January 27, 2014

Meeting Notes Summary – Technical Subgroup of Workgroup for Global Air Permit Policy Development for Temporary Oil and Gas Drill Rigs

Date of Meeting: Thursday, January 23, 2014

Time of Meeting: 14:00 – 15:30

Location of Meeting: Conference Room A, Bayview Building, 619 E. Ship Creek Ave., Ste. 249, Anchorage, AK 99501 and Teleconference

Technical Subgroup of Workgroup for Global Air Permit Policy Development for Temporary Oil and Gas Drill Rigs (Subgroup) Members present in person: Brad Thomas, ConocoPhillips (CPAI); Barbara Trost, Program Manager, Monitoring and Quality Assurance, Alaska Department of Environmental Conservation/ Division of Air Quality (ADEC/ AQ); Alejandra Castaño, BP Exploration Alaska (BPXA); Ben Wedin, Nordic–Calista Services (Nordic); Bob Morgan, ADEC/ AQ; Mike Gravier, ADEC/ AQ;

Technical Subgroup of Workgroup for Global Air Permit Policy Development for Temporary Oil and Gas Drill Rigs (DRWG) Members present via telephone: Wally Evans, Hilcorp Energy (Hilcorp); Tom Damiana, AECOM; Alan Schuler, ADEC/ AQ; Dan Fremgen, ADEC/ AQ; James Renovatio, ADEC/ AQ; Deanna Huff, ADEC/ AQ;,

Meeting Facilitator: Jeanne Swartz, ADEC/AQ

Public members present by telephone: Ann Mason, SLR

1) Introductions

The meeting commenced at 14:00. Jeanne Swartz welcomed all the participants and asked for introductions, first from the participants present in person, then from the participants joining the meeting by telephone. She turned the meeting over to Barbara Trost.

2) Monitoring Data Presentation

Brad Thomas made a presentation to the DRWG Technical subgroup members that provided information about the monitoring stations on the North Slope (NS) with nitrogen dioxide (NO₂) and particulate matter of 2.5 microns or less in size ($PM_{2.5}$) data. The full presentation will be provided for posting on the DRWG website,

http://www.dec.alaska.gov/air/ap/OilGasDrillWorkgroup.html, after a few editorial revisions have been made. Brad presented information on the following monitoring site locations:

- Alpine CD-1
- Alpine CD-3
- Kuparuk DS-1F
- Endicott (MPI)

Meeting Notes Summary – Workgroup for Global Air Permit Policy Development for Temporary Oil and Gas Drill Rigs Technical Subgroup

January 23, 2014

- Wainwright (Near-Term and Permanent)
- Nuigsut
- Prudhoe Bay A-Pad
- Endicott (SDI)/ Liberty
- Pt. Thomson
- Deadhorse

Brad presented information about these sites that included the number of years data has been collected at the site, contributing sources of emissions, aerial photographs of the locations, location of the monitoring station relative to the prevailing wind direction, location of the well line, whether the location had high line power available, drill rig activity (fuel usage), and other information relevant to specific locations.

Brad showed timeseries of the ambient concentrations (NO_2 and $PM_{2.5}$ where available) for all the sites in a graphical format with pollutant concentration shown over time, with the 98th NAAQS percentile level shown on the graph.

The DRWG Technical subgroup engaged in discussion about the presentation. Some topics of discussion were as follows:

- PM_{2.5} influences may be regional or traffic related, but NO₂ emissions are from combustion (Brad Thomas)
- Concern about large development scenarios may not be justified, because much drilling on the NS is infield drilling on existing pads where one or two drill rigs would be operating at a given time (Brad Thomas)
- Drill rig impacts are all near-field (Brad Thomas)
- For a three-year average of emission levels, on the NS, there may be one year of higher
 emissions from drilling activity that would be balanced with one or two years of zero or low
 emissions before pad development started and after the wells were drilled and were in
 operation (Tom Damiana)
- In Cook Inlet (CI), there is no ambient air monitoring around drill rigs (Brad Thomas)
- Cook Inlet drill rig engines are the same size as NS drill rigs, but have differences in their ancillary sources (Ben Wedin)
- Ambient air monitoring data provided to ADEC and shown in the presentation is not proprietary (Brad Thomas).
- Dea Huff asked about modeling studies using actual emissions as well as potential emissions, particularly at Pt. Thomson.

3) Set Focus for Next Meeting and Steps/ Actions Needed Prior to Meeting

Meeting Notes Summary – Workgroup for Global Air Permit Policy Development for Temporary Oil and Gas Drill Rigs Technical Subgroup

January 23, 2014

The DRWG Technical subgroup concluded the meeting by selecting a date for the next Technical subgroup meeting and discussing work to be accomplished before the next meeting. ADEC participants said they would identify a path forward to evaluate the data so that milestones for meeting the Technical subgroup's objectives can be discussed at the next meeting. One topic of interest is to further identify the similarities/ differences between NS and CI drill rig operations; another topic of interest is to understand the differences between offshore and onshore drilling operation in CI. Tom Damiana offered to be available by email to answer questions, particularly questions about data quality.

The meeting concluded at 15:29.

Action Items Generated From January 23 DRWG Technical subgroup Meeting:

- ADEC staff will review data provided by Brad Thomas:
 - o Identify a path forward
 - O Draft a priority list of work that needs to be done
 - Divide work among staff members
- Brad Thomas will contact Exxon/ Mobil to make sure data from Pt. Thomson, from the January 24 presentation, can be released to put on the DRWG website
- AOGA/ ASIA will be prepared to discuss drill rig operations in Cook Inlet
- The meeting summary from the January 24th Subgroup meeting will be circulated and placed on the DRWG website within a few days.
- ADEC will provide a meeting invitation, a meeting place in Anchorage, and agenda for the third Technical subgroup meeting, to be held Thursday, February 20, 2014 from 2:00 PM – 3:00 PM.

Respectfully submitted,

Jeanne Swartz ADEC/AQ