# DEPARTMENT OF ENVIRONMENTAL CONSERVATION
# AIR QUALITY CONTROL MINOR PERMIT

**Minor Permit No.: AQ1854MSS01** **Preliminary Date – August 1, 2024**

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit No. AQ1854MSS01 to the Permittee listed below.

| | |
|---|---|
| **Permittee:** | **Hilcorp North Slope, LLC**<br>3800 Centerpoint Drive, Suite 1400<br>Anchorage, AK 99503 |
| **Stationary Source:** | **Omega Pad** |
| **Location:** | Latitude: 70.352586 / Longitude: -149.360722 |
| **Project:** | Minor Permit for New Stationary Source (Omega Pad) |
| **Permit Contact:** | Natalia Lau, (907) 777-8304, Natalia.lau@hilcorp.com |

The Permittee submitted an application for Minor Permit No. AQ1854MSS01 under 18 AAC 50.502(c)(1) for a new source that has the potential to emit greater than 40 tons per year (TPY) of oxides of nitrogen ($NO_x$), 40 TPY of sulfur dioxide ($SO_2$), 10 TPY of particulate matter less than or equal to a nominal 2.5 microns in diameter ($PM_{2.5}$), and 15 TPY of particulate matter less than or equal to a nominal 10 microns in diameter ($PM_{10}$). 18 AAC 50.502(c)(1) requires the Permittee to obtain a minor permit before beginning actual construction of a new stationary source with a potential to emit greater than the thresholds listed under 18 AAC 50.502(c)(1).

This permit satisfies the obligation of the Permittee to obtain a minor permit under 18 AAC 50. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this permit.

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James R. Plosay, Manager
Air Permits Program

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## Abbreviations and Acronyms

AAAQS .....Alaska Ambient Air Quality Standards
AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AOS .....Air Online Services
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
bhp .....brake horsepower
C.F.R. .....Code of Federal Regulations
CO .....carbon monoxide
Department .....Alaska Department of Environmental Conservation
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp.....horsepower
$H_2S$.....hydrogen sulfide
ID.....emissions unit identification number
MMBtu/hr.....million British thermal units per hour
MR&R .....monitoring, recordkeeping, and reporting
N/A.....not applicable
$NO_x$.....nitrogen oxides
NMHC .....non-methane hydrocarbons
NRE.....nonroad engine
$PM_{10}$ .....particulate matter less than or equal to a nominal 10 microns in diameter
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....parts per million
ppmv, ppmvd.....parts per million by volume on a dry basis
PSD .....prevention of significant deterioration
PTE.....potential to emit
SIC.....Standard Industrial Classification
SIP .....State Implementation Plan
SPC.....Standard Permit Condition or Standard Operating Permit Condition
$SO_2$ .....sulfur dioxide
TBD.....to be determined
TPY .....tons per year
ULSD .....ultra-low sulfur diesel
VOC .....volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
vol% .....volume percent
wt% .....weight percent
$wt\%S_{fuel}$ .....weight percent of sulfur in fuel

# *Section 1 Emissions Unit Inventory*

**Emissions Unit (EU) Authorization.** The Permittee is authorized to install and operate the EUs listed in Table 1 in accordance with the terms and conditions of this permit. The information in Table 1 is for identification purposes only, unless otherwise noted in the permit. The specific EU descriptions do not restrict the Permittee from replacing an EU identified in Table 1.

**Table 1 – EU Inventory**

| EU ID | EU Description | Make/Model | Fuel | Rating/Max Capacity | Installation Date |
|---|---|---|---|---|---|
| 1 | Hot Oil Heater | Tulsa Heater (Therminol) | Fuel Gas | 115 MMBtu/hr | TBD |
| 2 | Hot Oil Heater | Tulsa Heater (Therminol) | Fuel Gas | 115 MMBtu/hr | TBD |
| 3 | Hot Oil Heater | Tulsa Heater (Therminol) | Fuel Gas | 115 MMBtu/hr | TBD |
| 4 | Hot Oil Heater | Tulsa Heater (Therminol) | Fuel Gas | 115 MMBtu/hr | TBD |
| 5 | Standby Engine(s)[1] | One Cummins QST30-G17 (Tier 4) | ULSD | 1,490 bhp | TBD |
| | | Two Caterpillar C18 (Tier 4) | | 779 bhp, each | |
| 6 | Emulsion Breaker Tank | TBD | N/A | 2,300 gallons | TBD |
| 7 | Anti Foam Tank | TBD | N/A | 2,300 gallons | TBD |
| 8 | Pad Buster Tank | TBD | N/A | 2,300 gallons | TBD |
| 9 | Corrosion Inhibitor Tank | TBD | N/A | 14,000 gallons | TBD |
| 10 | ULSD Tank | TBD | N/A | 5,000 gallons | TBD |

Notes:

1. As of issuance of this permit, Hilcorp has yet to identify the actual engine or engines that will be installed as EU ID 5. EU ID 5 will either be one Cummins QST30-G17 engine or two Caterpillar C18 engines.

**1.** The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement EU, including any applicable minor or construction permit requirements**.**

**2.** **Verification of Equipment Specifications and Maintenance of Equipment.** The Permittee shall install and maintain the equipment listed in Table 1 according to the manufacturer's or operator's maintenance procedures. Keep a copy of the manufacturer's or operator's maintenance procedure onsite and make records available to the Department personnel upon request. The records may be kept in electronic format.

**3.** **Nonroad Engines (NRE) Tracking.** Maintain a NRE log onsite for NREs with a rated capacity of 400 bhp or greater, including those categorized as construction phase units, and have it available for inspection upon request.

3.1 For each NRE, record in the log the following:

a. the make, model, serial number, and rated capacity; and

b. at a minimum, on the 15$^{th}$ of each calendar month, log its location and the purpose for being in that location.

3.2 Whenever any engine included in the log required by Condition 3 is permanently removed from the stationary source, discontinue the NRE tracking requirements in Condition 3.1b for that engine and provide notification of its removal from the stationary source in the first operating report required by Condition 17 due after its removal from the stationary source.

3.3 Report as an excess emission or permit deviation under Condition 16 if any of the NREs in the engine log stops meeting the definition of NRE in 40 C.F.R. 1068.30, or if any requirement under Condition 3 is not met.

## *Section 2 Fee Requirements*

**4. Fee Requirements.** The Permittee shall pay to the Department all assessed permit fees. Fee rates are set out in 18 AAC 50.400 – 499.

**5. Assessable Emissions**. For each period from July 1 through the following June 30, the Permittee shall pay to the Department annual emission fees based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit. The quantity for which fees will be assessed is the lesser of the stationary source's

5.1 potential to emit of 542.47 TPY; or

5.2 projected annual rate of emissions, in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

**6. Assessable Emission Estimates.** The Permittee shall comply as follows:

6.1 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 5.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

6.2 The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

6.3 If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero TPY and provides estimates for when construction or operation will commence.

6.4 If no estimate or waiver letter is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in Condition 5.1.

## *Section 3 State Emission Standards*

**7. Visible Emissions for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 – 5, listed in Table 1, to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

7.1 For EU IDs 1 – 4, burn only fuel gas as fuel. In each operating report under Condition 17, indicate whether each of EU IDs 1 – 4 burned only fuel gas during the period covered by the report.

7.2 For EU ID 5, perform an initial Method 9 observation within 60 days of initial startup of the EU.

a. Record the date of initial startup of EU ID 5.

b. Report the results of the Method 9 observations required by Condition 7.1 in the first operating report required by Condition 17 due after the observations were performed.

7.3 Report as an excess emission or permit deviation as described in Condition 16 if visible emissions from any of EU IDs 1 – 5 exceed the opacity standard in Condition 7 or if any of the requirements in Conditions 7.1 through 7.1 are not met.

**8. Particulate Matter for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 – 5, listed in Table 1, to exceed 0.05 grains per dry standard cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

8.1 For EU IDs 1 – 4, demonstrate compliance with the PM standard by complying with Condition 7.1.

8.2 For EU ID 5, demonstrate compliance with the PM standard by complying with Condition 7.2.

**9. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as $SO_2$, from EU IDs 1 – 5, listed in Table 1, to exceed 500 parts per million (ppm) averaged over three hours.

9.1 For EU IDs 1 – 4, to demonstrate compliance with Condition 9, the Permittee shall comply with the fuel hydrogen sulfide ($H_2S$) content limit in Condition 11.1 and the associated MR&R requirements in Conditions 11.1a through 11.1d.

9.2 For EU ID 5, to demonstrate compliance with Condition 9, the Permittee shall comply with the fuel sulfur content limit in Condition 11.2 and the associated MR&R requirements under Conditions 11.2a through 11.2c.

## *Section 4 Ambient Air Quality Protection Requirements*

**10.** The Permittee shall protect the annual average nitrogen dioxide ($NO_2$); 1-hour, 3-hour, 24-hour, and annual average sulfur dioxide ($SO_2$); 24-hour and annual average particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$); and 24-hour average particulate matter with an aerodynamic diameter less than or equal to 10 microns ($PM_{10}$) Alaska Ambient Air Quality Standards (AAAQS), as follows:

10.1 **Stack Configuration.** Comply with the following stack configuration requirements:

a. Construct and maintain vertical, uncapped exhaust stacks for EU IDs 1 – 5, except

(i) EU IDs 1 – 4 may use capped releases;

(ii) EU ID 5 may use horizontal releases; and

(iii) All EUs may use flapper-style rain covers or other similar designs that do not hinder the vertical momentum of their exhaust plume.

b. Report in the first operating report required by Condition 17 due following installation of each of EU IDs 1 – 5, a statement that the exhaust stack for that EU is constructed in accordance with the configuration requirements of Condition 10.1a; and

c. Report as an excess emission or permit deviation as described in Condition 16 if the exhaust stack for any of EU IDs 1 – 5 is not constructed in accordance with the configuration requirements of Condition 10.1a.

10.2 **Stack Heights.** Construct and maintain the exhaust stacks for the EUs listed in Table 2 so that the height above grade[1] equals or exceeds the minimum height listed for that EU.

**Table 2 – Minimum Stack Height Requirements**

| EU ID | Description | Min. Stack Height (m) |
|---|---|---|
| 1 | Hot Oil Heater | 15.2 |
| 2 | Hot Oil Heater | 15.2 |
| 3 | Hot Oil Heater | 15.2 |
| 4 | Hot Oil Heater | 15.2 |

a. Provide as-built drawings, photographs, or other information sufficient to demonstrate that each exhaust stack listed in Table 2 complies with the minimum stack height requirements in the first operating report required by Condition 17 due after installation of the given EU.

b. Report as an excess emission or permit deviation as described in Condition 16 if any requirement under Condition 10.2 is not met.

[1] or as otherwise measured from the stack base, e.g., from above a pad or platform surface.

10.3 **EPA's Nonroad Tier 4 Emission Standards.** The Permittee shall protect the annual average $NO_2$, 24-hour and annual average $PM_{2.5}$, and 24-hour $PM_{10}$ AAAQS by operating an EPA Tier 4 compliant engine as EU ID 5.

a. Obtain a certified manufacturer's guarantee, photograph of the engine nameplate, or copy of the EPA certificate of conformity that indicates that EU ID 5 complies with EPA's Nonroad Tier 4 emissions standards.

b. Submit a copy of any of the records required in Condition 10.3a as proof of the engine's conformity with EPA's Nonroad Tier 4 emissions standards in the first operating report required by Condition 17 after EU ID 5 becomes fully operational.

c. Report as excess emissions and/or permit deviation as described in Condition 16, if any of the requirements under Condition 10.3 were not met.

**11. Fuel Sulfur Content Limits**. The Permittee shall protect the 1-hour, 3-hour, 24-hour, and annual $SO_2$ AAAQS as follows:

11.1 Limit the hydrogen sulfide ($H_2S$) content of the fuel gas fired in EU IDs 1 – 4 to no more than 250 ppmv at any time.

a. Determine compliance with the fuel gas $H_2S$ content limit as follows:

(i) Obtain a semiannual statement from the fuel supplier of the fuel $H_2S$ sulfur level in ppm; or

(ii) Determine the fuel gas $H_2S$ content of the fuel no less than once a month using ASTM D4084, D5504, D4810, D6228 or GPA Standard 2377, or other 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).The fuel gas $H_2S$ analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, or the fuel vendor.

b. Keep records of the statement from the fuel supplier or the $H_2S$ analysis conducted under Condition 11.1a(i) or 11.1a(ii).

c. Include in each operating report required by Condition 17, copies of the records required by Condition 11.1b for the period covered by the report.

d. Report as an excess emission or permit deviation as described in Condition 16, whenever the fuel gas $H_2S$ concentration exceeds the limit in Condition 11.1 or whenever the requirements in Conditions 11.1a through 11.1c are not met.

11.2 Combust only liquid fuel that meets the specifications of ultra-low sulfur diesel (ULSD) (i.e., less than 0.0015 percent sulfur by weight) in EU ID 5. Monitor, record, and report as follows:

a. Obtain and keep certified receipts from fuel suppliers that specify the fuel grade or confirm diesel fuel combusted in EU ID 5 meets the fuel sulfur limit in Condition 11.2.

b. Include in the operating report required by Condition 17, the following for the period covered by the report:

(i) copies of the records specified in Condition 11.2a; and

(ii) a statement indicating whether all fuel combusted in EU ID 5 during the reporting period was ULSD or 0.0015 percent sulfur by weight or less.

c. Report as excess emissions or permit deviation, as described in Condition 16, if any fuel combusted in EU ID 5 exceeds the fuel sulfur content limit in Condition 11.2 or if any of the requirements under Condition 11.2 are not met.

## Section 5 Recordkeeping, Reporting, and Certification Requirements

**12. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five-years after the date of collection, including:

12.1 copies of all reports and certifications submitted pursuant to this section of the permit; and

12.2 records of all monitoring required by this permit, and information about the monitoring including:

a. the date, place, and time of sampling or measurements;

b. the date(s) analyses were performed;

c. the company or entity that performed the sampling and analyses;

d. the analytical techniques or methods used in the analyses;

e. the results of the analyses; and

f. the operating conditions that existed at the time of sampling or measurement

**13. Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: "*Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.*" Excess emissions reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

13.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature

a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and

b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

**14. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

14.1 Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/.

**15. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke, reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.

**16. Excess Emissions and Permit Deviation Reports**. The Permittee shall report excess emissions and permit deviations as follows:

16.1 **Excess Emissions Reporting.** Except as provided in Condition 19, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

a. In accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) excess emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable.

b. In accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology-based emissions standard.

c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 16.1d.

d. Report all other excess emissions not described in Conditions 16.1a, 16.1b, and 16.1c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 17 for excess emissions that occurred during the period covered by the report, whichever is sooner.

e. If requested by the Department, the Permittee shall provide a more detailed written report to follow up on an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2)]

16.2 **Permit Deviations Reporting.** For permit deviations that are not "excess emissions," as defined under 18 AAC 50.990:

a. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 17 for permit deviations that occurred during the period covered by the report, whichever is sooner.

16.3 **Reporting Instructions.** When reporting either excess emissions or permit deviations, the Permittee shall report using the Department's online form for all such submittals, beginning no later than September 7, 2023. The form can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 9 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

**17. Operating Reports.** During the life of this permit[2], the Permittee shall submit to the Department an operating report in accordance with Conditions 13 and 14 by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

17.1 The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.

17.2 When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 17.1, the Permittee shall identify

a. the date of the excess emissions or permit deviation;

b. the equipment involved;

c. the permit condition affected;

d. a description of the excess emissions or permit deviation; and

e. any corrective action or preventive measures taken and the date(s) of such actions; or

17.3 When excess emissions or permit deviation reports have already been reported under Condition 16 during the period covered by the operating report, the Permittee shall either

a. include a copy of those excess emissions or permit deviation reports with the operating report; or

b. cite the date(s) of those reports.

**18. Title V Major Source Application Submittal Date.** For a stationary source that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant subject to regulation, the Permittee shall file a complete application to obtain the Part 70 Title V

[2] *Life of this permit* is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example, if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

Operating Permit within 12 months after commencing operation or reaching the 100 TPY threshold.

**19. Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

19.1 **Monitoring.** The Permittee shall monitor as follows:

a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 19.

b. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 19; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 19.

19.2 **Recordkeeping.** The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 19; and

d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

19.3 **Reporting.** The Permittee shall report as follows:

a. With each stationary source operating report under Condition 17, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(i) the number of complaints received;

(ii) the number of times the Permittee or the Department found corrective action necessary;

(iii) the number of times action was taken on a complaint within 24 hours; and

(iv) the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

b. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 16.

**20. Triennial Emission Inventory Reporting.** Every third year by April 30, the Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, $NH_3$, $NO_x$, $PM_{10}$, $PM_{2.5}$, $SO_2$, VOC and lead (Pb) and lead compounds, as follows:

20.1 The Permittee shall report the annual emissions and the required data elements under Condition 20.2 every third year for the previous calendar year as scheduled by the EPA.[3]

20.2 For each emissions unit and the stationary source, include in the report the required data elements[4] contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory.

20.3 Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/.

**21. Consistency of Reporting Methodologies.** Regardless of permit classification, as of September 7, 2022, all stationary sources operating in the state shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 C.F.R. Part 51, Subpart A.

21.1 For the purposes of reporting actual or assessable emissions required under Condition 20 and Condition 5.2, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

[3] The calendar years for which reports are required are based on the triennial reporting schedule in 40 C.F.R. 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

[4] The required data elements to be reported to the EPA are outlined in 40 C.F.R. 51.15 and Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A.

## *Section 6 Standard Permit Conditions*

**22.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

22.1 an enforcement action; or

22.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.

**23.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

**24.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

**25.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**26.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

**27.** The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

27.1 enter upon the premises where an emissions unit subject to this permit is located or where records required by the permit are kept;

27.2 have access to and copy any records required by this permit;

27.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

27.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

## *Section 7 Permit Documentation*

| Date | Document Details |
|---|---|
| December 21, 2023 | Application Received |
| February 21, 2024 | Hilcorp Response to February 2, 2024 ADEC Information Request. |
| June 3, 2024 | Hilcorp Response to May 23, 2024 ADEC Information Request. |
| July 3, 2024 | Hilcorp submitted comments for pre-public notice review. |

# *Section 8 Visible Emissions Form*

## VISIBLE EMISSIONS OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources." Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under Additional Information. The following are brief descriptions of the type of information that needs to be entered on the form. For a more detailed discussion of each part of the form, refer to "Instructions for Use of Visible Emission Observation Form" (a copy is available in https://www3.epa.gov/ttnemc01/methods/webinar8.pdf).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g., charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present? check "yes" if visible water vapor is present.
- If Present, note in the Comments column whether the Plume is "attached" if water droplet plume forms prior to exiting stack, and "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate color of clouds and cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer.
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun's Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen's shadow crosses the observer's position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer's Name: print in full.
- Observer's Signature, Date: sign and date after performing VE observation.
- Observer's Affiliation: observer's employer.
- Certifying Organization, Certified By, Date: name of "smoke school," certifying observer, and date of most recent certification.

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM**

Page No.

| | |
|---|---|
| Stationary Source Name | Type of Emission Unit |
| Emission Unit Location | |
| City / State / Zip | |
| Phone # (Key Contact) | Stationary Source ID Number |
| Process Equipment | Operating Mode |
| Control Equipment | Operating Mode |
| Describe Emission Point/Location | |
| Height above ground level / Height relative to observer / Clinometer Reading | |
| Distance From Observer Start / End | Direction From Observer Start / End |
| Describe Emissions & Color Start | End |
| Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to w here the plume w as read — No / Yes | |
| Point in Plume at Which Opacity Was Determined | |
| Describe Plume Background Start / End | Background Color Start / End |
| Sky Conditions: Start | End |
| Wind Speed Start / End | Wind Direction From Start / End |
| Ambient Temperature | Wet Bulb Temp / RH percent |
| SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks | |
| Additional Information: | |
| I have received a copy of these opacity observations<br>Print Name:<br>Signature: | |
| Title | Date |

| Observation Date | Start Time | | | | End Time |
|---|---|---|---|---|---|
| Sec / Min | 0 | 15 | 30 | 45 | Comments |
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Range of Opacity:
Minimum | Maximum

Print Observer's Name

Observer's Signature | Date

Observer's Affiliation:

Certifying Organization:

Certified By: | Date

***Data Reduction:***

| | |
|---|---|
| Duration of Observation Period (minutes): | Duration Required by Permit (minutes): |
| Number of Observations: | Highest Six–Minute Average Opacity (%): |
| Number of Observations exceeding 20%: | |
| In compliance with six-minute opacity limit? (Yes or No) | Highest 18-Consecutive –Minute Average Opacity (%)(engines and turbines only) |

***Average Opacity Summary:***

| Set Number | Time | | | Opacity | | Comments |
|---|---|---|---|---|---|---|
| | Start | End | | Sum | Average | |
| | | | | | | |
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## *Section 9 Notification Form*[5]

| Omega Pad | AQ1854MSS01 |
|---|---|
| **Stationary Source Name** | **Air Quality Permit Number** |

Hilcorp North Slope, LLC
**Company Name**

**When did you discover the Excess Emissions/Permit Deviation?**

Date: ____/____/____ Time: ____:____

**When did the event/deviation occur?**

Begin: Date: ____/____/____ Time: ____:____ (please use 24-hr clock)

End: Date: ____/____/____ Time: ____:____ (please use 24-hr clock)

**What was the duration of the event/deviation?** ____:____ (hrs:min) or ____days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

**Reason for Notification** (Please check only 1 box and go to the corresponding section.):

☐ Excess Emissions - Complete Section 1 and Certify

Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

☐ Deviation from Permit Conditions - Complete Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

☐ Deviation from COBC[6], CO[7], or Settlement Agreement - Complete Section 2 and Certify

[5] Revised as of July 22, 2020.
[6] Compliance Order By Consent
[7] Compliance Order

# Section 1. Excess Emissions

(a) **Was the exceedance** ☐Intermittent or ☐Continuous

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

☐Start Up/Shut Down
☐Natural Cause (weather/earthquake/flood)
☐Control Equipment Failure
☐Scheduled Maintenance/Equipment Adjustments
☐Bad fuel/coal/gas
☐Upset Condition
☐Other _____

(c) **Description**

Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance. Attach supporting information if necessary.

(d) **Emissions Units (EU) Involved:**

Identify the emissions units involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

| EU ID | EU Name | Permit Condition Exceeded/Limit/Potential Exceedance |
|---|---|---|
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(e) **Type of Incident:** (Please check all that apply and provide the value requested, if any):

- ☐ Opacity _____%
- ☐ Control Equipment Down
- ☐ Emission Limit Exceeded
- ☐ Flaring
- ☐ Other**:** _____
- ☐ Venting _____(gas/scf)
- ☐ Fugitive Emissions
- ☐ Marine Vessel Opacity

(f) **Corrective Actions:**

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

| |
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(g) **Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable? ☐YES ☐NO

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐YES ☐NO

**Certify Report (<u>go to end of form</u>)**

## Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

- ☐ Emissions Unit-Specific Requirements
- ☐ Stationary Source-Wide Specific Requirements
- ☐ Monitoring/Recordkeeping/Reporting Requirements
- ☐ General Source Test Requirements
- ☐ Compliance Certification Requirements
- ☐ Standard/Generally Applicable Requirements
- ☐ Insignificant Emissions Unit Requirements
- ☐ Other: _____

(b) **Emissions Units (EU) Involved:**

Identify the emissions units involved in the event, using the same identification number and name as in the permit. List the corresponding permit condition and the deviation.

| EU ID | EU Name | Permit Condition /Potential Deviation |
|---|---|---|
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(c) **Description of Potential Deviation:**

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation. Attach supporting information if necessary.

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence. Attach supporting information if necessary.

| |
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**Certification:**

**Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.**

Printed Name: _____Title: _____Date: _____

Signature: _____ Phone number: _____

***NOTE:*** *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 13.)*

Beginning September 7, 2023, Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at http://dec.alaska.gov/applications/air/airtoolsweb/.

This Notification Form may only be used to satisfy the reporting requirements if the Department has approved alternative reporting options in writing prior to submittal.

[18 AAC 50.346(b)(3)]