

**Alaska Department of Environmental Conservation
Air Permits Program**

[Public Comment - November 17, 2025]

**Hilcorp Alaska, LLC
Monopod Platform**

**STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0067TVP04**

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0067TVP04.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0067TVP04 contains information on the stationary source as provided in the Title V permit application.

The Monopod Platform is owned and operated by, Hilcorp Alaska, LLC and Hilcorp Alaska, LLC is the Permittee for the stationary source’s operating permit. The SIC code for this stationary source is 1311 - Crude Petroleum and Natural Gas. The NAICS codes for this stationary source are 211120 - Crude Petroleum and 211130 - Natural Gas Extraction.

The stationary source is an offshore oil and gas production platform that consists of equipment for handling the production of both natural gas and oil wells and transportation of the produced streams to the Trading Bay Production Facility.

EMISSIONS UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 C.F.R. 71.5(c)(3).

The emissions units at the Monopod Platform that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0067TVP04.

Table A of Operating Permit No. AQ0067TVP04 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)¹ and assessable PTE from the Monopod Platform, as indicated in the application for this permit, is shown in the table below.

Table E - Emissions Summary, in Tons Per Year (TPY)

Emissions	NO _x	CO	PM	SO ₂	VOC	CO ₂ e ¹	HAPs	Total ²
PTE	331.21	194.05	10.86	62.74	121.09	111,491.08	6.24	719.94
Assessable PTE	331.21	194.05	10.86	62.74	121.09	0	0	719.94

Notes:

- ¹ CO₂e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.

¹ “Potential to Emit” or “PTE” means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(22).

2. Total PTE and total assessable PTE shown in the table do not include CO₂e and HAPs.
3. HAP emissions are a subset of either VOC emissions or PM₁₀ emissions and are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 66.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table E are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants, hazardous air pollutants (HAPs), and GHGs, emissions are as provided in the application materials for this permit.

The amount of sulfur that an EU emits is dependent on the amount of sulfur that is originally in the fuel which it combusts. Sulfur in fuel gas takes form as H₂S. Therefore, the amount of sulfur that fuel gas-combusting EUs emit is dependent on the H₂S concentration of the fuel gas which they combust.

At the time of application for this renewal permit, Operating Permit No. AQ0067TVP04, for the purpose of calculating the PTEs and assessable emissions from all fuel gas-combusting EUs (except for EU ID 26), Hilcorp is still using an assumed H₂S concentration of 200 ppmv for fuel gas being combusted in those EUs. In its application materials, this assumed concentration is noted as being a “conservative estimate based on an average of the past 5 years of H₂S concentration data.” In response to an information request, dated December 3, 2024, from the Department, Hilcorp provided the results from fuel gas H₂S concentration measurements taken for calendar years 2018 through 2023, which showed five-year averages of 168 ppmv H₂S (for calendar years, 2018 through 2022) and 164 ppmv H₂S (for calendar years, 2019 through 2023). The highest measurement taken during these years was 600 ppmv H₂S (a one-time maximum result during a monthly test in 2023). As such, the Department, agrees that at this time, 200 ppmv H₂S annual average is an appropriate conservative assumption.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source² must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists the following categories of sources that require an operating permit:

- A major source;
- A stationary source, including an area source, subject to federal New Source Performance Standards (NSPS) under Section 111 of the Clean Air Act or National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the CAA;
- Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the Monopod Platform as specified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a), because the stationary source is a major source. This stationary source is a major source because, as defined in Section 302 of the CAA, it directly emits, or has the potential to emit, 100 TPY or more of any air pollutant subject to regulation.

² “Title V source” means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

AIR QUALITY PERMITS

Permits to Operate

No previous air quality control Permit to Operate exists for this stationary source.

Title I (Construction and Minor) Permits

Permit No. 0067CPT01. The Department issued Construction Permit No. 0067CPT01 for this stationary source on June 20, 2003 to Union Oil Company of California (Unocal), the Permittee at the time. Unocal did not add any new emissions units under this permit. Rather, the permit added fuel consumption limits and fuel sulfur content limits for two existing crane engines (EU IDs 13 and 14 – East Crane and West Crane) that were constructed in 1996 and 1997, respectively. The limits were added to limit emissions for these engines to less than the PSD major modification thresholds of 40 tons per year for NO_x and 40 tons per year for SO₂. The Department established stationary source-specific requirements in this Title I permit. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0067TVP04 as described in Table F.

Minor Permit No. 0067MSS01. Hilcorp Alaska, LLC. (Hilcorp), the current Permittee, submitted a minor permit application dated December 19, 2013, which the Department received on December 27, 2013. The purpose of the minor permit application was to install a new turbine (EU ID 26) and to establish Owner Requested Limits (ORLs) to avoid project classification as a Prevention of Significant Deterioration (PSD) major modification. The Department issued Minor Permit No. 0067MSS01 to this stationary source on September 12, 2014. The Department established stationary source-specific requirements in this Title I permit. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0067TVP04 as described in Table G.

Minor Permit No. 0067MSS02. Hilcorp submitted a minor permit application dated September 19, 2017, which was received by the Department on September 21, 2017. The purpose of the minor permit application was to establish ORLs for three drill engines (EU IDs 8a, 9a, and 10a) to avoid minor and PSD permit requirements. The Department issued Minor Permit No. 0067MSS02 to this stationary source on May 31, 2019. The Department established stationary source-specific requirements in this Title I permit. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0067TVP04 as described in Table H.

Title V Operating Permits

Under AS 46.14.190, the owner or operator has requested multiple operating permits for this stationary source.

Permit No. AQ0067TVP01. Unocal submitted an application for an initial Title V operating permit dated June 19, 2007. The Department issued Operating Permit No. AQ0067TVP01 on December 2, 2002.

- Revision No. 1. The Department issued Revision 1 to Operating Permit No. 0067TVP01 on June 20, 2003. This revision incorporated the changes from Construction Permit No. 0067CPT01 into the operating permit.

Permit No. AQ0067TVP02. Unocal submitted an application to renew Operating Permit No. AQ0067TVP01 dated January 3, 2014. The Department issued Operating Permit No. AQ0067TVP02 on December 17, 2014.

Permit No. AQ0067TVP03. Hilcorp submitted an application to renew Operating Permit No. AQ0067TVP02 under an October 30, 2013 cover letter. The Department received the application on November 4, 2013. The Permittee amended the application on May 21, 2014 and submitted additional information on April 21, 2015. The Department issued Operating Permit No. AQ0067TVP03 on August 5, 2019.

Operating Permit No. AQ0067TVP04. Hilcorp submitted an application to renew Operating Permit No. AQ0067TVP03 under a January 30, 2024 cover letter. The Department received the application on January 30, 2024.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1966. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations, indicates a stationary source generally operating in compliance with its operating permit.

While the stationary source is generally operating in compliance with its operating permit, past full compliance evaluations (FCEs) have found this stationary source operating in non-compliance with the requirements of its operating permit. Evaluations that found this stationary source in non-compliance include FCEs conducted in years 2023, 2021, and 2019. These FCEs found procedural violations that included failure to comply with monitoring, recordkeeping, and reporting requirements before the due dates required by the active permits. All non-compliance issues have been resolved or are in the process of being resolved.

APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.2 defines “applicable requirement” to include the terms and conditions of any preconstruction permit issued under rules approved in Alaska’s State Implementation Plan (SIP).

Alaska’s SIP includes the following types of preconstruction permits:

- Permit to Operate issued on or before January 17, 1997 (these permits cover both construction and operations);
- Construction permits issued on or after January 18, 1997; and
- Minor permits issued on or after October 1, 2004.

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation. These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ0067TVP04.

Table F, Table G, and Table H below lists the requirements carried into Operating Permit No. AQ0067TVP04 to ensure compliance with the preconstruction permit requirements.

Table F - Comparison of Construction Permit No. 0067CPT01 Conditions to Operating Permit No. AQ0067TVP04 Conditions¹

0067CPT01 Condition No.	Description of Requirement	AQ0067TVP04 Condition No.	How Condition was Revised
2	Fuel oil sulfur content limit	25	The Department has made the following changes: <ul style="list-style-type: none"> • Revised the language in Conditions 25.1 through 25.3 (formally Conditions 2.1 and 2.2 of Construction Permit No. 067CP01) for clarity. • Added recordkeeping requirements (found in Condition 25.2). • Added a requirement for excess emission/permit deviation reporting (found in Condition 25.4).
3	Fuel consumption limit	26	The Department has made the following changes: <ul style="list-style-type: none"> • Added language to Condition 26 (formally Condition 3 of Construction Permit No. 067CP01) to clarify the intent of the condition (i.e., limiting fuel consumption of EU IDs 13 and 14). • Revised sub-conditions, Conditions 26.1 and 26.2, (formally Conditions 3.1 and 3.2 of Construction Permit No. 067CP01) for clarity.

Note:

1. This table does not include all standard and general conditions.

Table G - Comparison of Minor Permit No. 0067MSS01 Conditions to Operating Permit No. AQ0067TVP04 Conditions¹

AQ0067MSS01 Condition No.	Description of Requirement	AQ0067TVP04 Condition No.	How Condition was Revised
1.1	Installation notification	18	Not revised.
4 – 6	ORLs to avoid PSD permit requirements	20 – 22	<p>The Department made the following changes:</p> <ul style="list-style-type: none"> • Added subtitles to each of Conditions 20, 21, and 22 (formally Conditions 4, 5, and 6 of Minor Permit No. AQ0067MSS01) for better organization. • Added language to Condition 20 (formally Condition 4 of Minor Permit No. AQ0067MSS01) to clarify the purpose of the NO_x emissions limit for EU ID 26 (i.e., to avoid classification under 18 AAC 50.306(a)). • Added language to Conditions 20.3.a(i) through 20.3.b (formally Conditions 4.3.a(i) through 4.3.b in Minor Permit No. AQ0067MSS01) to clarify the monitoring and recordkeeping requirements. • Revised some of the language in Conditions 20.4.a through 20.4.b (formally Conditions 4.4.a through 4.4.b of Minor Permit No. AQ0067MSS01) to clarify the reporting requirements. • Revised Condition 21 (formally Condition 5 of Minor Permit No. AQ0067MSS01) for clarity. • Revised language in Conditions 21.3.a through 21.3.b (formally Conditions 5.3.a through 5.3.b of Minor Permit No. AQ0067MSS01) to clarify the reporting requirements. • Removed the requirements of Condition 5.3.a(ii) of Minor Permit No. AQ0067MSS01. The requirement was redundant with Condition 20.3.a(i) (formally Condition 4.4.a(i) of Minor Permit No. AQ0067MSS01). • Revised Condition 22 (formally Condition 6 of Minor Permit No. AQ0067MSS01) for clarity. • Revised language in Conditions 22.3.a through 22.3.b (formally Conditions 6.3.a through 6.3.b of Minor Permit No. AQ0067MSS01) to clarify the

AQ0067MSS01 Condition No.	Description of Requirement	AQ0067TVP04 Condition No.	How Condition was Revised
			reporting requirements. <ul style="list-style-type: none"> Removed the requirements of Condition 6.3.a(ii) of Minor Permit No. AQ0067MSS01 because it was redundant with Condition 20.3.a(i) (formally Condition 4.4.a(i) of Minor Permit No. AQ0067MSS01).
7	Department imposed limit to avoid PSD permit and minor permit requirements	23	The Department made the following changes: <ul style="list-style-type: none"> Added subtitle to Condition 23 (formally Condition 7 of Minor Permit No. AQ0067MSS01) for better organization. Added language to Condition 23 (formally Condition 7 of Minor Permit No. AQ0067MSS01) to clarify the purpose of and the averaging period of the SO₂ limit for EU ID 26.
8	Department imposed limit to avoid minor permit requirements	24	The Department made the following changes: <ul style="list-style-type: none"> Added subtitle to Condition 24 (formally Condition 8 of Minor Permit No. AQ0067MSS01) for better organization. Added language to Condition 24.1 (formally Condition 8.1 of Minor Permit No. AQ0067MSS01) to clarify which operating report must include the items specified in Conditions 24.1.a and 24.1.b. Removed the requirements to notify the Department of the date that EU ID 24 was removed, previously found in Conditions 8.1 and 8.1.a of Minor Permit AQ0067MSS01. EU ID 24 was removed from the facility in 2015.
11.1	Monitoring and recordkeeping requirements for the SO ₂ state standard	23.2 – 23.3	The Department made the following changes: <ul style="list-style-type: none"> Added MR&R requirements (found in Conditions 23.2 through 23.3). Added permit deviation reporting requirement in Condition 23.3 (found in Condition 7.3 of Minor Permit No AQ0067MSS01).

Note:

- This table does not include all standard and general conditions.

Table H - Comparison of Minor Permit No. 0067MSS02 Conditions to Operating Permit No. AQ0067TVP04 Conditions¹

0067MSS02 Condition No.	Description of Requirement	AQ0067TVP04 Condition No.	How Condition was Revised
5	ORL to avoid PSD permit requirements	19	The Department made the following changes: <ul style="list-style-type: none"> • Added subtitle to Condition 19 (formally Condition 5 of Minor Permit No. AQ0067MSS02) for better organization. • Added language to Condition 19 (formally Condition 5 of Minor Permit No. AQ0067MSS02) to clarify the averaging period.

Note:

1. This table does not include all standard and general conditions.

NON-APPLICABLE REQUIREMENTS

This section discusses standard conditions that have not been included in the permit and other requirements that are not included for specific reasons.

- **40 C.F.R. 64 Compliance Assurance Monitoring (CAM):** None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 C.F.R. 71, as specified in 18 AAC 50.040(j), to establish operating permit regulations. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 C.F.R. 70. This Statement of Basis, required under 40 C.F.R. 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0067TVP04. Additionally, and as required by 40 C.F.R. 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 5, Visible Emissions Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 – 7, 8a – 10a, 13 – 21, 23a, and 26 are fuel-burning equipment or industrial processes.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 C.F.R. 52.70. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 (for liquid fuel-burning equipment) and Condition 5 (for flares) of the permit. These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid Fuel-Burning Equipment and Flares.

Beyond as noted above, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Except for gas fuel-burning equipment, the Permittee must establish by visual observations of emissions unit exhaust, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state emission standards for visible emissions.

These conditions detail a stepwise process for monitoring to determine compliance with the state's visible emissions standard for liquid fuel-burning equipment. Equipment types covered by these conditions are stationary internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emissions units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Condition 5 was developed to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas fuel-

burning flares normally burn without emitting visible emissions. However, gas fuel-burning flares have been shown to smoke when a control device malfunctions (e.g., knockout drum, flare scrubber, gas or steam assist, or vapor recovery system). The condition sets out a protocol to collect actual field data to determine compliance with the 20 percent visible emissions standard for flares.

Gas Fuel-Burning Equipment:

Monitoring – The monitoring of gas fuel-burning emissions units for visible emissions is waived; i.e., no Method 9 observations will be required. The Department has found that natural gas fuel-burning equipment inherently has negligible visible emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel- Burning Equipment:

Monitoring – The emissions unit exhaust must be observed by the Method 9 Plan as detailed in Condition 2. Corrective actions such as maintenance procedures or more frequent observations may be required depending on the results of the observations.

Recordkeeping – The Permittee is required to record the results of all observations of emissions unit exhaust and record any actions taken to reduce visible emissions.

Reporting – The Permittee is required to report emissions in excess of the state visible emissions standard and deviations from permit conditions. The Permittee is also required to include in the operating report copies of the results of all visible emission observations.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU ID 23a, as an emergency diesel engine, has potential emissions that are below the significant thresholds listed in 18 AAC 50.326(e). However, this emissions unit does not qualify as insignificant per 18 AAC 50.326(d)(1) because it is subject to standards established under NSPS Subpart IIII. Therefore, the Department has waived visible emissions monitoring for EU ID 23a, but this unit is subject to compliance certification requirements, in accordance with Department Policy and Procedure No. 04.02.103, Topic #3. Monitoring for this emissions unit consists of an annual certification under Condition 94 for the visible emissions standard based on reasonable inquiry.

EU ID 21 has potential NO_x emissions that exceed the significant threshold under 18 AAC 50.326(e)(2) and is subject to standards established under NSPS Subpart ZZZZ. However, this emissions unit has historical actual emissions that are below the thresholds under 18 AAC 50.326(e). Therefore, as long as the actual emissions from EU ID 21 do not exceed any of the thresholds under 18 AAC 50.326(e), no monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3. The Permittee must annually certify compliance under Condition 91 with the visible emissions standard based on reasonable inquiry.

Flares:

Monitoring for flares requires Method 9 observations of scheduled daylight flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

For stationary flares, EU IDs 17 through 20, the Permittee is required to conduct an initial visible emissions observation within 12 months of issuance of the permit, and a subsequent visible emissions observation within 14 months, but not earlier than three months, after the preceding flare event visible emissions observation.

TEG Dehydration Unit:

EU ID 16 (TEG Dehydration Unit) has a still column vent that exhausts to the atmosphere. The vapors emitted are composed of water and VOCs and are not expected to be a significant source of opacity (the opacity standard specifically exempts water vapor). Therefore, there are no MR&R requirements for EU ID 16 despite its classification as an industrial process.

Conditions 6 through 9, PM Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b).

- 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 – 7, 8a – 10a, 13 – 21, 23a, and 26 are fuel-burning equipment or industrial processes.

This PM standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 6 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 7 through 9 of the permit. These conditions have been adopted into regulation as SPC IX.

The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Except for gas fuel-burning equipment, the Permittee must establish by visual observations, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state's emission standards for PM.

Gas Fuel-Burning Equipment:

Monitoring – The monitoring of gas fuel-burning emissions units for PM is waived; i.e., no source testing will be required. The Department has found that natural gas fuel-burning equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel-Burning Equipment:

Monitoring – The Permittee is required to either take corrective action or conduct PM source testing, if opacity threshold values are exceeded. For liquid fuel-burning engines and turbines, the Department set opacity threshold values of 15 percent for stack diameters less than 18 inches and 20 percent for stack diameters equal to or greater than 18 inches. These opacity thresholds are based on a study conducted by the Department in an effort to establish a correlation between opacity and PM. The data was collected from diesel engines of various stack sizes and the results are as follows:

- For stacks normalized to 21 inches – 0.05 gr/dscf corresponds to 27% opacity;
- For stacks normalized to 18 inches – 0.05 gr/dscf corresponds to 23% opacity;
- For stacks normalized to 12 inches – 0.05 corresponds to 16.8 % opacity; and
- For stacks normalized to 10 inches – 0.05 corresponds to 14.3 %.

This means that the trend line for the complete data set predicts that 20% opacity corresponds to a little less than the PM limit for an 18-inch stack. There may be engines that exceed the thresholds, but the intent of the standard condition is not to guarantee that each engine that might exceed the PM standard will be tested. The Department expects few, if any, engines to actually be tested under this condition. What the Department does expect is that with the adopted condition in place, operators that find an opacity above or near the testing threshold will take corrective action necessary to reduce PM emissions. This would achieve the desired environmental outcome without the added cost of testing. The Department expects this to be the case with both thresholds.

The method is premised on the fact that a five percent difference in opacity is distinguishable. The conditions mean that if opacity readings as measured using Method 9 – with all of its limitations – exceed the threshold, the Permittee must either take corrective action or conduct a PM source test. The compliance conditions for PM do not draw a legal conclusion about whether the method shows compliance with the visible emissions standard.

Recordkeeping – The Permittee is required to record the results of PM source tests and visible emissions observations conducted during the source tests.

Reporting – The Permittee is required to report incidents when emissions in excess of the opacity threshold are observed and the results of PM source tests. The Permittee is also required to include copies of the results of all visible emission observations taken during PM source testing in the operating report.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU ID 23a, as an emergency diesel engine, has potential emissions that are below the significant thresholds listed in 18 AAC 50.326(e). However, this emissions unit does not qualify as insignificant per 18 AAC 50.326(d)(1) because it is subject to standards established under NSPS Subpart IIII. Therefore, the Department has waived particulate matter emissions monitoring for EU ID 23a, but this unit is subject to compliance certification requirements, in accordance with Department Policy and Procedure No. 04.02.103, Topic #3. Monitoring for this emissions unit consists of an annual certification under Condition 91 for the particulate matter emissions standard based on reasonable inquiry.

EU ID 21 has potential NO_x emissions that exceed the significant threshold under 18 AAC 50.326(e)(2) and is subject to standards established under NSPS Subpart ZZZZ. However, this

emissions unit has historical actual emissions that are below the thresholds under 18 AAC 50.326(e). Therefore, as long as the actual emissions from EU ID 21 do not exceed any of the thresholds under 18 AAC 50.326(e), no monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3. The Permittee must annually certify compliance under Condition 91 with the particulate matter emissions standard based on reasonable inquiry.

Flares:

Monitoring of flares for PM is waived; i.e., no source testing is required, because of the difficulty and questionable results these tests produce when applied to flares. Compliance with the state visible emissions standard serves as surrogate compliance demonstration for the state particulate matter emissions standard.

TEG Dehydration Unit:

EU ID 16 (TEG Dehydration Unit) has a still column vent that exhausts to the atmosphere. The vapors emitted are composed of water and VOCs and are not expected to be a significant source of particulate matter. Therefore, there are no MR&R requirements for EU ID 16 despite its classification as an industrial process.

Conditions 10 through 17, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires compliance with the sulfur compound emissions standard under 18 AAC 50.055(c).

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 – 7, 8a – 10a, 13 – 21, 23a, and 26 are fuel-burning equipment or industrial processes.

The sulfur compound standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Permittee may not cause or allow the affected equipment to violate the applicable sulfur compound standard. Sulfur dioxide comes from the sulfur in the fuel (e.g., natural gas and fuel oils).

Liquid Fuels:

For the liquid fuel-burning equipment, EU IDs 8a, 9a, 10a, 13, 14, 21, and 23a, the MR&R conditions are SPCs XI and XII adopted into regulation pursuant to AS 46.14.010(e). Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g., diesel or No. 2 fuel oil). Fuel sulfur testing will verify compliance. Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard. For fuels with a sulfur content higher than 0.75 percent, the condition requires the Permittee to use the equations in Section 12, or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3), to calculate the sulfur-dioxide concentration to show that the standard is not exceeded.

For the liquid fuel-burning engines, EU IDs 13 and 14, to protect the SO₂ ambient air quality standards, the Permittee is required to limit sulfur contents of diesel fuel burned in the emissions units to concentrations lower than necessary, as shown in Condition 25. Therefore,

the MR&R requirements in Condition 13, for compliance with the state SO₂ standard in Condition 10, have been streamlined based on the more stringent fuel sulfur content limit of 0.3 percent by weight (found in Condition 25) rather than having two sets of MR&R.

Beyond as noted above, the Department has determined that the standard permit conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

Gaseous Fuels:

Fuel sulfur testing will verify compliance with SO₂ emission standard. Mercaptans are a concentrated thiol molecule (e.g., ethanethiol) composed of hydrogen and sulfur used to detect the presence of natural gas by its strong odor as in t-butyl-mercaptan. Basically, it is the mercaptan that allows the presence of gas to be detected by its odor, so it is naturally used as a leak detectant. However, by that same token, it can raise the sulfur content of the natural gas and should be accounted for in determining compliance with the state sulfur compound emissions standard. The Department has therefore revised the basic MR&R requirements to monitor the total sulfur quantity, instead of H₂S concentration, in the natural gas fuel due to the presence of mercaptans in the gas supply which raise the sulfur concentration.

Condition 14.2 requires the Permittee to conduct a semiannual analysis for fuel gas sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

The Permittee is required to report excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standards in this condition. The Permittee is required to include copies of the records of the semiannual statement from the fuel supplier or the sulfur content analysis with the stationary source operating report.

Fuel sulfur testing will verify compliance with SO₂ emission standard. Fuel gas sulfur is measured as hydrogen sulfide (H₂S) concentration in parts per million by volume (ppmv). Calculations show that fuel gas containing no more than 4000 ppmv H₂S will always comply with this emission standard. This is true for all fuel gases, even with no excess air. Equations to calculate the exhaust gas SO₂ concentrations resulting from the combustion of fuel gas were not included in this permit. Fuel gas with an H₂S concentration of even 10 percent of 4,000 ppmv is currently not available in Alaska and is not projected to be available during the life of this permit.

For the gas fuel-burning turbine, EU ID 26, to avoid a Prevention of Significant Deterioration (PSD) Permit under 18 AAC 50.306(a) and Minor Permitting under 18 AAC 50.502(c)(3) for SO₂, the Permittee is required to limit sulfur contents of gas fuel burned in the emissions units to concentrations lower than necessary, as shown in Condition 23. Therefore, the MR&R requirements in Condition 17, for compliance with the state SO₂ standard in Condition 10, have been streamlined based on the more stringent fuel H₂S concentration limit of 650 parts per million by volume (ppmv) (found in Condition 23.1) rather than having two sets of MR&R.

Conditions 18 through 26, Preconstruction Permit Requirements

Legal Basis: The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate (PTO) issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT), limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: These conditions require the Permittee to comply with pre-construction permit terms and conditions. These requirements are listed in 18 through 26.

Conditions 18 through 26 reflects emissions unit- and/or stationary source-specific requirements established in Construction Permit No. AQ0067CPT01 and Title I Minor Permit Nos. AQ0067MSS01 and AQ0067MSS02. The Air Quality Permits section and Table F through Table H to the SOB describe which emissions units were authorized and how the terms and conditions have been revised, rescinded, and replaced in the Title I permits issued for the stationary source and how they are carried forward into the Title V permit. Background information details for these requirements are found in the corresponding Technical Analysis Report (TAR) for the Title I permits.

Condition 18 is a requirement established in Minor Permit No. AQ0067MSS01. This requirement requires the permittee to submit to the Department, EU ID 26's installation date, serial number, specification sheet, and maximum design rating of the turbine within 30 days after installation.

Condition 19 is an ORL established in Minor Permit No. AQ0067MSS02 to avoid PSD permitting under 18 AAC 50.306(a) for NO_x, indirect PM_{2.5}, and ozone (O₃). The condition requires limiting NO_x emissions from EU IDs 8a, 9a, and 10a to no more than 56 tons per rolling 12-consecutive-month period. This condition does so by limiting the combined hours of operation of EU IDs 8a, 9a, and 10a to no more than 6,800 hours per rolling 12-consecutive-month period. MR&R requirements are included in the condition.

Condition 20 is an ORL established in Minor Permit No. AQ0067MSS01 to avoid PSD permitting under 18 AAC 50.306(a) for NO_x. The condition requires limiting NO_x emissions from EU ID 26 to no more than 39 tons per rolling 12-consecutive-month period. This condition does not do so through a surrogate limit, such as limiting operation hours, fuel consumption, etc. MR&R requirements are included in the condition.

Condition 21 is an ORL established in Minor Permit No. AQ0067MSS01 to avoid PSD permitting under 18 AAC 50.306(a) for VOCs. The condition requires limiting VOC emissions from EU ID 26 to no more than 39 tons per rolling 12-consecutive-month period. This condition does not do so through a surrogate limit, such as limiting operation hours, fuel consumption, etc. MR&R requirements are included in the condition.

Condition 22 is an ORL established in Minor Permit No. AQ0067MSS01 to avoid PSD permitting under 18 AAC 50.306(a) for CO. The condition requires limiting CO emissions from EU ID 26 to no more than 99 tons per rolling 12-consecutive-month period. This condition does not do so through a surrogate limit, such as limiting operation hours, fuel consumption, etc. MR&R requirements are included in the condition.

Condition 23 is a Department-imposed limit established in Minor Permit No. AQ0067MSS01 to avoid PSD permitting under 18 AAC 50.306(a) and minor permitting under 18 AAC 50.502(c)(3) for SO₂. The condition requires limiting SO₂ emissions from EU ID 26 to no more than 7.9 tons per rolling 12-consecutive-month period. This condition does so by limiting the hydrogen sulfide (H₂S) concentration of fuel gas combusted in EU ID 26 to no more than 650 parts per million by volume (ppmv) at any time. MR&R requirements are included in the condition.

Condition 24 is a Department-imposed limit established in Minor Permit No. AQ0067MSS01 to avoid minor permitting under 18 AAC 50.502(c)(3) for NO_x and SO₂. The condition requires limiting the emissions increases at the stationary source for each, NO_x and SO₂, that would result from the installation of EU ID 26 to no more than 10 tons per rolling 12-consecutive-month period. This condition did so by requiring that the Permittee remove EU ID 24 from service prior to EU ID 26 becoming fully operational. EU ID 24 was removed from the facility in 2015. Consequently, in this permit, only the requirements pertaining to the installation of EU ID 26 are carried forward.

Condition 25 is a limit established in Construction Permit No. AQ0067CPT01 to protect the ambient air quality. The condition requires the Permittee to limit the sulfur content of fuel oil combusted in EU IDs 13 and 14 to no more than 0.3 percent sulfur by weight. This condition does not do so through a surrogate limit, such as limiting operation hours, fuel consumption, etc. MR&R requirements are included in the condition.

Condition 26 is an ORL established in Construction Permit No. AQ0067CPT01 to avoid project classification as a PSD major modification under 18 AAC 50.300(c). The condition requires the Permittee to limit the fuel consumption of EU IDs 13 and 14 to 66,900 gallons per rolling 12-consecutive-month period and 24,400 gallons per rolling 12-consecutive-month period, respectively. The Permittee is required to record the fuel consumption of each of EU IDs 13 and 14, and to report the rolling 12-consecutive-month total fuel consumption of each EU.

Condition 27, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. 18 AAC 50.055 is contained in the federally-approved SIP. The Department also added permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The condition requires insignificant emissions units to comply with the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions. Insignificant emissions units are not generally listed in operating permits unless specific monitoring, recordkeeping, and reporting are necessary to ensure compliance with the state emission standards. However, the Permittee may not cause or allow insignificant

emissions units at the stationary source to violate these standards whether or not they are listed in the operating permit.

The Department finds that the insignificant emissions units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 27.4.a requires certification that the insignificant emissions units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution, based on reasonable inquiry.

The Department used the language in SPC V, adopted by reference under 18 AAC 50.346(b)(4), for the permit condition.

Conditions 28 through 36, NSPS Subpart A Requirements

Legal Basis: The EPA approved Alaska’s Part 70 Program granted on November 30, 2001 (40 C.F.R. 70 Appendix A). The Department is the permitting authority for the Part 70 program. As the permitting authority, the Department requires compliance with all permit conditions. Although the EPA has not delegated to the Department the authority to administer the New Source Performance Standard (NSPS) program, NSPS requirements are included in the definition for “applicable requirement” under 40 C.F.R. 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The NSPS provisions under Subparts GG, IIII, and KKKK apply to the stationary source. Therefore, the Department requires compliance with those standards in a Part 70 permit issued under the approved program. However, the Department is unable to change the actual wording of the relevant standard to substitute “the Department” for “the Administrator” in those standards. Since the Department expects access to any permit-related information provided by the Permittee to the EPA, the Department will act on its responsibility as the permitting authority to determine compliance with the standard. To reflect this relationship and for the purposes of this permit, the Department has defined “the Administrator” to mean the “EPA and the Department” for conditions implementing the federal emission standards under Section 4.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 1 and 2 are subject to NSPS Subpart GG and EU ID 26 is subject to NSPS Subpart KKKK, and therefore these units are subject to Subpart A. EU IDs 8a, 9a, 10a, and 23a are subject to NSPS Subpart IIII, and therefore are subject to Subpart A, as specified in Table 8 to 40 C.F.R. 60, Subpart IIII.

Conditions 28.1 through 28.3 – The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU IDs 1, 2, 8a, 9a, 10a, 23a, and 26. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility³ or in the event of a modification or reconstruction of an existing facility⁴ into an affected facility.

³ “Affected facility” means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2.

⁴ “Existing facility” means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2.

Condition 28.4 – The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 29 – The requirements in 40 C.F.R. 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to EU IDs 1, 2, and 26.

Conditions 30 and 31 – NSPS excess emission and monitoring systems performance report and summary report form in 40 C.F.R. 60.7(c) and (d) are applicable to an owner or operator required to or electing to install a continuous monitoring device to monitor EUs subject to an NSPS emissions standard. Excess emissions are defined in applicable subparts. These reporting requirements are applicable to EU ID 26. Additionally, according to 40 C.F.R. 60.334(j) Subpart GG, periodically monitoring fuel sulfur content for compliance with Subpart GG SO₂ standard is a continuous monitoring system. Therefore, these reporting requirements also apply to EU IDs 1 and 2 when monitoring under Condition 41.1.a. The Department has included in Attachment A of the statement of basis a copy of the federal EEMSP summary report form for use by the Permittee.

Condition 32 – The NSPS general recordkeeping requirements under 40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part. This requirement is satisfied by Condition 85, which requires at least five years of records retention, in accordance with 40 C.F.R. 71.6(a)(3)(ii)(B) adopted under 18 AAC 50.040(j)(4).

Condition 33 – For EU ID 26, the Permittee must comply with the initial performance test requirements in 40 C.F.R. 60.8. The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 1 and 2. Additionally, the performance test requirements do not apply to EU IDs 8a, 9a, 10a, and 23a as described in Table 8 of NSPS Subpart III. The Permittee is also still subject to these requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility or at such other times as may be required by EPA.

Condition 34 – Good air pollution control practices in 40 C.F.R. 60.11 are applicable to most NSPS affected facilities subject to Subpart A (EU IDs 1, 2, and 26).

Condition 35 – The condition states that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards for EU IDs 1, 2, and 26.

Condition 36 – Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 1, 2, 8a, 9a, 10a, 23a, and 26.

The flares are not subject to 40 C.F.R. 60.18 because they are safety devices and not control devices. They do not control emissions from any NSPS regulated emissions units.

Factual Basis: Subpart A contains general requirements applicable to all affected facilities (emissions units) subject to NSPS. In general, the intent of NSPS is to provide technology-based emission control standards for new, modified, and reconstructed affected facilities.

Conditions 37 through 41, NSPS Subpart GG Requirements

Legal Basis: As stated in Condition 37 and in accordance with NSPS Subpart GG 40 C.F.R. 60.330(a) and (b), the subpart applies to stationary gas turbines with a heat input at peak load (maximum load at 60 percent relative humidity, 59 °F, and 14.7 psi) equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired which commenced construction, modification, or reconstruction after October 3, 1977. EU IDs 1 and 2 meet these criteria and are therefore subject to these requirements.

Factual Basis: Conditions 38 and 40 incorporate the Subpart GG NO_x and SO₂ emissions standards applicable to EU IDs 1 and 2, as specified in 40 C.F.R. 60.332(a)(2) for NO_x, and 40 C.F.R. 60.333(b) for SO₂. The Permittee must not cause or allow EU IDs 1 and 2 to violate these standards.

Per Condition 41.1.b and pursuant to 40 C.F.R. 60.334(h)(3), the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. Per Condition 41.1.b and pursuant to 40 C.F.R. 60.334(h)(3), the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas as defined by 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. Custom sulfur monitoring schedules set forth in 40 C.F.R. 60.334(i)(3)(i)(A) through (D) and 60.334(i)(3)(ii) are acceptable without prior Administrative approval.

Custom sulfur monitoring schedules set forth in 40 C.F.R. 60.334(i)(3)(i)(A) through (D) and 60.334(i)(3)(ii) are acceptable without prior Administrative approval.

NO_x Standard: For a turbine subject to 40 C.F.R. 60.332, the NO_x standard is determined by the following equation:

$$STD_{NO_x} = 0.015 \left(\frac{14.4}{Y} \right) + F$$

Where:

STD_{NO_x} = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis)

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen, percent by volume assumed to be zero for distillate fuel oil and gaseous fuels.

Based on the manufacturer's heat rating at manufacturer's rated peak load, and assuming fuel bound nitrogen of zero, the NO_x standard is 170.4 ppmv for each of EU IDs 1 and 2.

SO₂ Standard: To demonstrate compliance with the Subpart GG SO₂ standard, the Permittee is required to comply with one of the following options:

- (1) do not cause or allow SO₂ emissions in excess of 0.015 percent by volume, at 15 percent O₂ and on a dry basis (150 ppmv); or
- (2) do not cause or allow the sulfur content for the fuel burned in EU IDs 1 and 2 to exceed 0.8 percent by weight.

The Permittee elected to limit the fuel sulfur content, as described in option 2.

Exemptions: Gas turbines exempted from NSPS Subpart GG emission standards are as provided in 40 C.F.R. 60.332(e) – (l).

Condition 39, NSPS Subpart GG NO_x Monitoring, Recordkeeping, and Reporting

Legal Basis: Conditions 39.1 through 39.3 includes periodic monitoring, recordkeeping, and reporting requirements for all turbines that normally operate for greater than 400 hours in a 12-month period. These additional MR&R requirements are necessary to ensure that turbine emissions comply with the NSPS Subpart GG NO_x standard and is required under 40 C.F.R. 71.6(a)(3) as the subpart does not contain MR&R sufficient for an operating permit.

Factual Basis: The Department does not have enough information to make categorical determinations that certain types of turbines, or turbines with emission test results below a certain percentage of the Subpart GG NO_x emission limit will inherently comply with the Subpart GG limit at all times and will never need additional testing. After a sufficient body of NO_x data is gathered under monitoring conditions for compliance with 40 C.F.R. 60, Subpart GG, the Department may find that it has enough information to make such categorical determinations. In that event, the Department would revise the NO_x monitoring conditions. The Department may determine that to assure compliance it is necessary to retain or increase the current monitoring frequency.

These conditions do not include the initial NSPS performance test requirements as the Subpart A conditions cover these requirements. If an existing or new turbine under this permit is still subject to the performance test requirement of 40 C.F.R. 60.8, the requirement is covered under the Subpart A related conditions.

The intent of these conditions is that turbines or groups of turbines be routinely tested on no less than a 5-year cycle. If the most recent performance test on a turbine showed NO_x emissions at less than or equal to 90 percent of the limit shown in Condition 38, then periodic monitoring is required at the first applicable of three criteria: either within 5 years of the last performance test, within a year of the effective date of the permit, or within a year of exceeding 400 hours of operation within a 12-month period. For clarification, the Department added a 6 month cut-off date for triggering source testing within 1 year after permit effective date in accordance with Condition 39.1.a(i)(B). The 6-month trigger identifies when Condition 39.1.a(i)(C) would be enacted to require source testing within 1 year of triggering 400 hours. This ensures that a unit would not appear to be out of compliance with Condition 39.1.a(i)(B) once it finally triggered Condition 39.1.a(i)(C). If the most recent performance test showed operations at greater than 90 percent of the more stringent of the NO_x limits, then periodic monitoring source testing is required every year until two consecutive tests show emissions at less than or equal to 90% of that limit.

The condition does not state how load must be measured. For some turbines it may be possible to directly measure load as either mechanical or electrical output. For others, it may be necessary to calculate load indirectly based on measurements of other parameters. The

Department is not attempting to dictate what method is most appropriate through the permit condition, but should evaluate the adequacy of methods of calculating load based on the load monitoring proposed by the Permittee.

Subpart GG defines “emergency gas turbine” and exempts turbines meeting that definition from the Subpart GG NO_x emission standards. Some turbines may be operated as standby equipment but not meet the definition of emergency turbine, so the Department has added a Method 20, or Method 7E and either Method 3 or 3A, monitoring threshold of 400 hours per 12-month period. For turbines expected to operate less than 400 hours, the Department has also added recordkeeping for hours of operation. The Department does not intend to require the Permittee to operate a turbine solely for the purpose of testing.

The condition requires testing at a range of loads, consistent with the performance test requirements in Subpart GG, that is, test at 30, 50, 75, and 90-to-100 percent load. If testing at these four loads is not reasonable, the condition allows the Permittee to propose to the Department what test loads will be reasonable and adequate, and the Department will have the responsibility to make a finding on that proposal. If EPA has already approved alternative test loads for the initial performance test, the Department would allow those test loads if the information that went into that decision were still representative of the turbine operation.

In Condition 39.1.b(ii)(C)(4), the Department considers “fuel type” to mean, for liquid fuels a type of fuel as described in an ASTM or similar fuel specification.

Load measurements or load calculations from load surrogate measurements are for one-hour periods. The intent is to match the averaging period for the test method. Method 20 identifies a number of traverse points that vary with the size of the stack. From these points the tester is to choose at least 8 points for NO_x measurements. The time at each point is to be at least one minute plus the average response time of the instrument. The recorded value is the average steady state response. Presumably, the steady state response would exclude some or all of the response time of the instrument. Three runs are to be done at each test load.

The three runs would represent 24 minutes of measurement time or more. A one-hour average load is therefore a reasonable approximation of a load period corresponding to the test method.

Condition 41, NSPS Subpart GG SO₂ Monitoring, Recordkeeping, and Reporting

Legal Basis: Monitoring, recordkeeping, and reporting requirements for this condition are described in NSPS Subpart GG and have been referenced here. These MR&R requirements are necessary to ensure that turbine emissions comply with the Subpart GG SO₂ standard, as required under 40 C.F.R. 71.6(a)(3) and in accordance with corresponding MR&R requirements provided under NSPS Subpart GG.

Factual Basis: Conditions 41.1 through 41.4 includes periodic monitoring, recordkeeping, and reporting requirements for all turbines subject to the NSPS Subpart GG SO₂ emissions standards. No additional monitoring outside of the Subpart GG requirements is necessary to ensure compliance with the Subpart GG SO₂ standard.

Monitoring: Condition 41.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements. The Permittee may demonstrate compliance with the Subpart GG SO₂ standard by either periodically monitoring the total sulfur content of the gaseous fuel being fired in the affected turbine (as described in Condition 41.1.a).

Recordkeeping: The Permittee is required to maintain records of all sulfur monitoring data required by NSPS Subpart GG for five years, as specified in Condition 85.

Reporting: NSPS Subpart GG SO₂ reporting requirements are incorporated in the permit in Condition 41.4.a. For the purpose of the EEMSP report (Condition 30) and summary report (Condition 31) required under 40 C.F.R. 60.7(c), report daily periods during which the sulfur content of the fuel being fired in the turbine exceeds 0.8 percent as excess emissions. As stated in Condition 95.1, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 90. If the Permittee has demonstrated that the gaseous fuel burned at the stationary source meets the definition of “natural gas” in 40 C.F.R. 60.331(u), as set out by Condition 41.1.b, then the reporting requirements under Condition 41.4.a do not apply.

Conditions 42 through 45, NSPS Subpart III Requirements

Legal Basis: NSPS Subpart III applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICEs are manufactured after April 1, 2006 for non-fire pump engines and manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006 for fire pump engines.

EU IDs 8a, 9a, and 10a are non-emergency CI ICEs, while EU ID 23a is an emergency CI ICE. These EUs meet the applicability criteria of Subpart III under 40 C.F.R. 60.4200(a)(2)(i).

Factual Basis: These conditions incorporate the Subpart III emissions standards applicable to EU IDs 8a, 9a, 10a, and 23a. The Permittee may not cause or allow these emissions units to violate these standards. These conditions also provide MR&R specifically called out for the EUs within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer.

Emissions standards that apply to Subpart III-affected CI ICE depend on several factors, including, but not limited to, the unit's purpose (whether emergency or non-emergency), model year, displacement in liters/cylinder (L/cyl), and location. Some of this information are provided in Table A of the permit.

Because the stationary source location meets the definition of “remote Alaska” in 40 C.F.R. 60.4219, the applicable standards and MR&R requirements for EU IDs 8a, 9a, 10a, and 23a are rooted from the provisions under 40 C.F.R. 60.4216 that specifically address engines used in remote Alaska. 40 C.F.R. 60.4216(c) allows the Permittee to comply with the applicable emission standards for emergency engines in 40 C.F.R. 60.4202 and 60.4205, and not those for non-emergency engines in 40 C.F.R. 60.4201 and 60.4204, whether the unit is operated as emergency or non-emergency CI ICE. Therefore, EU IDs 8a, 9a, 10a and 23a⁵ are subject to EPA Tier 2 and 3 emissions standards for nonroad CI engines as specified in Tables 2 and 3 to Appendix I to Part 1039. Additionally, 40 C.F.R. 60.4216(d) includes provisions that exempt owners and operators of pre-2014 model year stationary CI ICE subject to Subpart III that are located in remote areas of Alaska, such as EU IDs 8a, 9a, 10a, and 23a, from the provisions of 40 C.F.R. 60.4207 (fuel requirements in Subpart III). 40 C.F.R. 60.4216(f) includes provisions

⁵ EU ID 23a does not make use of the provisions under 40 C.F.R. 60.4216(c). It is an emergency CI ICE subject to the applicable standards for emergency engines operating in remote areas of Alaska.

that allow owners and operators of stationary CI ICE subject to Subpart IIII that are located in remote areas of Alaska, such as EU IDs 8a, 9a, 10a, and 23a, to use fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. Although, the sulfur content of the used lubricating oil must be less than 200 ppm and must meet the on-specification levels and properties for used oil in 40 C.F.R. 279.11. EU IDs 8a, 9a, 10a, and 23a do not utilize fuel mixed with used lubricating oil so these provisions are not included in the permit.

EU IDs 8a, 9a, 10a, and 23a do not need and are not equipped with diesel particulate filter to comply with the applicable PM standard. Therefore, the provisions regarding diesel particulate filter in 40 C.F.R. 60.4209(b) and 60.4214(c) are not included in the permit

Because EU ID 23a is permitted as an emergency CI ICE, it must be operated in accordance with the requirements in 40 C.F.R. 60.4211(f)(1) – (3). Per 40 C.F.R. 60.4211(f) and the definition of ‘emergency stationary internal combustion engine’ under 40 C.F.R. 60.4219, in order for a CI ICE to be considered an emergency stationary CI ICE under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. To ensure that EU ID 23a meets the definition of emergency stationary ICE, the Department added gap-fill requirements, similar to 40 C.F.R. 60.4209 and 60.4214(b), in Condition 44.4.b pursuant to 18 AAC 50.040(j)(4) and 50.326(j)(4), and 40 C.F.R. 71.6(a)(3)(i) and (c)(6).

The NSPS GAPCP requirements provided in 40 C.F.R. 60.4211(a), as reflected in Condition 42.2, suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). MR&R requirements are provided in Conditions 44 through 45.

The provisions of NSPS Subpart IIII, listed in Conditions 42 through 45, are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Conditions 46 through 50, NSPS Subpart KKKK Requirements

Legal Basis: NSPS Subpart KKKK applies to combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. EU ID 26 meets these criteria and is therefore subject to these requirements.

Factual Basis: These conditions incorporate the Subpart KKKK NO_x and SO₂ emissions standards. The Permittee may not cause or allow EU ID 26 to violate these standards. These conditions also provide MR&R specifically called out for within the subpart. Condition 48.2, which requires keeping records of performance tests data by referencing the standard requirement in Condition 85, is added to gap-fill in the recordkeeping requirements.

The provisions of NSPS Subpart KKKK listed in Conditions 46 through 50 are current as amended through December 7, 2020. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Condition 51, NESHAP Subpart A Requirements

Legal Basis: Most sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements are subject to NESHAP Subpart A. This stationary source is subject to 40 C.F.R. 63 Subpart ZZZZ and therefore is subject to the general provisions of Subpart A as specified in the provisions for the applicability of NESHAP Subpart A in Table 8 to NESHAP Subpart ZZZZ.

Factual Basis: Subpart A contains the general requirements applicable to all affected sources subject to NESHAP. In general, the intent of NESHAP is to regulate specific categories of stationary sources that emit or have the potential to emit one or more hazardous air pollutants.

Conditions 52 through 56, NESHAP Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), whose construction commenced before June 12, 2006, located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Monopod Platform is an area source that owns and operates RICE units, EU IDs 13, 14, and 21, subject to NESHAP Subpart ZZZZ.

Factual Basis: These conditions incorporate the current NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 13, 14, and 21. Monopod Platform is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS). Per 40 C.F.R. 63.6603(b)(1), existing non-emergency compression ignition (CI) RICE rated greater than 300 Hp (as in the case of EU ID 13) located at area sources that are not accessible by the FAHS do not have to meet the numerical CO emission limitations (therefore, no operational limitations apply as well) under Subpart ZZZZ but must meet the work and management practices for stationary non-emergency CI RICE with a rating of less than or equal to 300 Hp as specified in Table 2d (item 1).

For EU IDs 13, 14, and 21, the Permittee is required to perform inspections and maintenance at intervals specified by the subpart (see Conditions 54.1 through 54.4); as well as, comply with the NESHAP GAPCP requirements, as reflected in Condition 53, which suffices the State GAPCP requirement under 18 AAC 50.346(b)(5).

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e), 63.6625(i), and 63.6660, as set out in Condition 55. The reporting requirements are provided in Condition 56. The Permittee is required to include reports of deviations from NESHAP Subparts A and ZZZZ requirements with the semiannual operating reports, per 40 C.F.R. 63.6650(f).

EU IDs 13, 14, and 21 are exempt from the subpart's fuel requirements per 40 C.F.R. 63.6604(d), and from the notification requirements per 40 C.F.R. 63.6645(a)(5) since none of the affected emissions units are subject to numerical emission standards.

The provisions of NESHAP Subpart ZZZZ listed in Conditions 51 through 56 are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Condition 57, Asbestos NESHAP

Legal Basis: The requirements of 40 C.F.R. 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the “applicable requirement” definition under 40 C.F.R. 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M and associated general provisions under Subpart A, as adopted by reference under 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation. ADEC received delegation for 40 C.F.R. 61.145 and 40 C.F.R. 61.154 of Subpart M (Asbestos), along with other sections and appendices which are referenced in 40 C.F.R. 61.145, as 40 C.F.R. 61.145 applies to sources required to obtain an operating permit under Alaska's regulations. ADEC has not received delegation for Subpart M for sources not required to obtain an operating permit under Alaska's regulations.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Conditions 58 through 60, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: The requirements of 40 C.F.R. 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the “applicable requirement” definition under 40 C.F.R. 71.2.

Condition 58 requires compliance with the applicable requirements in 40 C.F.R. 82, as adopted by reference under 18 AAC 50.040(d). The requirements apply if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants in 40 C.F.R. 82, Subpart F.

Conditions 59 and 60 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 59 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 60 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements. The Monopod Platform uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 82 requirements. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to require compliance with this federal regulation.

Condition 61, NESHAP Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAP and requires recordkeeping for those determinations if required by the source classification.

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and EPA if the stationary source becomes an

affected source subject to a standard promulgated by EPA under 40 C.F.R. 63 and to keep records of applicability determinations and make those records available to the Department.

Conditions 62 through 64, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e)-(g). As stated in 18 AAC 50.326(j)(3), the standard permit conditions of 18 AAC 50.345 replace the provisions of 40 C.F.R. 71.6(a)(5) – (7).

Factual Basis: These are standard conditions that apply to all permits.

Condition 65, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400-403. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. The regulations in 18 AAC 50.400-403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 66 and 67, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410-420. The regulations specify the time period for the assessable emissions and the methods the Permittee may use to calculate assessable emissions. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Except as noted in the last paragraph, the Department used the language in SPC I, adopted by reference under 18 AAC 50.346(b), for the permit. SPC I requires the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date. The assessable emissions are the lesser of the stationary source's potential or projected emissions of each air pollutant.

SPC I also allows the Permittee to recalculate the stationary source's assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emissions must be based on actual emissions for the previous calendar year. Since each current year's assessable emissions are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

The Department has modified Condition 66 by deleting the phrase "in quantities 10 tons per year or greater" to match the revision made in 18 AAC 50.410 effective September 7, 2022. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 68, Good Air Pollution Control Practice

Legal Basis: This condition requires compliance with the requirements in 18 AAC 50.346(b)(5) and applies to all emissions units, **except** those subject to an emissions standard in 40 C.F.R. 60, 61, or 63, those subject to continuous emission or parametric monitoring requirements, and insignificant emissions units, i.e., except EU IDs 1, 2, 8a, 9a, 10a, 13, 14, 21, 23a, and 26.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

The Department adopted this condition under 18 AAC 50.346(b) as SPC VI pursuant to AS 46.14.010(e). Records kept in accordance with Condition 68.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 85 even if a unit is no longer subject to this condition.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that an adequate maintenance schedule is not maintained.

Condition 69, Dilution

Legal Basis: This condition reiterates 18 AAC 50.045(a), which prohibits the Permittee from using dilution as an emission control strategy. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 70, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The Department used the language in SPC X for the permit. The condition requires the Permittee to take reasonable action to prevent particulate matter from being emitted into the ambient air in accordance with 18 AAC 50.045(d).

Condition 71, Stack Injection

Legal Basis: This condition reiterates 18 AAC 50.055(g), which prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e., disposing of material by injecting

it into a stack). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

Factual Basis: No specific monitoring for this condition is practical. Compliance is verified by inspections, because the emissions unit or stack would need to be modified to accommodate stack injection.

Condition 72, Air Pollution Prohibited

Legal Basis: This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing 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. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in SPC II for the permit. This condition spells out how to monitor, record, and report prohibited air pollution. While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and must submit copies of these records upon request of the Department.

Condition 73, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if unavoidable emergency, malfunction, or non-routine repair activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 89. Excess emission reporting under Condition 89 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 89.

Condition 74, Open Burning

Legal Basis: The condition prohibits the Permittee from conducting open burning. The Permittee requested this condition be included in operating Title V Permit AQ0067TVP04.

Factual Basis: No specific monitoring is required for this condition. More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 91.

Condition 75, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. This requirement is under 18 AAC 50.220(a) and 50.345(k), which are included in the SIP approved by EPA.

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a). Compliance is demonstrated through the submission of the required source test plan and report.

Conditions 76 through 78, Operating Conditions, Reference Test Methods, and Excess Air Requirements

Legal Basis: Conditions 76 and 78 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition 77 specifies source test methods, as required by 40 C.F.R. 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 76 through 78.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit.

Condition 79, Test Exemption

Legal Basis: This condition incorporates the source test exemption in 18 AAC 50.345(a) regarding visible emissions observations. 18 AAC 50.345(a) is included in the SIP approved by EPA.

Factual Basis: As provided in 18 AAC 50.345(a), the requirements for test plans, notifications, and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 80 through 83, Test Deadline Extension, Test Plans, and Notifications and Reports

Legal Basis: Condition 80 contains the requirement in 18 AAC 50.345(l), while Conditions 81 through 83 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o). The requirements in 18 AAC 50.345(l) through (o) are included in the SIP approved by the EPA. These requirements constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 50.345(a). Additionally, these requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

Factual Basis: These standard conditions supplement specific monitoring requirements stated elsewhere in this permit.

Condition 84, Particulate Matter Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f), which is included in the SIP approved by EPA. It applies when the Permittee tests for compliance with the particulate matter standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 85, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 C.F.R. 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4). It also incorporates the general NSPS recordkeeping requirement under 40 C. F. R. 60.7(f), which the Department adopted by reference under 18 AAC 50.040(a)(1).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide evidence of compliance with this requirement.

40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part while 40 C.F.R. 71.6(a)(3)(ii) requires at least five years of records retention. The five-year records retention requirement in Condition 85 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 86, Certification

Legal Basis: All operating permits must contain a requirement to certify permit applications, reports, affirmations, or compliance certification, per 18 AAC 50.345(j). The requirement is a part of the SIP approved by EPA.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). 18 AAC 50.345(j) allows the excess emissions reports to be certified with the operating report. However, the Department reminds the Permittee that excess emissions reports must be submitted according to the applicable deadline given in Condition 89 and must not be withheld from the Department until the deadline for submittal of an operating report. This condition supplements the reporting requirements of this permit. The certification statement through electronic signature and options for submittal provide paperless options for reporting without compelling Permittees to any specific means of submission.

Condition 87, Submittals

Legal Basis: This condition applies because the Permittee is required to send reports to the Department and supplements the standard reporting and notification requirements of this permit.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. This condition lists the Department's appropriate address for reports and written notices. This condition states that the Department

requires one certified copy of submitted reports (except as otherwise required by the Department or other conditions of the permit) and provides an allowance for either electronic or hard copy document submittals. The condition also directs the Permittee to refer to the submission instructions on the Department's Standard Permit Conditions webpage for additional information regarding document submittals (e.g., the appropriate Department address).

Condition 88, Information Requests

Legal Basis: All operating permits must include a condition that requires the Permittee to furnish certain information upon request, per 18 AAC 50.345(i). The requirement is part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(i) is a standard condition that must be included in each operating permit, as specified in 18 AAC 345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 89 and Section 13, Excess Emission and Permit Deviation Reports and Notification Form

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions: the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

Except as noted in the last paragraph, the Department used the language in SPCs III and IV, adopted by reference under 18 AAC 50.346(b)(2), for the permit condition. The Department used the Notification Form in SPC IV adopted by reference under 18 AAC 50.346(b)(3), for the notification requirements (see Section 13).

The Department has modified Condition 89.3 and the Notification Form in Section 13 to reflect the electronic submittal requirements in 18 AAC 50.270 using the Department's online form to submit notification of excess emissions and permit deviations beginning September 7, 2023. The electronic notification form is 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. Submittal through other methods may be allowed only upon written Department approval. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

The Department has modified Condition 89.3 and the Notification Form in Section 13 to reflect the electronic submittal requirements in 18 AAC 50.270 using the Department's online form to submit notification of excess emissions and permit deviations beginning September 7, 2023. The electronic notification form is 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. Submittal through other methods may be allowed only upon written Department approval. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 90, Operating Reports

Legal Basis: The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) which the Department has adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The Department used the language in SPC VII, adopted by reference under 18 AAC 50.346(b)(6), for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements identified elsewhere in the permit.

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports: one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 91, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 C.F.R. 71.6(c)(5), which the Department adopted by reference under 18 AAC 50.040(j).

Factual Basis: This condition specifies the periodic compliance certification requirements and specifies a due date for the annual compliance certification.

Condition 91.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified. The Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports: one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

Condition 92, Regional Haze Visibility Protection Area

Legal Basis: Condition 92 contains requirements from 18 AAC 50.265(1) and 50.265(4)(B) for stationary sources located in the Regional Haze Visibility Protection Area (RHVPA), as specified in 18 AAC 50.025(a)(4), which is shown in Figure III.K.13 H-1 of the July 5, 2022 Amendments to: State Air Quality Control Plan (Regional Haze SIP)⁶ and adopted by reference in 18 AAC 50.030. To assist the state's efforts in meeting the requirements in 40 C.F.R. 51.308(f)(2), the RHVPA was established with the intent to track and control current and potential new sources that may affect visibility in the Class I areas.

⁶ The July 5, 2022 Amendments to: State Air Quality Control Plan for the Regional Haze SIP can be found at the following website: <https://dec.alaska.gov/media/25964/section-iii-k-13-second-implementation-period-combined-sip-section-adopted-07-05-22.pdf>.

Factual Basis: 18 AAC 50.265 was added to the Department's regulations on August 21, 2022 to satisfy requirements from Section III.K.13.H Long-Term Strategy for Regional Haze, Subsection 2B.⁶ Condition 92.1 contains the requirements from 18 AAC 50.265(1) which requires Permittee's to maintain onsite for 10 years, records of any maintenance to any significant emissions unit that has or may have an effect on any emission that affects visibility of Class I areas.

Condition 93, Triennial Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources to the EPA as required under 40 C.F.R. 51.15 and 51.321. The federal emission inventory requirement applies to sources defined as point sources in 40 C.F.R. 51.50. Under 18 AAC 50.275, the state also requires reporting of emissions triennially for stationary sources with an air quality permit, regardless of permit classification. This includes sources that do not meet the federal emission thresholds in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A. The state must report emissions data as described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A to EPA.

Factual Basis: Except as noted in the last paragraph, the Department used the language in SPC XV, as adopted by reference under 18 AAC 50.346(b)(8), for the permit condition.

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1)). Permittees have until April 30th to compile and submit the data to the Department. To expedite the Department's process of transferring data into EPA's electronic reporting system, the Department encourages Permittees to submit the emission inventory through the Department's electronic emission inventory submission system in the Permittee Portal on the Department's Air Online Services webpage <http://dec.alaska.gov/Applications/Air/airtoolsweb/>. A myAlaska account and profile are needed to gain access to the Permittee Portal. Other options are to submit the emission inventory via mail, email, or fax.

Detailed instructions on completing and submitting the emission inventory and the report form are available at the Point Source Emission Inventory page <http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory> by clicking the Emission Inventory Instructions button. The emission inventory instructions and report form may also be obtained by contacting the Department.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, stationary sources with air quality permits are required to submit with each report emissions data described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A, as applicable. Title V stationary sources with potential annual emissions greater than or equal to any of the emission thresholds for Type A (large) sources, as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every year for the previous calendar year (also known as the inventory year). For triennial inventory years, Type A sources only need to submit one report, not both an annual report and a separate triennial report.

Stationary sources, excluding owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230, that do not meet any of

the emission thresholds for Type A (large) sources are required to report emission inventory data every third year (i.e., triennially) for the previous inventory year under Condition 93. As of the issue date of this permit, the Monopod Platform is required to report triennially as described under Condition 93.

The Department has modified the triennial reporting requirements under Condition 93 by including stationary sources' PTEs that are below the thresholds for annual reporting, instead of pollutant-specific thresholds for attainment and non-attainment areas. Thus, all stationary sources regardless of permit classification (excluding ORLs and PAELs) are covered under this condition, to capture the new requirements found in 18 AAC 50.275, effective September 7, 2022. Because the stationary source's PTE for criteria pollutants are below the thresholds for every-year emissions inventory reporting, the Department has streamlined SPC XV to include only triennial reporting requirements. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 94, Consistency of Reporting Methodologies

Legal Basis: Condition 94 is from 18 AAC 50.275(a) and requires all stationary sources, regardless of permit classification (with the exception of owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230), to report actual emissions to the state so that the state can meet its obligation under 40 C.F.R. 51. Condition 94.1 is from 18 AAC 50.275(b) and requires consistency on the stationary sources' actual emissions reports submitted for NEI and the state's assessable emissions.

Factual Basis: The regulation was added to 18 AAC 50 on September 7, 2022 so as to include all stationary sources required to report actual emissions for the purpose of federal emissions inventory and to avoid inconsistencies in actual emissions reports submitted. When reporting actual emissions under Condition 93 or assessable emissions under Condition 66.2, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

Condition 95, NSPS and NESHAP Reports and Waivers

Legal Basis: The Permittee is required to provide the Department a copy of each report submitted to EPA as required for emissions units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). Appendix A to 40 C.F.R. 70 documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 96, Federal Electronic Reporting Allowance

Legal Basis: On September 25, 2024, EPA published a notice in the Federal Register (Vol. 89, No. 186, page 78300) allowing stationary sources subject to federal rules to electronically submit reports, notifications, or other submission types to CEDRI, consistent with the provisions of the Cross-Media Electronic Reporting Rule (CROMERR), codified under 40 C.F.R. 3.

Factual Basis: The electronic reporting provisions in Condition 96 is a general advisory option for stationary sources subject to federal rules to facilitate and streamline reporting requirements, in lieu of paper or email format. CROMERR establishes electronic reporting as an acceptable regulatory alternative to paper reporting and establishes requirements to assure that electronic documents are as legally dependable as their paper counterparts. The submittals must be in acceptable digital formats. Acceptable digital formats are file types that are compatible with CEDRI or other EPA electronic document receiving system that the Administrator may designate.

Condition 97, Permit Applications and Submittals

Legal Basis: 40 C.F.R. 71.10(d)(1), adopted by reference by the Department under 18 AAC 50.040(j)(7), requires submission of a copy of each permit application to EPA.

Factual Basis: The Department used the language in SPC XIV, adopted by reference under 18 AAC 50.346(b)(7), for the permit condition. The condition directs the applicant to send a copy of each application for modification or renewal of this permit to the EPA. The information may be submitted in electronic format, if practicable. This condition shifts the burden of compliance with 40 C.F.R. 71.10(d)(1) from the Department to the Permittee as allowed under 40 C.F.R. 71.10(d)(1).

Conditions 98 through 100, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(8), (12), and (13), incorporated by reference under 18 AAC 50.040(j), require that these provisions be included in operating permits.

Factual Basis: 40 C.F.R. 71.6(a)(12) and (13), as reflected in Conditions 99 and 100, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 98) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 98.

Condition 101, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 C.F.R. 71.5(a) – (c), adopted by reference in 18 AAC 50.040(j)(3), and 18 AAC 50.326(c).

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 40 C.F.R. 71.5(a)(2), a complete renewal application is one

that provides all information required pursuant to 40 C.F.R. 71.5(c) and remits payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, as long as an application has been submitted within the timeframe specified under 40 C.F.R. 71.5(a)(1)(iii) and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application.

Conditions 102 through 106, General Compliance Requirements and Schedule

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in 18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

Factual Basis: These are standard conditions for compliance required for all operating permits.

Conditions 107 and 108, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 C.F.R. 71.6(f), which the Department has adopted by reference under 18 AAC 50.040(j)(4). These requirements apply because the Permittee has requested that the Department shield the stationary source from specific non-applicable requirements listed under this condition.

Factual Basis: Table D of Operating Permit No. AQ0067TVP04 shows the permit shield that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.

ATTACHMENT A

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company:
 Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

Emission Data Summary ¹	CMS Performance Summary ¹
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown _____	a. Monitor equipment malfunctions _____
b. Control equipment problems _____	b. Non-Monitor equipment malfunctions _____
c. Process problems _____	c. Quality assurance calibration _____
d. Other known causes _____	d. Other known causes _____
e. Unknown causes _____	e. Unknown causes _____
2. Total duration of excess emissions _____	2. Total CMS Downtime _____
3. Total duration of excess emissions x (100) / [Total source operating time] % ²	3. [Total CMS Downtime] x (100) / [Total source operating time] % ²

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ Date: _____

Title: _____