ownership of technical data used in the regional analysis process. Other workgroups (e.g. OGWG) provide key inputs. If you are interested in becoming involved in this group, please contact Tom Moore. To learn more, see the Subcommitee page on WRAP website: http://www.wrapair2.org/RHP_InvMod.aspx

And the wiki on the Intermountain West Data Warehouse: <a href="http://views.cira.colostate.edu/wiki/9191/western-us-regional-analysis-2014-neiv2-emissions-inventory-review-for-regional-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-neiv2-emission-analysis-2014-ne

d. Other announcements from work group members / advisors

Frank Forsgren (NV): Frank is a co-chair for the <u>Technical Steering Committee</u> (TSC). To promote transparency and coordination pointed out that TSC has initiated process to update on product progress. You can find these on the Technical Steering Committee website: the post the monthly workplan progress update ppt. TSC progress reports for each workgroup call.

Darla Potter: Tribal Data Work Group is contracting with ITEP. Contract will consider oil and gas emission inventory work. Working with Julie Simpson TSC Co-Chair to coordinate.

4. OGWG Road Map Phase II (John Grant & Amnon Bar-Ilan – Ramboll Environ)

a. Base year O&G emission inventory (draft v1) – OGWG comments due August 28 The draft inventories are available in a 8/14/2018 email from Amanda Brimmer, which provides a link to an FTP folder where you can download inventory spreadsheets for all states in the WRAP region. They are not posted to the WRAP website yet. Please enable macros when using the spreadsheets in order to use the sort function, which allows users to sort by state/basin in the spreadsheets.

Slide notes - See the Status Update Presentation (WRAP OGWG: O&G El Phase 2 Status Update, August 14, 2018) for additional information.

Slide 3: El Calendar Year 2014. Includes criteria pollutant and GHG emissions. Includes updates for criteria pollutants and GHGs, the Uinta Basin now includes evap. ponds. Slide 5: NM and CO have highest O&G NOx emissions. One point is that for UT there is a substantial contribution from point sources - many well-site sources were included in the IWDW as point sources. Same is true for AK. SCC 2310 sources are well-site sources in NEI.

Slide 6: ND has highest O&G VOC emissions – mostly non-point. Again, UT had well-site sources counted as point sources.

Slide 7 & 8: Emissions by basin: About 5% of the O&G NOx emissions across WRAP region do not fall within identified basins.

 b. Base year O&G activity data summary (sourced from IHS) – OGWG comments due August 28

Activity data summary starts on slide 10. <u>OGWG - Please take a close look at</u> inventory/ppt and provide comments on O&G activity estimates by the requested date.

Slide 11: Used IHS Enerdeq database as reliable sources for activity data Play type field is IHS's attempt to categorize unconventional development by play. Copyright protections prevent Ramboll from sharing any well-level data, but they can provide summarized activity data.

Slide 12: 2014 Spud counts by drill type.

Slide 13: 2014 Well counts by well type (oil, gas, CMB) and basin. Over 200,000 active wells in the region. This data corresponds to any well with production activity in 2014.

Slide 14: Gas production by basin and well type (gas, oil, CBM). Substantial production in 2014. Arctic slope stands out.

Slide 15: Oil production by basin and well type (gas, oil). Williston basin stands out.

Slide 16: Type of activity data was compiled by basin to give a sense of activity levels/types in each. There are two sheets in each spreadsheet that allow user to select by state or by basin, but the user needs to enable macros to use this functionality. Slide 16 provides an example of this activity data for the DJ basin to. In the DJ, it is interesting to look at drilling activity vs. well counts. In the DJ the vast majority of drilling is for horizontal spuds, but the majority of existing wells are vertical wells.

Slide 17: Example of basin production activity data by play name/type. Note: there are a significant number of wells in the database that don't have a play name or play type associated with the record. This may be because they are traditional vertical wells among other reasons. Regardless it may be difficult to use this measure to identify activity types.

Slide 19: El improvements. Examples of existing data sources they can use include IHS pipeline network to improve pipeline emissions, GHG reporting inventories, include data/studies on high emitters to the extent feasible. There is survey work that could be done to improve inventories, such as gas composition data, control penetration rates, equip. counts. Need to prioritize the inventory improvements.

Summary of comments received and potential path forward on survey development –
 OGWG further feedback due August 17

Slides 20 - 21: Summary of agency responses to information request and possible sources.

Slide 23: Next Steps. Comments by Aug. 28, 2018 on EI spreadsheets, Prioritizing EI improvements and finalize V1

Questions:

Q: WY – Due to incomplete data for play information in IHS you may not be able to use this for activity data updates. Is this something to keep in mind for future EI work?

A: Yes – this is a field that IHS just recently began incorporating in it's database and is something to consider for future compilations.

Q: Tom Moore – Highlight spud information . . . 2014 was high production year with significant drilling, so will you be looking at trends over last 5-10 years?

A: Yes, trends analysis to occur in next month or two and will specifically look at trends.

Q: Can we still provide comments on data sources? A: Yes.

Q: Are spreadsheets on the WRAP OGWG website?

A: No. They have only been sent to the OGWG, but will be posted to website.

d. EPA seeks comments on proposed revisions to AP-42 Ch 7, Sec 7.1 (Darla Potter) – OGWG feedback to consider for Phase II, due August 28. Hyperlink in the agenda to EPA proposed revisions. If your agency intends to send comments, they are due Sept. 24. If you have input, it would be helpful if you would share that with the OGWG – they are interested to see our comments to take this into consideration as they work on phase 2.

e. Project Management Team (Darla Potter)

Next call with Ramboll on the 20th. Molly B. has joined the project management team. If you are interested in working more in depth with Ramboll, please let Darla and OGWG team chair and co-chairs know. The project management team holds more frequent calls (more than the 1x per month OGWG calls). Also, if you need additional time for product reviews, please let them know as soon as possible. Deadlines are necessary to keep the process on track.

i. Next Call August 20

5. RHPWG – Control Measures Subcommittee status report (RHPWG Controls Measures Subcommittee lead Curtis Taipale (CDPHE))

The Control Measures Subcommittee is to develop a Four-Factor Analysis Protocol or Process and assemble a Control Measure Clearinghouse. The Subcommittee meets monthly on the 4th Wednesday and there are members from state and local air agencies and the National Park Service listens in. The Subcommittee is drafting a protocol document to be a general guideline for air agencies to use to review point sources with a four-factor analysis, which will be discussed on the call next week. There was a brief discussion regarding point/area sources for oil and gas that may vary from state to state. There was an expression of interest in secondary organic aerosols, which may be more of a discussion for the modeling subcommittee. Curtis was asked to come back and brief the OGWG on a future call for further coordination.

6. Next Steps & Planning for Next Calls (Amanda Brimmer)

- a. Next Call October 9, 2018 10:00 am (AK), 11:00 am (PT), Noon (MT), 2:00 pm (ET) 90 minutes
 - Next Project Management Team Call August 20, 2018
- b. Volunteer Call Note Taker state agency volunteer needed Amanda will reach out to Debbie Miller to see if she may be able to take notes for the October call.
- c. Website Posting OGWG Materials http://www.wrapair2.org/OGWG.aspx
 Reminder of August 28 comment due dates for spreadsheet review and AP-42 revision feedback.

Reminder of August 17 due date for additional input on inventory improvement. Please give feedback to Amanda Brimmer, Mark Jones, and Darla Potter on future call topics so that we can best serve the OGWG.

If there is interest in other groups, please reach out to Tom Moore.