October 6, 2016

MEMORANDUM

To: Tom Moore, WESTAR
From: John Grant, Amnon Bar-Ilan
Subject: National O&G Inventory Analysis: September Progress

Below is a summary description of progress made on the subject project during August 2016.

TASK 1. NATIONAL INVENTORY ANALYSIS

1) **Point O&G Sources:**
   a) Received responses from state/local/tribal (S/L/T) agencies to the survey of 2014 NEI O&G point source emissions reporting. The responses to this survey will be helpful to understanding the extent that midstream sources fall below reporting thresholds and are therefore not included in the 2014 NEI v1.

2) Surveys Sent / Responses Received	
Surveys sent to individual S/L/T Agencies by Mark Gibbs (OKDEQ)	31 surveys
Responses received	31 responses
Response Results Summary	
Respondent indicates that only Title V (AERR Type B) sources were reported	14 responses
Respondent indicates that Title V (AERR Type B) **and additional minor sources** were reported	17 responses
(Minor source thresholds provided)	(12 of 17 responses)

   a) Continued detailed analysis of NEI point source emissions for select states.
      i)   Identified the extent to which wellsite sources are included as point sources.
      ii) Analyzed the suite of SCCs used to characterize point source emissions.
      iii) Summarized and reviewed by source category emission contributions for NOx, CO, and VOC.
      iv) Identified the extent to which control information is available in point source files.

2) **Nonpoint O&G Sources:**
   a) Continued analysis of O&G Tool
      i) Queried O&G activity data from IHS Enerdeq and the O&G Tool and compared estimates for the two data sources.
      ii) Began QA of formulas used to estimate by county and SCC emissions in the O&G Tool.
      iii) Began analysis of basin factors in the O&G Tool including statistical analysis and review of data sourced from GHGRP Subpart W reporting.
      iv) Analyzed the by source category basin factor references to understand the reference data sources for each state.

TASK 2. REGIONAL ANALYSIS

Ramboll Environ has not yet begun work on this task.