Response to Public Comments
Regulation Changes to Title 18, Chapter 50 of the Alaska Administrative Code
SO₂ Standard, PM2.5 and 1-hour SO₂ SIL, GHG Emission Rate Basis Rulemaking
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The department proposed revisions to the Air Quality Control regulations in 18 AAC 50 to address the following goals:

- Adopt a new standard for sulfur dioxide (SO₂) in 18 AAC 50.010.
- Adopt new significant impact levels for fine particulates (PM-2.5) and 1-hour SO₂ in 18 AAC 50.215.
- Adopt new emission rate basis for greenhouse gases in 18 AAC 50.326.
- Update adoption by reference dates and adoption of CFR parts in 18 AAC 50.035.
- Update, add, and clarify language in 18 AAC 50.010, 18 AAC 50.215, and 18 AAC 50.220.
- Add new definitions to 18 AAC 50.990

Public Comment Process:
The department issued public notice of the proposed regulations on February 15, 2011, and accepted public comments from February 15, 2011 through March 24, 2011. The Department held a public hearing on March 18, 2011. One commentator attended the public hearing in person and one commentator called into the hearing, primarily to ask for clarification on the proposed rules and the regulations process. The public hearing was transcribed.

This document responds to comments received during the comment period.

The Department received written comments from the following:
1. Kate Williams, Alaska Oil and Gas Association (AOGA); March 24, 2011; faxed comment letter. (Comments labeled AOGA)
2. Brad Thomas, ConocoPhillips Alaska; March 23, 2011; e-mailed comments. (Comments labeled ConocoPhillips)

The Department received no oral comments during the public hearing.
Comment #1 (From Kate Williams at AOGA):

The Alaska Oil and Gas Association (AOGA) appreciates this opportunity to submit comments regarding the above proposed regulation changes. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining and marketing activities in Alaska.

The Alaska Department of Environmental Conservation (ADEC) proposes to update Table 5 of 18 Administrative Code (AAC) Chapter 50 to include a new 1-hour significant impact level (SIL) for sulfur dioxide (SO2) of eight (8) micrograms per cubic meter (μg/m³). AOGA believes that ADEC should not implement the 1-hour SO2 SIL regulation on the basis of a level established by the Environmental Protection Agency (EPA) under an interim guidance memorandum. The proposed 1-hour SO2 SIL has not been finalized under rule making and the public has not been given an opportunity for formal review and comment. AOGA contends that ADEC should only implement the 1-hour SO2 SIL under the interim guidance as necessary under a permit action.

On June 22, 2010, EPA promulgated the new 1-hour National Ambient Air Quality Standard (NAAQS) for SO2 of 75 parts per billion (ppb). Under the June 22, 2010 issuance of the SO2 NAAQS, EPA did not issue a 1-hour SO2 SIL. On August 23, 2010, EPA issued a memorandum entitled General Guidance for implementing the 1-hour SO2 National Ambient Air Quality Standard in Prevention Significant Deterioration Permits. Including an Interim 1-Hour SO2 Significant impact Level (General Guidance). The guidance memorandum sets forth a recommended interim 1-hour SO2 SIL that states may consider for carrying out the required prevention significant deterioration (PSD) air quality analysis for SO2. The interim 1-hour SO2 SIL is recommended for use until EPA promulgates a 1-hour SIL via rulemaking, and addresses the continued use of the existing SO2 Significant Emissions Rate (SER) and Significant Monitoring Concentration (SMC) to implement the new 1-hour SO2 standard.

Under the General Guidance, EPA states that a "permitting authority that utilizes [the 1-hour SO2 SIL] as part of an ambient air quality analysis should include in the permit record the analysis reflected in this memorandum and the referenced documents to demonstrate that a modeled air quality impact is de-minimis, and thereby would not be considered to cause or contribute to a modeled violation of the NAAQS". The state may choose to rely upon the 1-hour SO2 SIL under the guidance document to implement the PSD program for SO2 if the state agrees that the value represents a reasonable threshold for determining a significant ambient impact, and they incorporate into each permit record a rationale supporting the conclusion.

The General Guidance memorandum also recommends that the interim 1-hour SO2 SIL be compared to the highest of the 5-year average, of the maximum 1-hour SO2 concentrations predicted each year at each receptor. Alternatively, the interim 1-hour SO2 SIL should be compared to the highest modeled 1-hour SO2 concentration predicted across all receptors based on one (1) year of site-specific meteorological data. ADEC has decided not to include this multiyear averaging recommendation within the General Guidance memorandum into 18 AAC 50. ADEC states in the Frequently Asked Questions Regarding the February 2011 Proposed Changes to 18 AAC 50 (FAQ) that:

"[t]he Department decided that it would be premature to adopt EPA's suggested changes to the SIL format [multi-year averaging versus single year]. EPA did not adopt their
suggestions in the Code of Federal Regulations. They [EPA] have also indicated that additional changes may be coming. Maintaining our current approach also provides consistency for all pollutants and averaging periods."

It is arbitrary to codify into the State of Alaska regulations the interim 1-hour SO\textsubscript{2} SIL that has not been promulgated as final EPA regulation but to refuse incorporation of the EPA recommended averaging periods for SIL’s because the averaging period has not been adopted into the Code of Federal Regulations.

For these reasons, AOGA contends that adopting the interim 1-hour SO\textsubscript{2} SIL issued under EPA guidance into ADEC regulations is unwarranted and premature. If ADEC issues a 1-hour SO\textsubscript{2} SIL under regulation using SILs developed by EPA, it should be based on a SIL that is issued through final EPA rulemaking where public review and comment has occurred. Additionally, ADEC should provide a sound basis why a SIL issued by EPA is appropriate for application in Alaska. If ADEC chooses to implement the interim EPA guidance, it should only implement the 1-hour SO\textsubscript{2} SIL guidance under each permit action and provide a basis for each use under permit comment.

**Department Response to AOGA Comments:** The AOGA comment consists of several parts, and therefore the Department will address them in an overall response and then separately address the individual key items.

The Department has determined that the key points of AOGA’s comment are:

1) AOGA stated that adopting the 1-hour SO\textsubscript{2} SIL is unwarranted and premature.
2) If ADEC adopts a 1-hour SO\textsubscript{2} SIL, it should be based on an SIL that is issued through final EPA rulemaking where public review and comment has occurred;
3) ADEC should provide a sound basis why an SIL issued by EPA is appropriate for application in Alaska;
4) If ADEC chooses to implement the interim EPA guidance, we should do so under each permit action; and
5) It is arbitrary to codify the SIL that has not been promulgated as final EPA regulation but to “refuse incorporation of the EPA-recommended averaging periods for SILs.”

**Overall Department Response to AOGA Comments:**

The Department disagrees with AOGA’s contention that the interim SIL should not be adopted into regulation. AOGA is concerned about adopting the interim SIL into Alaska Regulations under 18 AAC 50 before EPA adopts a final SIL for the 1-hour SO\textsubscript{2} National Ambient Air Quality Standard. The Department has concluded that adopting the interim SIL is appropriate and timely.

The SIL is simply a modeling concept and tool and does not impose an enforceable limitation on a permittee. It’s a threshold for determining when a modeled impact is inconsequential. Not having an SIL in place means applicants must either determine and defend when a modeled impact is insignificant on a case-by-case basis, or proceed with a more extensive modeling analysis (e.g., an analysis that includes characterization and inclusion of neighboring sources).
Either option takes additional resources and can substantively increase the time it takes to prepare and process a permit application.

While it is often preferable to wait for EPA’s final rules, there are situations where state rules in the absence of federal rule are warranted. The adoption of standard permit conditions in 18 AAC 50.345 and the minor permit fast-track procedures are examples where state rules have been enacted. The adoption and use of SILs for the commonly modeled pollutants serves the same purpose, as explained in more detail below.

**Itemized Responses to the 5 items highlighted above:**

1) AOGA stated that adopting the 1-hour SO$_2$ SIL is unwarranted and premature.

*Response:* Permit applicants that trigger the SO$_2$ modeling requirements must demonstrate compliance with the new 1-hour SO$_2$ standard once it becomes effective. Therefore, the SIL should be promulgated concurrently with the 1-hour standard in order to avoid the extra work and permit delays that may otherwise occur.

2) If ADEC adopts a 1-hour SO$_2$ SIL, it should be based on a SIL that is issued through final EPA rulemaking where public review and comment has occurred.

*Response:* Department actions have no requirement to go through a federal public comment period. The Department’s regulatory comment period is adequate for providing for public comments on State issues. AOGA, in its comment, did not provide any rationale for why a federal comment period is necessary before the Department adopts an SIL. This SIL was presented for public review through the state’s comment period, and AOGA had an opportunity to provide comment on the level of the SIL.

3) ADEC should provide a sound basis why a SIL issued by EPA is appropriate for application in Alaska.

*Response:* The interim value provides consistency with EPA’s permit actions. The Department sees no benefit or basis for adopting a value that differs from the value that EPA is currently using in their permit actions.
4) If ADEC chooses to implement the interim EPA guidance, we should do so under each permit action.

**Response:** A case-by-case approach runs the risk of inconsistent decisions, which provides ground for challenge and further delays. If the Department relies on EPA’s interim guidance to ensure its case-by-case decisions are consistent, then that guidance would constitute a regulation under AS 44.62.640. The Department must adopt it as a regulation under AS 44.62.

The Department wants to ensure its decisions are not arbitrary. Since “significance” is a common question in essentially all modeling applications, it is also more expedient to have a common answer to that question rather than making case-by-case decisions. The Department decided to comply with AS 44.62.640 by inserting the SILs into 18 AAC 50.215(d), rather than adopting EPA’s interim guidance by reference in 18 AAC 50.035.

5) It is arbitrary to codify into the State of Alaska regulations the interim 1-hour SO$_2$ SIL that has not been promulgated as final EPA regulation but to refuse incorporation of the EPA recommended averaging periods for SILs because the averaging period has not been adopted into the Code of Federal Regulations.

**Response:** The Department is in fact adopting EPA’s “averaging period” with the proposed SO$_2$ SIL. The averaging period contained in the proposed regulations is “1-hour”, as stated in the column heading in Table 5 of 18 AAC 50.215(d). The Department believes that AOGA is concerned that the Department does not propose to adopt the EPA’s method for calculating the 1-hour SO$_2$ SIL.

The Department’s proposed action is not arbitrary. The Department did not adopt the EPA revised calculation methodology in this regulation package because the Department was waiting for EPA to provide additional guidance and understanding related to the calculation methodology. The Department’s current methodology is more conservative than EPA’s revised methodology. This may cause some applicants to conduct more extensive modeling than what would have been required with EPA’s revised method, although less modeling than would be required with no SIL at all. The Department believes this was a reasonable compromise compared to the level of effort that would have been required if the Department did not adopt the SIL at all.

Since the close of the comment period EPA has provided the clarification for which the Department was waiting. The Department cannot add this methodology into this regulation package without an additional comment period because it would be too substantive a change. The Department instead plans to propose EPA’s revised calculation methodology in a future regulation package.

**Regulations:** No changes will be made to the proposed regulations.
Comment #2 (from Brad Thomas at Conoco Phillips):

“We have just two comments:

1. We support the inclusion of the 3,750 ton threshold for GHGs. We believe this is reasonable (and thanks for answering my question about this when the proposed rules first came out).
2. We caution that including GHGs in the state regulations as a "regulated pollutant" could introduce confusion in existing permits. For example, on page 3 of the general permit MG1 is this applicability language:

    This general permit applies to a portable oil and gas operation that
    (1) is not located within 10 kilometers of a Class I area or in a non-attainment area;
    (2) does not operate on the same pad or within a quarter of a mile of
        (A) another pad on which another drill rig or another well test flare is simultaneously operating;
        (B) an emission unit that emits or has the potential to emit 100 tons or more per year of a regulated air contaminant; or
        (C) a group of emission units that emits or has the potential to emit 100 tons or more per year of a regulated air contaminant, and that is located on either a single pad or a group of pads that are within a quarter of a mile of each other;

At issue, of course, is the use of the phrase "regulated air contaminant." We recommend that ADEC include in its updated regulation package a statement to the effect that including GHGs on the list of regulated air contaminants is not retroactive to permits or permit actions in existence at the time of the regulation adoption nor are GHGs to be considered when evaluating "regulated air contaminants" under permits in existence at the time of this regulation's adoption.

The reason for this is that GHGs were not in view and not included in the analyses as the existing permits were being developed. The 100 ton language in the example above, for instance, was never meant to include GHGs.”

Department Response to Conoco Phillips Comments:

Response 1: No response required

Response 2: Nothing in the current package changes the status of GHG as a regulated pollutant. The concerns raised here are due to a previous regulation package, and are not relevant for the proposed regulations at hand.

The Department agrees that the applicability criteria, in some issued general permits, could be interpreted to include GHGs, instead of the intended Title V sources threshold exclusion. Since the Department put this applicability criterion in place to mean a Title V source, after July 1, 2011, the Department interprets the referenced permit condition to mean a PTE over 100 tpy for the traditional criteria pollutants or 100,000 tpy of CO2e. The referenced permit condition will be revised to make this clear in a future permit action.
**Regulations:** No changes will be made to the proposed regulations.