DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL MINOR PERMIT

Minor Permit No. AQ0034MSS03 Revision 2 Issue Date: Preliminary - February 21, 2024
Rescinds Minor Permit AQ0034MSS03 Revision 1

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ0034MSS03 Revision 2 to the Permittee listed below.

Permittee:	Petro Star Inc. 3900 C St, Suite 802 Anchorage, AK 99503
Stationary Source:	Port of Alaska Terminal
Location:	61° 14′ N, 149° 53′ W
Project:	Additional Tank Project
Permit Contact:	Catherine Bollinger, (907) 339-6625, cbollinger@petrostar.com

This project is classified under 18 AAC 50.508(6) for revising or rescinding the terms and conditions of a Title I permit and 18 AAC 50.502(b)(6) for construction of a stationary source containing a Port of Anchorage stationary source.

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

Table of Contents

Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS.....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....best available control technology
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CFR .....Code of Federal Regulations
CAA.....Clean Air Act
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)
gpm.....gallons per minute
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp.....horsepower
ID.....emissions unit identification number
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 CFR 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R .....monitoring, recordkeeping, and reporting
NA .....not applicable
NESHAPs.....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NOx .....nitrogen oxides
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O & M .....operation and maintenance
O_2.....oxygen
PAL .....plantwide applicability limitation
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
psia .....pounds per square inch (absolute)
PSD .....prevention of significant deterioration
PTE.....potential to emit
SIC.....Standard Industrial Classification
SIP .....State Implementation Plan
SO_2 .....sulfur dioxide
The Act.....Clean Air Act
tpy.....tons per year
VOC .....volatile organic compound [as defined in 40 CFR 51.100(s)]
VOL.....volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1 Emissions Unit Inventory

Emissions Unit (EU) Authorization. The Permittee is authorized to install and operate the emission units listed in Table A in accordance with the terms and conditions of this permit. Except as noted elsewhere in this permit, the information in Table A is for identification purposes only. The specific emission unit descriptions do not restrict the Permittee from replacing an emission unit identified in Table A.

Table A – Emissions Unit Inventory

EU ID	Description	Rating/Capacity	Installation Date
2	Premium Unleaded Storage Tank [1]	10,000 barrels	1969
3	Premium Unleaded Storage Tank [1]	20,000 barrels	1969
4	Diesel Fuel #2 Storage Tank	20,000 barrels	1969
5	Diesel Fuel #2 Storage Tank [1]	30,000 barrels	1970
6	Unleaded Storage Tank [1]	50,000 barrels	1970
7	Jet A Storage Tank	50,000 barrels	1970
8	Diesel Fuel #2 Storage Tank	29,000 barrels	1966
9	Tank Truck Loading Rack & Vapor Recovery Equipment	1,700 gallons/minute (gasoline)	1969 [2]
	Rail Loading Rack & Vapor Recovery Equipment	1,700 gallons/minute (gasoline)	NA [3]
		2,400 gallons/minute (diesel and Jet A)	NA [3]
10	Component Leaks	-	-
11	Additive Storage Tank	280 gallons	Not Available
12	Additive Storage Tank	200 gallons	Not Available
13	Additive Storage Tank	14 barrels	Not Available
14	Isuzu EMI4JB1R Firewater Pump Engine (Diesel-fired)	63 hp	2002
15	Burnham Model 2B Boiler (Gas-fired)	0.164 MMBtu/hr	2006
17	Regular Unleaded Gasoline Storage Tank [1, 3]	50,000 barrels	2015
18	North Truck Loading Racks [4]	1,200 gallons/minute (gasoline)	2015
	Enclosed VCU [4]	14.70 MMBtu/hr; 0.0096 MMscf/hr (vapor)	2015
	Pilot Flare	60 scf/hr	2015

Table Notes:
[1] Tank has internal floating roof.
[2] Upgraded 1998-1999.
[3] Converted from Methanol Storage Tank acquired from Delta Western 7/27/23.
[4] Converted to handle gasoline loading in addition to methanol 2023.

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

2. Maintenance of Equipment.

2.1. Perform regular maintenance on the equipment listed in Table A according to the manufacturer's or operator's maintenance procedures.

2.2. Keep records of any maintenance that would have a significant effect on emissions.

2.3. Keep a copy of the manufacturer's or operator's maintenance procedures onsite and make records available to Department personnel upon request.

2.4. Records may be kept in electronic format.

Section 2 Fees

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

4. **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:

4.1. potential to emit of 106.44 tpy; or

4.2. 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.

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

5.1. 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 4.2. 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/.

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

5.3. 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.

5.4. 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 4.1.

6. Annual Compliance Fee. For a stationary source not classified as needing a Title V permit, the Permittee shall pay an annual compliance fee as set out in 18 AAC 50.400(d), to be paid for each period from July 1 through the following June 30.

Section 3 State Emission Standards

7. Visible Emissions for Industrial Process and Fuel-Burning Equipment . In accordance with 18 AAC 50.055(a), the Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 14, 15, and 18 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

8. Particulate Matter for Industrial Process and Fuel-Burning Equipment . In accordance with 18 AAC 50.055(b), the Permittee shall not cause or allow particulate matter emitted from EU IDs 14, 15, and 18 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

9. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 14, 15, and 18 listed in Table A to exceed 500 ppm averaged over three hours.

Section 4 Port of Anchorage Requirements

Volatile Liquid Storage Tank Emission Standards

10. The Owner, Operator, or Permittee of a volatile liquid storage tank located in the Port of Anchorage that has a volume of 9,000 barrels (378,000 gallons) or more shall reduce organic vapors emitted to the atmosphere by using either:

10.1. an internal floating roof installed before June 1, 1992;

10.2. an internal floating roof that meets the specifications of 40 C.F.R. 60.112b(a)(1), adopted by reference in 18 AAC 50.040;

10.3. a closed vent system and control device that collects and reduces organic vapors emitted to the atmosphere by at least 95 percent (six-hour average), as specified in the Department's *Air Quality Compliance Certification Procedures for Volatile Liquid Storage Tanks, Delivery Tanks, and Loading Racks*, adopted by reference in 18 AAC 50.030; or

10.4. a system that the Department determines is as effective as those described in Condition 10.2 or 10.3, using procedures in the document referred to in Condition 10.3.

11. The Owner, Operator, or Permittee of a volatile liquid storage tank with an internal floating roof described in Condition 10.1 shall reduce organic vapors emitted to the atmosphere by modifying the seals and fittings to meet the specifications of 40 C.F.R. 60.112b(a)(1), adopted by reference in 18 AAC 50.040, no later than the first time after June 1, 1995 that the tank is emptied and degassed.

12. When conducting source testing, the Department will, and the Owner, Operator, or Permittee shall, use the procedures specified in the document referred to in Condition 10.3 to determine compliance with this section. In accordance with those procedures, the Owner, Operator, or Permittee of a volatile liquid storage tank subject to this section shall

12.1. periodically inspect air pollution control equipment;

12.2. repair any deficiencies detected;

12.3. report to the Department the results of all inspections and repairs; and

12.4. keep records of those inspections and repairs for at least five years.

Volatile Liquid Loading Racks and Delivery Tank Emission Standards

13. The Owner, Operator, or Permittee of a stationary source that is located in the Port of Anchorage and that has a volatile liquid loading rack with a design throughput of 15 million gallons (357,143 barrels) or more per year shall reduce organic vapors emitted to the atmosphere by

13.1. operating a vapor collection system and liquid product loading equipment that

a. loads volatile liquid through the bottom of the delivery tank or through a submerged loading arm that extends to within six inches of the bottom of the delivery tank;

b. collects all organic vapors displaced during the loading of vapor-laden delivery tanks;

c. prevents any organic vapors collected at one delivery tank loading position from passing to another delivery tank loading position;

d. processes the vapors collected under Condition 13.1.b with

(i) a control device that emits no more than 10 milligrams of organic vapors per liter of volatile liquid loaded (six-hour average); or

(ii) a system that the Department determines is as effective as the control device described in Condition 13.1.d(i); in making a determination under this clause, the Department will use the procedures specified in the Department's *Air Quality Compliance Certification Procedures for Volatile Liquid Storage Tanks, Delivery Tanks, and Loading Racks*, adopted by reference in 18 AAC 50.030;

e. prevents the gauge pressure in any delivery tank connected to the vapor collection system from exceeding 18 inches of water; and

f. does not contain a pressure relief valve designed to open at a gauge pressure of less than 18 inches of water, except that for a system using vapor balancing to a storage tank, a pressure relief valve on the storage tank or on any portion of the vapor collection system between a storage tank and the control device may be designed to open at a gauge pressure less than 18 inches of water, but may not open at the normal system operating pressure;

13.2. preventing the loading of liquid product into any vapor-laden delivery tank unless the tank

a. is connected to a vapor collection system that meets the requirements of Condition 13.1; and

b. has been certified vapor-tight under Condition 14 within the preceding 12 months; and

13.3. preventing leaks in the vapor collection system or liquid loading equipment that result in the release of a volatile liquid organic or a volatile organic vapor in a concentration exceeding 10,000 ppm by volume, measured as methane.

14. In accordance with the Department's *Air Quality Compliance Certification Procedures for Volatile Liquid Storage Tanks, Delivery Tanks, and Loading Racks*, adopted by reference in 18 AAC 50.030, the Owner or Operator of a delivery tank that is to be loaded with volatile liquid at a loading rack described in Condition 13 shall

14.1. perform annual tests to certify that the delivery tank is vapor-tight;

14.2. mark the delivery tank with the month and year that the tank was last certified vapor-tight according to the test required under Condition 14.1;

14.3. provide the Owner, Operator, or Permittee of the loading rack with a copy of the most recent test results under Condition 14.1; and

14.4. keep a copy of the most recent test results with the delivery tank.

15. When conducting source testing, the Department will, and the Owner, Operator, or Permittee shall, use the procedures specified in the Department's *Air Quality Compliance Certification Procedures for Volatile Liquid Storage Tanks, Delivery Tanks, and Loading Racks*, adopted by reference in 18 AAC 50.030, to determine compliance with this section. In accordance with those procedures, the Owner, Operator, or Permittee shall

15.1. periodically inspect air pollution control equipment;

15.2. repair any deficiencies detected;

15.3. report to the Department the results of all inspections and repairs; and

15.4. keep records of all inspections and repairs for at least five years.

16. Limit gasoline loading through EU ID 9 and EU ID 18 to no more than 2,100 and 1,200 gallons per minute (gpm), respectively.

16.1. Monitor and record the gasoline loading rate for EU IDs 9 and 18.

16.2. Report the highest gasoline loading rate for EU IDs 9 and 18 in the operating report required in Condition 30.

16.3. Report in accordance with Condition 29 anytime the limits in Condition 16 are exceeded.

Section 5 AQ0034MSS01 Requirements for Terminal I

Conditions from Permit Nos. 9521-AA003 and 9521-AA07

17. The Permittee shall neither modify nor replace any of the storage tank equipment, loading rack equipment, or vapor recovery equipment which constitutes a modification as described by 18 AAC 50.990(59), without first notifying the Department 30 days in advance. The notification must be in writing and must include a description of the proposed change and an estimate of any change in the quantity of emissions of each regulated air contaminant that may occur as the result of the modification or replacement.

18. For any storage tank subject to 18 AAC 50.085(b), the Permittee shall submit to the Department the inspection and maintenance record showing compliance with this section 60 days after completion of the work.

19. If the Permittee makes any planned change(s) or modification(s) to the vapor recovery systems, EU ID 9, which would decrease vapor recovery performance below the requirements of this permit or other applicable regulations, the Permittee shall notify the Department 15 days prior to the modification and provide a schedule for meeting the requirements. The Permittee shall notify the Compliance Technician, Fairbanks Office, in writing, when the vapor recovery system is again operating in compliance with 18 AAC 50.090(a)(D)(i) and with the amended State Air Quality Control Plan, Volume II, Section IV, Point Source Control Program Subpart I, 4.a.ii.(2)(c)(i)-(ii).

20. The Permittee shall maintain test results, instrument data or recording charts, maintenance records, and other data necessary to demonstrate compliance with this permit or other applicable requirements. The annual and monthly tests requiring reporting include those in Section 4 (b)(iii) and Section 6 of the amended State Air Quality Control Plan, Volume II, Section IV, Point Source Control Program, Subpart I.

21. The Permittee shall have available for review, on request of the Department, a copy of all the delivery tank vapor-tightness certifications.

22. Report the following in accordance with Condition 30:

22.1. For the vapor recovery system and enclosed vapor combustion unit, EU IDs 9 and 18, report any changes in operations, down time, and repairs made to the system.

22.2. A report summary of the monthly leak inspections and completed repairs, required by the amended State Air Quality Control Plan, Volume II, Section IV, Point Source Control Program, Subpart I, to avoid a reoccurrence.

Terminal I Operation and Maintenance Manual

23. The Permittee shall comply with the "VRU Operation and Maintenance (O & M) Manual" for the vapor collection and processing system, EU ID 9, as approved by the Department on December 14, 2000.

23.1. Record and report deviations from the control unit inspection schedule and plan in the VRU Operation and Maintenance Manual in accordance with Condition 29.

24. Operate and maintain EU ID 18 in accordance with manufacturer's operating and maintenance guidelines.

24.1. Maintain a copy of the manufacturer's operating and maintenance guidelines onsite.

24.2. Report deviations from the manufacturer's operating and maintenance guidelines in accordance with Condition 29.

Section 6 Recordkeeping, Reporting, and Certification Requirements

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

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

25.2. 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.

26. 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.

26.1. 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.

27. 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 by hard copy or electronically.

27.1. 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/.

28. 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.

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

29.1. **Excess Emissions Reporting.** Except as provided in Condition 32, the Permittee shall report all emissions or operations that exceed emissions standards or limits or deviate from the requirements 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 caused 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 29.1.d.

d. Report all other excess emissions not described in Conditions 29.1.a, 29.1.b, and 29.1.c 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 30 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)]

29.2. **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 30 for permit deviations that occurred during the period covered by the report, whichever is sooner.

29.3. **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 12of 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/.

30. Operating Reports. During the life of this permit[1], the Permittee shall submit to the Department an operating report in accordance with Conditions 26 and 27 by August 1 for the period January 1 through June 30 of the current year and by February 1 for the period July 1 through December 31 of the previous year.

30.1. 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.

30.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report, under Condition 30.1, 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 preventative measures taken and the date(s) of such actions; or

30.3. When excess emissions or permit deviations have already been reported under Condition 29 during the period covered by the operating report, the Permittee shall either

a. Include a copy of those excess emission or permit deviation reports with the operating report; or

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

[1] *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.

31. Annual Affirmation. The Permittee shall submit to the Department by March 31 of each year an affirmation certified according to Condition 25 of whether the stationary source is still accurately described by the application and this permit, and whether any changes have been made to the stationary source that would trigger the requirement for a new permit under 18 AAC 50.

32. Air Pollution Prohibited. No person may permit any emissions 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.

32.1. **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 32.

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 investigation because of complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 32; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 32.

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

a. the date and 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 32; and

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

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

a. With each stationary source operating report under Condition 30, 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 29.

33. 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:

33.1. For reporting under Condition 33, the Permittee shall report the annual emissions and the required data elements under Condition 33.2 every third year for the previous calendar year as scheduled by the EPA.[2]

33.2. For each emissions unit and the stationary source, include in the report the required data elements[3] 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 .

33.3. 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/.

34. 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.

[2] 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.).

[3] 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.

34.1. For the purposes of reporting actual or assessable emissions required under Condition 33 and Condition 4.1, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

Section 7 Standard Permit Conditions

35. The Permittee must comply with each permit term and condition. Non-compliance 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

35.1. an enforcement action; or

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

36. 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.

37. 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.

38. 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.

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

40. 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

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

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

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

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

Section 8 General Source Test Requirements

41. **Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

42. **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

42.1. at a point or points that characterize the actual discharge into the ambient air; and

42.2. at the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.

43. **Reference Test Methods.** The Permittee shall use the following test methods when conducting source testing for compliance with this permit:

43.1. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in 40 CFR 60, Appendix A, Reference Method 9. The Permittee may use the form in Section 11 to this permit to record data.

43.2. Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals and acid gases must be conducted in accordance with the methods and procedures specified in 40 CFR 60, Appendix A.

43.3. Source testing for emissions of PM-10 and PM-2.5 must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.

43.4. Source testing for emissions of any contaminant may be determined using an alternative method approved by the Department in accordance with 40 CFR 63 Appendix A, Method 301.

44. **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68°F and an absolute pressure of 760 millimeters of mercury).

45. **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

46. **Test Plans.** Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the emissions unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 41 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

47. **Test Notification.** At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

48. **Test Reports.** Within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 25. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

49. **Test Exemption.** The Permittee is not required to comply with Conditions 46, 47 and 48 when the exhaust is observed for visible emissions by Method 9 Plan or Smoke/No Smoke Plan.

50. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standard in Condition 8, the three-hour average is determined using the average of three one-hour test runs.

Section 9 Permit Documentation

Date	Document Details
January 29, 2019	Application received.
March 1, 2019	Department requests additional information.
March 20, 2019	Petro Star Inc. submitted a revised application.
August 8, 2023	Petro Star Inc. submitted a permit revision application.
January 5, 2024	The Department issued AQ0034MSS03 Revision 1.
October 26, 2023	Petro Star Inc. submitted a permit revision application.
January 17, 2024	Petro Star Inc. requested off-permit change of Tank 5 product from unleaded gasoline to #2 diesel and provided calculations demonstrating lowered PTE.
February 2, 2024	Petro Star Inc. submitted tank cleaning emission calculations.

Section 10 Complaint Form

COMPLAINT FORM

Date Time:

Activities Involved:

Provide a description of reported complaint. Attach sheets as necessary.

If applicable, operational conditions which contributed to the complaint:

If applicable, ambient conditions which contributed to the complaint:

If applicable, describe measures taken to immediately address the complaint.

If applicable, describe measures taken to address preventing the condition which generated the complaint.

If applicable, describe any reason that you feel the complaint may not be a violation:

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	Signature	Date

Section 11 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. 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 where the plume was 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
Print Name:
Signature:
Title | Date

Observation Date		Start Time		End Time
Min \ Sec	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

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	

Section 12 Notification Form[4]

Port of Alaska Terminal	**AQ0034MSS03 Revision 2**
Stationary Source Name	**Air Quality Permit Number**

Petro Star Inc.
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[5], CO[6], or Settlement Agreement - Complete Section 2 and Certify

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

(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.

(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

(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.

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 26.)*

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)]