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July 9, 2021

**Submitted Electronically**

ATTN: Brittany Crutchfield  
Alaska Department of Environmental Conservation  
Air Permit Program  
555 Cordova Street  
Anchorage, Alaska 99501  
[brittany.crutchfield@alaska.gov](mailto:brittany.crutchfield@alaska.gov)

Subject: **ConocoPhillips Alaska, Inc. Public Notice Preliminary Minor Permit  
AQ1552MSS02 and Technical Analysis Report Public Comments –  
Doyon 26 Drill Rig POGO**

Dear Ms. Crutchfield:

ConocoPhillips Alaska, Inc. (CPAI) respectfully submits these comments in response to the public notice preliminary Air Quality Control Minor Permit AQ1552MSS02 for the Doyon 26 Drill Rig Portable Oil and Gas Operation (POGO). CPAI is submitting comments for the preliminary permit and associated technical analysis report (TAR) in a tabular format that summarizes the requested revisions and bases for the requests. The comments table is provided in Attachment A.

We appreciate the opportunity to provide comments on the permit and TAR, as well as the Department's timely processing of this submittal. If you have any questions or require additional information, please do not hesitate to contact me at (907) 265-6937 or [WNSAirQualityCoordinator@conocophillips.com](mailto:WNSAirQualityCoordinator@conocophillips.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Laura K. Perry', with a stylized flourish at the end.

Laura K. Perry  
Senior Environmental Coordinator – Western North Slope Air Quality

Enclosures: Attachment A

Electronic cc: [patrick.dunn@alaska.gov](mailto:patrick.dunn@alaska.gov)  
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**ATTACHMENT A**

**ConocoPhillips Alaska, Inc.'s (CPAI's) requested revisions to the Doyon 26 Drill Rig Portable Oil and Gas Operation Air Quality Control Permit AQ1552MSS02 and associated Technical Analysis Report (TAR) for the public comment period that ends July 12, 2021.**

No.	Location in Permit or TAR	Requested Changes and Basis of Request
<b>Section 3 Fee Requirements</b>		
1	Condition 13	<p>The reliance on a web page with submittal instructions that can be changed without a public process is problematic. Therefore, we request that this condition is revised to explicitly list the submittal instructions on the web page that the Permittee is directed to in this condition. This request is based on consideration of the following issues:</p> <ol style="list-style-type: none"> <li>(1) The web page instructions at issue are subject to change without notice. Therefore, the requirement to submit estimates in accordance with instructions on the web page puts the Permittee in the position of monitoring the web page for changes and updating internal standard operating procedures if the web page changes. In short, it creates additional burden, results in a compliance trap for the Permittee, and puts the Permittee at risk of administrative permit deviations.</li> <li>(2) A permit condition relying on instructions posted on a web page that can be changed without notice means that the permit is also subject to change without notice. This is problematic because a change in submittal instructions on the web page is essentially a change to the requirements of a permit condition and a change to the standard permit condition that does not go through a formal permit modification and public notification process. Note that it is not the fact that the permit references a web page that we are most concerned about, it is the fact that the information on the web page is not static, did not go through public comment, and can be revised without notification and a public process.</li> <li>(3) The web page instructions require revisions to correct inconsistencies. For example, the web page explicitly requires an E-signer and submittal via the AOS portal. However, the AOS portal allows for submittal options that do not require an E-signer. Does this mean that the "Print Document" feature under "Report Options" within the AOS portal cannot be used because it does not require an E-signer? We request that the Department revise the web page instructions to allow for all submittal options that are available using the AOS Portal, not just the E-signer option.</li> </ol> <p>CPAI proposes the following addition to Condition 13.1, which does not modify the existing language in the standard permit condition:</p> <p><i>"13.1 No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 12.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <a href="http://dec.alaska.gov/air/air-permit/standard-conditions/standardcondition-i-submission-instructions/">http://dec.alaska.gov/air/air-permit/standard-conditions/standardcondition-i-submission-instructions/</a>; or</i></p>

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		<p><i><u>a. Submittal of actual emissions estimates can be made by submittal of information contained in the Assessable Emission Estimate report made through the Air Online System (AOS) at <a href="http://dec.alaska.gov/applications/air/airtoolsweb/">http://dec.alaska.gov/applications/air/airtoolsweb/</a> by using the Permittee Portal; or</u></i></p> <p><i><u>b. Alternatively, the Department may, on a case-by-case basis, grant approval for an alternative submission method. If unable to submit by the Air Online System (AOS), please contact the Department. Upon approval by the Department, the Permittee may submit the report under a cover letter, by either an email addressed to <a href="mailto:dec.aq.airreports@alaska.gov">dec.aq.airreports@alaska.gov</a>; or a hard copy to the following address:</u></i></p> <p><i><u>ADEC Air Permits Program</u></i></p> <p><i><u>ATTN: Assessable Emissions Estimate</u></i></p> <p><i><u>555 Cordova Street Anchorage, Alaska 99501.”</u></i></p>
2	Condition 13	<p>Given the discussion in Comment 1, we request that the web page instructions are put through the same public process used for the standard permit conditions themselves. We also ask that the Department articulate their procedure for developing the webpage language and revising the language including (1) notifying the Permittee(s) of the proposed webpage language, (2) allowing for input from the Permittee(s), and (3) notifying the Permittee(s) that changes have been made.</p>
<p><b>Section 5 Ambient Air Quality Protection Requirements</b></p>		
3	Condition 19.1a	<p>Add EU ID 18 (new steam generator) to this condition, since EU ID 18 was modeled with a capped stack, as described in Comment 13.</p>
4	Condition 19.1c	<p>Remove this sub-condition, at the very least, or remove Condition 19.1 entirely. Similar to the recent removal of the condition for stack height requirements (was Condition 19.2), this condition is no longer necessary since CPAI conducted an onsite field verification, and CPAI confirms that the stack configurations of these units meet the requirements of Condition 19.1. See comment 14.</p>

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5	Conditions 20.3 and 20.4	<p>Consolidate these conditions into one single condition, since the compliance monitoring, recordkeeping, and reporting are the same for both. In consolidating these conditions, use the language in Condition 20.4a(i) for the analytical methods to determine the hydrogen sulfide content, since the language in this condition is inclusive of approved analytical methods and is consistent with the language of similar conditions in other CPAI minor permits (Condition 12.2a in the Drill Pad CD5 Permit No. AQ0945MSS07 and the GMT1/MT6 Drill Site Permit No. AQ1484MSS02).</p> <p>CPAI proposes the following revisions to Condition 20.3 to consolidate these conditions:</p> <p><i>“20.3 Limit the hydrogen sulfide (H<sub>2</sub>S) content of the gas fired in EU 16 to no more than 200 ppmv at any time <u>and the H<sub>2</sub>S of the fuel gas fired in EUs 1 through 13 and 18 to no more than 10 ppmv at any time.</u>”</i></p> <p><i>a. Determine compliance once a month with the gas H<sub>2</sub>S content limits in Condition 20.3 as follows:</i></p> <p><i>(i) Determine the gas H<sub>2</sub>S content using <u>ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1)ASTM D 4810-88, ASTM D 4913-89, Gas Producer’s Association method 2377-86, or an alternative analytical method approved by the Administrator.</u></i></p> <p><i>(ii) The gas H<sub>2</sub>S analysis required under this condition may be performed by the owner or operator, or a service contractor retained by the owner or operator.</i></p> <p><i>b. Keep records of the analysis conducted as required in Condition 20.3a(i).</i></p> <p><i>c. Report in each operating report required by Condition 29, the monthly gas H<sub>2</sub>S concentration, for each month of the reporting period.</i></p> <p><i>d. Report as excess emissions and permit deviation as described in Condition 28, should the gas H<sub>2</sub>S concentration exceed the limits in Condition 20.3, or if Conditions 20.3a through 20.3c are not met.”</i></p>
<b>Section 10 Permit Documentation</b>		
6	Attachment 3 – New Relocation Notification	Revise the title of this attachment to be consistent with the reference to the attachment in Condition 6, as follows: “Attachment 3 – New <u>Location Relocation</u> Notification”.
<b>Technical Analysis Report (TAR) for the Terms and Conditions of Minor Permit AQ1552MSS02</b>		
7	Page 4, Section 1: General Terms and Conditions	<p>In the first paragraph, add an “or” after the third comma as follows, since the Doyon 26 Drill Rig POGO can only operate with one of these sources at a time.</p> <p><i>“In order to document when the Doyon 26 Drill Rig Portable Oil and Gas Operation operates alone, with a minor stationary source, <u>or</u> with a Title V...”</i></p>

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<b>TAR Appendix A – Emissions Calculations</b>		
8	Page 10, Table A-2	Move the row with emission factors for EU ID 18 to follow the row for EU ID 16 so that it is in numerical order and is consistent with the order of the rows in Tables A-3 and A-4.
<b>Review of ConocoPhillips Alaska, Inc’s Ambient Demonstration for the Doyon 26 POGO Boiler Project supporting Minor Permit AQ1552MSS02</b>		
9	Entire Ambient Demonstration Review	<p>The entire modeling review consistently references the wrong permit number when referencing both the previous and current permits. For example, on Page 2 of 9, the second paragraph of the introduction refers to the incorrect permit number when referencing the previous permit. The previous permit was permit no. AQ1552MSS01, and not AQ1553MSS01. The permit numbers should be corrected throughout the modeling review as follows:</p> <p><i>“AQ21553MSS01AQ1552MSS01”</i>,  <i>“AQ1553MSS01AQ1552MSS01”</i>, and  <i>“AQ1553MSS02AQ1552MSS02”</i>.</p>
10	Page 2 of 9, 2.2 Project Classification	<p>Revise the third sentence as follows, to clearly describe the basis for the revisions to permit conditions.</p> <p><i>“CPAI’s request to add the 200 Bhp steam generator requires <del>wants to revisions</del> revise to permit conditions established in <del>AQ1552MSS01AQ1553MSS01</del> to protect the annual NO<sub>2</sub>; 1-hour, 3-hour, 24-hour, and annual SO<sub>2</sub>; annual PM-2.5; and 24-hour PM-10 standards.”</i></p>
11	Page 4 of 9, 3.4. EU Inventory	<p>The new 200 Bhp steam generator was modeled with the stack ID “STG01”, not “GEN”. Model ID “GEN” is the generic pad generator that was modeled and is not new to the modeling (refer to Section 3.8 of the ambient demonstration provided with the application for AQ1552MSS01). We suggest the following revision to correct this issue:</p> <p><i>“CPAI used the same EU inventory for this modeling analysis that they used for <del>AQ1552MSS01AQ1553MMS01</del>. The exception to this is that they added EU 18, the new 200 Bhp steam generator, to their inventory. This EU was modeled as a single point source and given the Stack ID “<del>STG01</del>GEN” in AERMOD. Further discussion regarding the remainder of the EU inventory can be found in Section 3.8 of the modeling report for <del>AQ1552MSS01AQ1553MMS01</del>.”</i></p>
12	Page 5 of 9, 3.5.1.2. Operational Limits	<p>Revise the last sentence as follows to include EU 18, since EU 18 is subject to this limit:</p> <p><i>“...CPAI did not assume that these EUs would be subject to the daily fuel use limit when EUs 1 through 13, <del>and 18</del> do not operate and, thus, the conditions were modified to reflect their modeling analysis.”</i></p>
13	Page 6 of 9,	Based on the discrepancy described in Comment 11, it appears that the incorrect point source was evaluated by the Department as the steam generator when

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	3.5.2.2. Horizontal/Capped Stacks	<p>reviewing the modeling files supporting the ambient demonstration. In the modeling files, the steam generator is point source “STG01” and was simulated using the “POINTCAP” keyword. Therefore, the steam generator was simulated with a capped stack consistent with the source description provided in the application ambient demonstration.</p> <p>Therefore, the second paragraph of this section should be revised as follows, to indicate that the steam generator was modeled with a capped stack and as a result the Department is not imposing an ambient air protection condition related to the steam generator exit configuration.</p> <p><i>“In the modeling analysis report submitted with their application, CPAI indicated that the steam generator stack will have a capped, vertical release. <del>However, review Review of CPAI’s model input files indicate that EU 18 was modeled using the POINTCAP keyword, rather than the POINTCAP keyword; thus, the new steam generator was not modeled with a capped release. Since the impacts from horizontal or capped stacks are typically greater than the impacts from stacks with vertical, uncapped discharges, and therefore the Department is not imposing CPAI’s vertical, uncapped characterization as an ambient air condition related to the steam generator stack exit configuration.</del>”</i></p>
14	Page 8 of 9, 5. CONCLUSION	<p>Condition 19.1 should be removed for the same reason that the on-site verification justified the removal of Condition 19.2. That justification was based on the following statement from Section 4 of the ambient demonstration supporting the application to revise AQ1552MSS01 Revision 1, which confirms that more than just stack heights were field verified.</p> <p style="padding-left: 40px;">"physical exit parameters for the Doyon 26 Rig sources that were previously modeled were updated to represent the as-built rig. This information was updated based on an extensive field verification conducted by CPAI and Doyon Drilling, Inc. personnel in August and September 2020 (Field Verification [September 2020]). This resulted in revising nearly all stack diameters and some of the stack exit heights. As a consequence of changing stack diameters, stack exit velocities were revised."</p> <p>While this statement and the rest of Section 4 focuses on discussing heights and diameters, the exit configuration is also a physical stack exit parameter that was field verified. Similar to the diameters, that verification did not warrant presenting a table documenting the differences, and the field verification results were simply reflected in Tables 2 through 5 of the ambient demonstration.</p>