

# **WRAP OGWG: O&G EI**

## **PHASE 2 STATUS UPDATE**

John Grant and Amnon Bar-Ilan

December 10, 2019

# OUTLINE

- Baseline Inventory (complete)
- Future Year OTB&OTW
  - Scenario 1: Historical trends (complete)
  - Scenario 2 & 3
- Future Year Additional Controls
- Program Review Task

# BASELINE INVENTORY

- OGWG Baseline Year Alaska and Intermountain Region Emissions Inventory revised final deliverables – Sept. 2019
  - The [Revised Final Report](#) and [Inventory Spreadsheet](#) 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 [gas profile](#) 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

- OGWG Projected Emissions from Baseline Year Emissions Inventory – October 11, 2019
  - [Final Report](#) and [Inventory Spreadsheet](#) for the “Continuation of Historical Trends” projection inventory. These data will be used in modeling and control analyses for Regional Haze planning.
- Medium Scenario: “Continuation of Historical Trends”
- Will be used in regional haze modeling

# 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-December: Scenario 2 and 3 memorandum and 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.
- WRAP OGWG Project Management Team provided input on additional reasonable controls outline
- **Deliverable:** Report/memo
  - Anticipated timeline for agency input is during the month of December and January

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

- Requested input from state agencies by Dec 13:
  - Update to narrative in 2013 program review
  - Update detailed regulations table, if needed:
    - [OGWG Road Map: Phase I Report Appendix A](#) (On-the-Books Regulations Tables)
- Ramboll to collate each agency's input into single document

# QUESTIONS?