

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL MINOR PERMIT

Minor Permit: AQ0272MSS04

Preliminary – October 22, 2025

Revises Permit: AQ0272CPT01 Revision 1
AQ0272MSS03

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ0272MSS04 to the Permittee listed below.

Permittee: **Hilcorp North Slope, LLC**
3800 Centerpoint Dr., Suite 1400
Anchorage, AK 99503

Stationary Source: **Lisburne Production Center (LPC)**

Location: Latitude: 70° 17' 6.3" North; Longitude: 148° 25' 54.3" West

Project: LPC Power Export Project (PXP)

Permit Contact : Kaley Volper - Environmental Specialist, (907) 564-4332
kaley.volper@hilcorp.com

The Permittee submitted an application for Minor Permit AQ0272MSS04 under 18 AAC 50.508(6) for revising or rescinding the terms and conditions of a Title I permit.

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.

James R. Plosay, Manager
Air Permits Program

Table of Contents

Table of Contents	ii
Abbreviations and Acronyms	iii
Section 1 Emissions Unit Inventory	1
Section 2 Fee Requirements.....	2
Section 3 Revisions to Previous Permit Actions.....	3
Section 4 CO Emissions MR&R Requirements	4
Section 5 Recordkeeping, Reporting, and Certification Requirements	6
Section 6 Standard Permit Conditions	7
Section 7 Permit Documentation	8
APPENDIX A: BAE and PAE for the LPC Power Export Project	A

Abbreviations and Acronyms

AAC.....	Alaska Administrative Code	kWe	kilowatt-electric
ADEC	Alaska Department of Environmental Conservation	LPC	Lisburne Production Center
AS.....	Alaska Statutes	MWe.....	megawatts (electric)
BACT	best available control technology	MMscf.....	million standard cubic feet
BAE	baseline actual emissions	MR&R.....	monitoring, recordkeeping, and reporting
CAE	could have accommodated emissions	NO _x	nitrogen oxides
C.F.R.	Code of Federal Regulations	O ₂	oxygen
CAA.....	Clean Air Act	PAE	projected actual emissions
CO	carbon monoxide	PM ₁₀	particulate matter less than or equal to a nominal 10 microns in diameter
Department	Alaska Department of Environmental Conservation	PM _{2.5}	particulate matter less than or equal to a nominal 2.5 microns in diameter
dscf	dry standard cubic foot	ppm	parts per million
EF	emission factor	ppmv, ppmvd.....	parts per million by volume on a dry basis
EICO.....	CO emission factor at site conditions	PSD	prevention of significant deterioration
EINO _x	NO _x emission factor at site conditions	PTE.....	potential to emit
EPA	US Environmental Protection Agency	PXP	Power Export Project
EU.....	emissions unit	RGCP	Rich Gas Compressor Project
F _d	calculated volume of dry combustion products per unit of heat content at stoichiometric conditions based on LPC fuel composition and lower heating value	SER	Significant Emissions Rate
gr/dscf.....	grain per dry standard cubic foot (1 pound = 7000 grains)	SPC.....	Standard Permit Condition or Standard Operating Permit Condition
GPBU	Greater Prudhoe Bay Unit	SO ₂	sulfur dioxide
HAPs	hazardous air pollutants [as defined in AS 46.14.990]	TPY	tons per year
hp	horsepower	VOC	volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
ID.....	emissions unit identification number	wt%	weight percent
		wt% _{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 Inventory¹

EU ID ²	EU Description	Make/Model	Fuel	Rating/Max Capacity	Construction Date
6A	Electric Generator Turbine	Solar Mars 90-13000S SoLoNOx	Fuel Gas	13,000 hp, ISO	February 18, 2025 ²
7A	Electric Generator Turbine	Solar Mars 90-13000S SoLoNOx	Fuel Gas	13,000 hp, ISO	March 12, 2025 ²
8	Electric Generator Turbine	Solar Mars GSC T-12000	Fuel Gas	12,000 hp, ISO (8,840 kW, ISO)	December 18, 1986
9	Electric Generator Turbine	Solar Mars GSC T-12000	Fuel Gas	12,000 hp, ISO (8,840 kW, ISO)	December 18, 1986

Notes:

1. Only the EUs affected by this minor permit appear in Table 1.
 2. EU IDs 6A and 7A startup dates are February 18, 2025 and March 12, 2025, per cc to the Department on February 28, 2025 and March 18, 2025 for Notification of Initial Startup, respectively.
- 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.

Section 2 Fee Requirements

2. **Fee Requirements.** The Permittee shall pay to the Department all assessed permit fees. Fee rates are set out in 18 AAC 50.400 – 499.
3. **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
 - 3.1 potential to emit of 3,396.06 TPY; or
 - 3.2 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.

Section 3 Revisions to Previous Permit Actions

4. Condition 7.1b of Construction Permit AQ0272CPT01 Revision 1 is rescinded (in its entirety) and replaced by Condition 6 of Minor Permit AQ0272MSS04.
5. Conditions 9, 11, and 12 of Minor Permit AQ0272MSS03 are rescinded (in its entirety) once the transformer is installed and ready to operate. Record and report as follows:
 - 5.1 Keep records of the date when the transformer is installed and ready to operate at the stationary source.
 - 5.2 Include the information recorded under Condition 5.1 in the first operating report for the applicable operating permit issued to the stationary source under AS 46.16 and 18 AAC 50, following completion of the transformer installation.
 - 5.3 Report as permit deviation in the applicable operating permit issued to the stationary source under AS 46.16 and 18 AAC 50 if the requirements of Conditions 5.1 or 5.2 are not met.

ORL to Avoid PSD Permit Classification under 18 AAC 50.306 for NO_x

6. Limit the NO_x emissions from EU IDs 6A, 7A, 8, and 9 to no more than 745 tons total in any rolling 12-month period.

Section 4 CO Emissions MR&R Requirements¹

7. **Monitoring.** The Permittee shall monitor and calculate for the remaining 10 calendar years from the date the transformer is installed and ready to operate, the CO emissions from EU IDs 6A, 7A, 8, and 9, as follows:

7.1 For EU IDs 6A and 7A, the Permittee shall use the exhaust gas concentrations shown in Table 2 to calculate CO emission factors for each temperature range or if available, use either Department-approved source test results or representative source test data.

Table 2 – Exhaust Gas Concentration at Various Intake Temperatures (T)¹

Pollutant	T < -20 °F	-20 °F ≤ T < -4 °F	-4 °F ≤ T
CO	150 ppmvd	50 ppmvd	25 ppmvd

Notes:

1. Vendor data assumes operations above 50% load during normal operations.
2. Concentration values are corrected to 15% O₂.

7.2 For EU IDs 6A and 7A, by the end of each calendar month, calculate and record the previous monthly and rolling 12-month period of CO emissions using the emissions factors obtained in accordance with Condition 7.1 and record the hourly average intake temperature and number of hours that the turbine was operating or amount of fuel gas burned.

7.3 For EU IDs 8 and 9, calculate and record the previous monthly and rolling 12-month period of CO emissions using a variation of the CO emission factor with intake temperature derived from all representative source test data and record the hourly average intake temperature and number of hours of operation that the turbine was operating or amount of fuel gas burned.

7.4 In addition to monitoring, recording, and calculating the total CO emissions in accordance with Conditions 7.2 and 7.3, comply with the following:

- a. Include in each operating report required by the applicable operating permit issued for the stationary source under AS 46.14.130(b) and 18 AAC 50, the net change in CO emissions for the rolling 12-consecutive month period as follows:

$$\text{Net Change in CO Emissions} = (\text{Sum of CO emissions calculated in Conditions 7.2 and 7.3}) - 6.74 \text{ TPY}^2.$$

8. **Recordkeeping.** The Permittee shall maintain the following records for EU IDs 6A, 7A, 8, and 9, and make them available to the Department upon request.

¹ Conditions 7 through 9 sunset after 10 calendar years from the date the transformer is installed and ready to operate.

² 6.74 TPY consists of 7.99 TPY, the average yearly amount of CO emitted by EU IDs 6 through 9 during the baseline period from May 2020 to April 2022 (Baseline Actuals), and -1.25 TPY from the excludable amount of CO emissions (Demand Growth). See Table C and Table D in the TAR.

- 8.1 Include the total CO emissions for each calendar month and year calculated under Conditions 7.2 and 7.3 and the supporting calculations used to obtain the emissions estimates; and
 - 8.2 The net change in CO emissions for each calendar year as determined in Condition 7.4a.
- 9. Reporting.** For EU IDs 6A, 7A, 8, and 9, the Permittee shall report as follows:
- 9.1 Include in each operating report required by the applicable operating permit issued for the stationary source under AS 46.14.130(b) and 18 AAC 50:
 - a. CO emissions for each calendar month of the calendar year as determined from Conditions 7.2 and 7.3; and
 - b. In the final operating report of the year, report the net change in emissions calculated under Condition 7.4a for the calendar year ending with the last month of the reporting period.
 - 9.2 Report to the Department within 60 days if the net change in CO emissions calculated under Condition 7.4a for the preceding year reaches or exceeds 100 TPY:
 - a. The name, address, and telephone number of the major stationary source;
 - b. The annual emissions calculated under Conditions 7.2 and 7.3 and the net change in emissions calculated under Condition 7.4a; and
 - c. Any other information that the Permittee deems relevant to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
 - 9.3 The Permittee shall submit a PSD permit application if the net change in CO emissions calculated under Condition 7.4a for the preceding year reaches or exceeds 100 TPY.
 - 9.4 Report as permit deviation in the applicable operating permit issued for the stationary source under AS 46.14.130(b) and 18 AAC 50 if monitoring, recordkeeping, or reporting under Conditions 7 through 9 is not completed as required.

Section 5 Recordkeeping, Reporting, and Certification Requirements

10. 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.

10.1 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.

11. 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.

11.1 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/>.

Section 6 Standard Permit Conditions

- 12.** 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
 - 12.1 an enforcement action; or
 - 12.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.
- 13.** 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.
- 14.** 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.
- 15.** 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.
- 16.** The permit does not convey any property rights of any sort, nor any exclusive privilege.
- 17.** 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
 - 17.1 enter upon the premises where an emissions unit subject to this permit is located or where records required by the permit are kept;
 - 17.2 have access to and copy any records required by this permit;
 - 17.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 17.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

Section 7 Permit Documentation

<u>Date</u>	<u>Document Details</u>
July 2, 2024	Application Received
July 24, 2025	Sent pre-PN technical review to Permittee.
August 8, 2025	Pre-PN technical review received from Permittee.
October 22, 2025	Preliminary permit, TAR, and modeling report sent for public notice.