

Introduction: In this document, the Alaska Support Industry Alliance and the Alaska Oil and Gas Association put forth a proposed new approach to drill rig air quality regulation in Alaska. These two organizations (hereafter referred to as "industry") were selected by the Alaska Department of Environmental Conservation (ADEC) and the Alaska Department of Natural Resources (ADNR) to represent oil and gas producers and drilling rig operators within a committee of six convened to establish a new policy for drill rig air quality regulation. As such, this proposal is the product of collaboration within the industry and conveys the consensus views of all participants.

Draft Outline of an Alaska Transportable Drill Rig Air Quality Management Approach

Purpose: Replace ADEC's existing mechanism of minor source permitting for drill rigs with a program that relies on air quality monitoring data collected in the active oil and gas fields to characterize and manage actual impacts and maintain compliance with the national ambient air quality standards.

Geographic scope: The entire state of Alaska including waters subject to the Alaska Department of Environmental Conservation air permitting jurisdiction.

Background: Drill rigs have been regulated in the Alaska air quality management program over the past decade for the purpose of protecting national ambient air quality standards (NAAQS). This regulatory approach has consisted of permitting within the state's minor source and Title V permitting programs (the latter for pads aggregated with processing facilities) attended by required dispersion modeling. Until the introduction of one-hour standards, the program functioned because drilling operations could be conducted in a manner that accommodated the required modeling and because the modeling, although it is very conservative and over-estimates the real-life impacts, could demonstrate compliance with all the ambient air quality standards. In 2010, EPA promulgated a new one-hour standard for nitrogen dioxide (NO₂) which is low enough as to render the existing permitting approach and dispersion modeling tools ineffective for drill rigs. Because of the known limitations in the required modeling for compliance with the new one-hour NO₂ ambient air quality standard, because voluminous ambient air quality monitoring data collected at drilling locations shows that rigs actually do meet the one-hour standard for NO₂, and because a survey of other comparable states has revealed no issues with NAAQS compliance around drill rigs, a new regulatory approach is necessary. The elements for this proposed new regulatory approach are presented below.

Program Elements:

- 1) With a focus on one-hour NO₂, but inclusive of all pollutants, industry will assemble, to the extent practicable, all existing and relevant ambient air quality data previously collected in Alaska oil and gas fields to document current ambient air quality around those fields.

- 2) Industry will continue for at least the next two years ambient air quality monitoring at well sites in Alpine and Prudhoe Bay (CD1 and A Pad, respectively) and the site located in the village of Nuiqsut, to maintain an ongoing look at the overall ambient air quality impacts from oil field activities and drill rigs. The data collected at these stations will be submitted to ADEC quarterly for inclusion, at the State's discretion, into the State's ambient air monitoring database.
- 3) By November 1, a sub-committee consisting of state representatives and industry representatives of the major operating areas will undertake an evaluation to establish the adequacy of existing monitoring data collected in the vicinity of oil and gas operations for characterization of air quality – as it relates to oil and gas operations. This sub-committee will conclude by December 1, 2013.
- 4) ADEC/ADNR and oil & gas industry representatives from the major operating areas will establish a Leadership Team to periodically review ambient air quality conditions as measured by the operating monitoring stations to assess actual conditions, trends, and any evidence suggesting growth in ambient impacts that has the potential, if unchecked, to result in a violation of an ambient air quality standard for nitrogen dioxide. To facilitate this periodic review, operators of portable oil & gas drill rigs will provide a summary report of drilling operations (exclusive of well-maintenance activities) conducted during the past calendar year and anticipated drilling plans for the coming year to the Leadership Team.
- 5) Industry will demonstrate via near-field dispersion modeling that drill rigs' historical actual emissions do not cause exceedances of the one-hour NO₂ air quality standard. The near-field modeling is intended to augment ambient air quality measurements collected in the vicinity of drill rigs.
- 6) Industry will document technology improvements on drill rigs that reduced emissions as well as future plans to be taken consistent with EPA's Title II program. These technology improvements will continue the trend of technology-driven emission reductions as a result of natural replacement of in-field drill rig fleet equipment.
- 7) ADEC will clarify the steps that need to be taken to rescind the sections of 18 AAC 50 that require air permitting of drilling rigs as well as, if necessary, what will be required for a state implementation plan (SIP) amendment request to the Environmental Protection Agency (EPA). Industry, to the extent it has the capability, will materially support the efforts to effect these changes and to develop, if necessary, a SIP amendment request to EPA. Until such time as the regulatory changes are in place and in effect, industry will operate under the existing permits, application shields, and minor permits.



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