WRAP OGWG: 0&G EI PHASE 2 STATUS UPDATE

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OUTLINE

- Baseline Inventory
- Future Year OTB&OTW: 3 scenarios
- Future Year Additional Controls
- Program Review Task



BASELINE INVENTORY

- OGWG Baseline Year Alaska and Intermountain Region Emissions Inventory revised final deliverables – Sept. 2019
 - The <u>Revised Final Report</u> and <u>Inventory Spreadsheet</u> were completed in mid-Sept. and posted on Sept. 23, 2019. These files completely replace the previously posted July 2019 report and spreadsheet, while the <u>gas profile</u> information posted in July is unchanged. The July report and spreadsheet files have been removed to avoid confusion. The Revised Final Report includes updates from the July postings to included the: 1) Colorado O&G emissions based on new inventories provided by Colorado Department of Public Health and Environment and Southern Ute Indian Tribe and 2) Williston Basin casinghead gas emission inventory to correct emissions that were biased low based on EPA O&G Tool inputs.
- OGWG Emissions Survey for State Air Agencies and O&G Operators
 - **Complete survey** (January 2019)
 - Fleet turnover and controls-focused survey (January 2019)
- Completed SMOKE-inputs development for WRAP Modeling and 2016 Emission Platform Collaborative



FUTURE YEAR OTB & OTW - SCENARIO 1

- Medium Scenario: "Continuation of Historical Trends"
- Will be used in regional haze modeling
- Draft Report and Spreadsheet sent out Sep 20
- Comments received from several agencies; we are addressing comments that we can in the limited time available:
 - Williston/Bakken revised activity forecasts
 - North Dakota: Higher future year activity increases based on NDDEQ provided forecasts
 - Montana, South Dakota: Little recent development, will assume continued limited future development.
 - Colorado integrated inventory provided by CDPHE
 - Making revisions to report text per several BLM comments
 - NPS provided several comments about future O&G activity forecasts
- Completion of Final Inventory during week of Oct 7



FUTURE YEAR OTB & OTW - SCENARIOS 2&3

- Low Scenario: Reduced Legacy Well Activity
 - Legacy (vertical) wells: Legacy wells retire more quickly (twice as fast as medium scenario)
 - Multi-stage fracing (horizontal) wells: same as medium scenario
- High Scenario: Increased Horizontal Well Activity
 - Multi-stage fracing (horizontal) wells: Increase in O&G activity by a percentage to be determined, tiered to medium scenario estimates
 - Legacy (vertical) wells: same as medium scenario
- Controls: no additional controls analysis
- Mid-November: Scenario 1, 2, and 3 Draft Final Report (inclusive of all scenarios), spreadsheets



ADDITIONAL REASONABLE CONTROLS

- Develop methodology by which emission controls estimates may be made by agencies based on future year inventory
 - Focus: Categories with substantial NOx emissions (e.g, midstream engines, wellhead compressor engines, artificial lift engines, flares, heaters, drill rigs, fracing engines)
 - Agencies determine emission control levels based on emissions data and methodology provided by Ramboll.
- **Deliverable:** Report/memo
 - Anticipated timeline for agency input is during the month of November

Four statutory factors [40 CFR 51.308(f)(2)(i)] relevant to inventory analyses

- Cost of compliance
- Time necessary for compliance
- Energy and non-air quality impacts of compliance
- Remaining useful life of any potentially affected major/minor stationary source or group of sources



AGENCY PROGRAM REVIEW TASK

- Emphasis will be on describing state programs
- Starting point
 - OGWG Road Map: Phase I Report Appendix A (On-the-Books Regulations Tables)
- Scope
 - To include elements similar to previous 2013 program review https://www.wrapair2.org/Analysis.aspx
 - Agency input will be solicited to update the previous review in November
- **Deliverable:** Draft Report/memo



QUESTIONS?

