Alaska Department of Environmental Conservation
Air Permits Program

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Cook Inlet Energy LLC
Kustatan Production Facility

STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0741TVP04

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0741TVP04.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0741TVP04 contains information on the stationary source as provided in the Title V permit application.

The Kustatan Production Facility is owned and operated by, Cook Inlet Energy, LLC and Cook Inlet Energy 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 Kustatan Production Facility is an onshore facility located on the west side of Cook Inlet, Alaska whose role is to separate the gas, water, and crude oil produced both on and offshore at Osprey Platform and West McArthur River Production Facility. The produced water is sent to the Osprey Platform for re-injection and the produced gas is used to power the facility's natural gas emission units, such as the turbine generators used for electrical power and the heaters used in processing the crude oil. The produced crude oil is transferred to the Cook Inlet pipeline system to be sold.

Osprey Platform is permitted as a separate stationary source from Kustatan Production Facility for the purposes of air quality classifications. The Department disaggregated the two stationary sources of the West Forelands Facility in a letter dated May 8, 2009 from ADEC to Pacific Energy Resources, Ltd. (then-owner of the 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 Kustatan Production Facility that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0741TVP04. The emission units consist of two natural gas fired turbines, three heater treaters, three crude oil heaters, one firewater pump, one emergency engine, a process flare, and six storage tanks.

Table A of Operating Permit No. AQ0741TVP04 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. Cook Inlet Energy requested to incorporate the requirements of Minor Permit AQ0741MSS03 into Operating Permit AQ0741TVP04.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as calculated by the Department from the Kustatan Production Facility is shown in the table below.

[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

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

Emissions	NO_x	CO	PM	SO_2	VOC	CO_2e[1]	HAPs	Total[2]
PTE	90.60	156.59	6.66	112.14	12.68	110,961	2.36	381.03
Assessable PTE	90.60	156.59	6.66	112.14	12.68	0	0	378.67

Notes:

1. CO_2e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.
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 PM_{10} emissions and are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 51.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table C 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 and GHGs, emissions are as provided in the application, as follows: NO_x and CO emission factors for EU IDs 1 and 2 (turbines) are the highest run results from 2019 source testing while operating above 50% load, increased by 10% to account for changes in load and temperature. NO_x and CO emission factors for EU IDs 3 through 8 (gas heaters) are from source test results from May 2003. PM and VOC emission factors for EU IDs 1 through 8 are based on AP-42. Emissions for EU IDs 9 and 9a (diesel engines) are based on emission factors from AP-42, Table 3.3-1 and 500 operating hours per year. Emissions for EU ID 9a are based on the 26.1 gallons per hour fuel rate provided in the application as "corrected nominal fuel rate according to Test Specs provided by NC Machinery". Emissions for EU ID 10 (process flare) are based on emission factors from AP-42, Table 13.5-1 and 70 MMscf/yr. All SO_2 PTE values are based on mass balance, an assumed diesel fuel sulfur content of 0.5% by weight, and 700 ppmv H_2S in the fuel gas. The Department corrected the flare GHG emissions, from 1,179,645 to 4,891 TPY by using the annual 70MMscf/yr operating limit.

The Applicant calculated HAP emissions using emission factors from AP-42 Table 1.4-3 and Table 3.3-2. In the HAP emissions calculations, the Department corrected the diesel engine hours from 8,760 to 500 hours each, the flare maximum capacity from 16,819 to 70 MMscf/yr, and the flare emission tonnage conversion factor.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[2] 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;

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

- 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 Kustatan Production Facility 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; and

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. 0741CPT01. The Department issued Construction Permit No. 0741CPT01 to this stationary source on May 2, 2002. At that time, the Department treated the Kustatan Production Facility as a modification to the West Forelands Facility. The Department established stationary source-specific requirements in this Title I permit.

Permit No. 0741CPT02. The Department issued Construction Permit No. 0741CPT02 to this stationary source on June 6, 2003. The permit authorized a modification to add a combustion turbine unit to the stationary source and rescinded Construction Permit 0741CPT01.

Minor Permit No. 0741MSS01. On November 1, 2006, the Permittee submitted a minor permit application to reduce the stationary source permitted inventory to match actual installations, update owner requested limits, remove sulfur compound restrictions originally proposed to avoid ambient impact analysis from SO_2 emissions, and rescind Construction Permit No. 0741CP02. The Department issued Minor Permit No. 0741MSS01 to this stationary source on May 31, 2007. The Department established stationary source-specific requirements in this Title I permit.

- Revision No. 1 rescinded AQ0741MSS01 and replaced MR&R language that cross referenced the operating permit with specific language within the minor permit.
- Revision No. 2 rescinded Revision 1 and transferred ownership from Forest Oil Corporation to Pacific Energy Resources Ltd.
- Revision No. 3 rescinded Revision 2 and transferred ownership from Pacific Energy to Cook Inlet Energy LLC.

Minor Permit No. 0741MSS02. On October 7, 2014, the Permittee submitted a minor permit application to revise the NO_x emission limits for the turbines and the methods used to determine NO_x and CO emission factors and to rescind minor permit 0741MSS01 Revision 3. The Department issued Minor Permit No. 0741MSS02 to this stationary source on February 23, 2015. The Department established stationary source-specific requirements in this Title I permit.

Minor Permit No. 0741MSS03. On February 28, 2018, the Permittee submitted a minor permit application to remove the 5.6 megawatt turbine generator EU ID 2a from the source inventory and

all permit conditions, add the term "malfunction" to the exceptions listed in the operational requirement under the carbon monoxide (CO) owner requested limit, and rescind and replace minor permit AQ0741MSS02. The Department issued Minor Permit No. 0741MSS03 to this stationary source on April 26, 2018. 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. AQ0741TVP04 as described in Table D.

Minor Permit No. 0741MSS04. On June 16, 2020, the Permittee submitted a minor permit application to remove EU IDs 1 and 2 from service temporarily, and add EU IDs 17 and 18 as temporary power generation while the source remained in warm shutdown with no gas production. The Department issued Minor Permit No. 0741MSS04 to this stationary source on September 17, 2020. The Department established stationary source-specific requirements in this Title I permit. Minor Permit No. 0741MSS04 was rescinded on December 8, 2023.

Title V Operating Permits

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

Permit No. AQ0741TVP01. The owner or operator submitted an application for an initial Title V operating permit dated September 15, 2004. The Department issued Operating Permit No. AQ0741TVP01 on April 17, 2006.

- Revision No. 1 was issued January 11, 2008 to transfer ownership from Forest Oil Corporation to Pacific Energy Resources Ltd.
- Revision No. 2 was issued January 16, 2008 to incorporate the provisions of Minor Permit AQ0741MSS01 Revision 1 by administrative amendment.
- Revision No. 3 was issued July 15, 2010 to transfer ownership from Pacific Energy Resources Ltd to Cook Inlet Energy.

Permit No. AQ0741TVP02. The Permittee submitted an application to renew Operating Permit No. AQ0741TVP01 dated October 4, 2010. The Permittee amended the application on November 14, 2011. The Department issued Operating Permit No. AQ0741TVP02 on June 14, 2012.

- Revision No. 1 was issued April 20, 2015 to incorporate Minor Permit AQ0741MSS02 by administrative amendment.

Permit No. AQ0741TVP03. The Permittee submitted an application to renew Operating Permit No. AQ0741TVP02 dated December 13, 2016. The Department received additional information on December 22, 2016. The Department deemed the application complete on December 23, 2016 and issued Operating Permit No. AQ0741TVP03 on April 4, 2017.

- Revision No. 1. The Permittee requested to incorporate the provisions of Minor Permit AQ0741MSS03 by administrative amendment on February 28, 2018. Revision No. 1 was issued April 26, 2018.

Permit No. AQ0741TVP04. Cook Inlet Energy LLC submitted an application to renew Operating Permit No. AQ0741TVP03 under a September 30, 2021 cover letter. The Department received additional information on November 28, 2023, and again on December 11, 2023. The Department issued Operating Permit No. AQ0741TVP04 on DATE.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 2003. 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.

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. AQ0741TVP04.

Table D below lists the requirements carried into Operating Permit No. AQ0741TVP04 to ensure compliance with the preconstruction permit requirements.

Table D - Comparison of Minor Permit No. 0741MSS03 Conditions to Operating Permit No. AQ0741TVP04 Conditions[1]

0741MSS03 Condition No.	Description of Requirement	AQ0741TVP04 Condition No.	How Condition was Revised
Table 1	EU Inventory	Table A	Lean and Raw fuel gas revised to Natural Gas Revised ratings of EU IDs 1, 2, 9a, and 10.
5	Access Control Plan	18	No change.
6	SO_2 Requirements	19	Raw and lean gas testing requirements combined to one representative sample of fuel.
7	NO_X ORL	20	Gap fill to reference latest source test results.
8	CO ORL	21	Gap fill to reference latest source test results. Added footnote to clarify worst-case emission factor while operating above 50% load.
9	VOC ORL	22	No change.

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.

- NSPS Subpart KKKK: Although the Permittee has several turbines (EU IDs 1 and 2), the provisions of this Subpart are not currently applicable since the turbines have not been modified or reconstructed since the Subpart applicability date. A permit shield has been granted for this regulation.
- 40 C.F.R. 64 Compliance Assurance Monitoring (CAM): While the storage tank EU IDs 12 – 16 use a control device (vapor recovery unit) to achieve compliance with the VOC emission limit, individual storage tank emissions can vary independently. Therefore, CAM requirements are not applicable.
- 40 C.F.R. 68 Chemical Accident Prevention Provisions: The Risk Management Plan (RMP) requirements do not apply because the stationary source has no threshold quantities of a regulated substance used in a process as defined in 40 C.F.R. 68.10.

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. AQ0741TVP04. 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 through 10 are fuel-burning equipment.

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. 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 gaseous fuel-burning flares normally burn without emitting visible emissions. However, gaseous 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 or Smoke/No Smoke 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):

For EU IDs 9 and 9a, no visible emissions monitoring is required when these emissions units are insignificant based on significant emission thresholds in 18 AAC 50.326(e) equated to hours of operation. The annual operating hours threshold at which emissions from EU IDs 9 and 9a become significant are 500 and 243 hours in any consecutive 12-month period, respectively. As long as the emissions units operate under these thresholds, they are insignificant by emissions rate as specified in 18 AAC 50.326(e) and 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 76 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 flare EU ID 10, 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.

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 through 10 are fuel-burning equipment.

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
- 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):

For EU IDs 9 and 9a, no visible emissions monitoring is required when these emissions units are insignificant based on significant emission thresholds in 18 AAC 50.326(e) equated to hours of operation. The annual operating hours threshold at which emissions from EU IDs 9 and 9a become significant are 500 and 243 hours in any consecutive 12-month period, respectively. As long as the emissions units operate under these thresholds, they are insignificant by emissions rate as specified in 18 AAC 50.326(e) and 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 76 with the visible 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.

Condition 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 through 10 are fuel-burning equipment.

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., coal, natural gas, fuel oils).

Liquid Fuels:

For the liquid fuel-burning equipment, EU IDs 9 and 9a, 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 13, 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.

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 the SO_2 emission standard. For EU IDs 1 through 8 and 10, fuel gas sulfur is measured as hydrogen sulfide (H_2S) concentration in parts per million by volume (ppmv). EU IDs 1 through 8 and 10 comply with Condition 10 by limiting H_2S content. Calculations show that fuel gas containing no more than 4,000 ppmv H_2S will always comply with the SO_2 emission standard. This is true for all fuel gases, even with no excess air. However, the Permittee assumed a 700 ppmv H_2S content in estimating the potential SO_2 emissions from the gas-burning emission units. Therefore, the MR&R requirements for the H_2S content of the fuel gas reflect the Permittee's assumptions. Equations to calculate the exhaust gas SO_2 concentrations resulting from the combustion of fuel gas were not included in this permit.

For EU IDs 1 and 2, fuel sulfur is separately measured as weight percent sulfur. EU IDs 1 and 2 comply with Condition 10 by complying with the NSPS GG SO_2 requirement of limiting fuel sulfur to 0.8 wt%S.

Condition 15.1 requires the Permittee to conduct monthly analysis for fuel gas H_2S content using either ASTM D4084, D4810, D4913, 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).

Conditions 18 through 22, 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: Permit AQ0741MSS03 contains conditions that were carried forward to this Title V operating permit renewal. These conditions contain requirements the Permittee must comply with and were derived from ambient air analysis in Conditions 18 and 19 and PSD avoidance limits in order to avoid classification as a PSD major source in Conditions 20 through 22.

Condition 18 incorporates the public access control plan which restricts public access to the stationary source for maintaining ambient air boundaries and protecting the general public from health and safety hazards at the stationary source. Condition 19 contains fuel sulfur requirements obtained through the ambient air quality analysis.

Condition 20 contains limitations and monitoring requirements for NO_x. NO_x emission factors in Condition 20.2.a have been updated with the latest source tests performed on the turbines in August 2019. Condition 21 contains limitations and monitoring requirements for CO. Condition 22 contains operational restrictions for VOC.

The Department added periodic emission source testing under its operating permit gap-filling authority to confirm emission factors for the turbines. Periodic source testing of turbines for NO_x and CO is necessary to verify emission unit specific emission factors used to calculate compliance with annual emission limits to avoid classification as a PSD major source. Periodic determination of emission factors is necessary because of operational and sampling variability. Source testing for verification of NO_x and CO emission factors should occur every 5 years.

Condition 23, 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 50.050(a) and 50.055 are 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 23.4.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 24 through 30, 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 Subpart GG 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 therefore subject to Subpart A.

Conditions 24.1 through 24.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU IDs 1 and 2. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility[3] or in the event of a modification or reconstruction of an existing facility[4] into an affected facility.

Condition 24.4 - 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 25 – The requirements in 40 C.F.R. 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to all NSPS affected facilities subject to Subpart A, unless the affected facilities are also subject to the requirements in the specific NSPS Subpart.

Condition 26 – 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 70, 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).

[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 27 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 1 and 2. However, the Permittee is 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 28 - 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 and 2).

Condition 29 - 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 and 2.

Condition 30 - Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 1 and 2.

NSPS excess emission and monitoring systems performance (EEMSP) 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. According to 40 C.F.R. 60.334(j) Subpart GG, periodically monitoring fuel sulfur content for compliance with Subpart GG SO_2 standard is a continuous monitoring system. Only units that periodically determine the fuel sulfur content under Subpart GG are required to submit EEMSP reports in accordance with 40 C.F.R. 60.7(c) (and/or the summary reports described in § 60.7(d)). Pursuant to 40 C.F.R. 60.334(h)(2), the Permittee has elected not to monitor the sulfur content of the gaseous fuel combusted in EU IDs 1 and 2 because the fuel has been demonstrated to meet the definition of natural gas in § 60.331(u).

The flare is not subject to 40 C.F.R. 60.18 because it is a safety device and not a control device. It does 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 31 through 35, NSPS Subpart GG Requirements

Legal Basis: As stated in Condition 31 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 ºF, 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 32 and 34 incorporate the Subpart GG NO_x and SO_2 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 SO_2. The Permittee must not cause or allow EU IDs 1 or 2 to violate these standards.

Per Condition 35.1.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. The Permittee has elected not to conduct sulfur monitoring as allowed under Condition 35.1.b and submitted a certified statement to the Department indicating that the fuel gas combusted at the stationary source meets the definition of natural gas as defined by 40 C.F.R. 60.331(u). 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_{NOx} = 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 173.6 ppmv for EU IDs 1 and 2.

SO_2 Standard: To demonstrate compliance with the Subpart GG SO_2 standard, the Permittee is required to comply with one of the following options:

(1) do not cause or allow SO_2 emissions in excess of 0.015 percent by volume, at 15 percent O_2 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 33, NO_x Monitoring, Recordkeeping, and Reporting

Legal Basis: Conditions 33.1 through 33.3 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 more stringent of limits shown in Condition 32, then periodic monitoring is required within 5 years of the last performance test. 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 percent 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 typically applies a Method 20, or Method 7E and either Method 3 or 3A, monitoring threshold of 400 hours per 12-month period. However, the Permittee expects each turbine to exceed 400 hours of operation per 12-month period during the permit term and asked that the requirements associated with the 400-hour threshold be removed for permit simplicity. 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 33.1.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.

On November 14, 2011, the Permittee requested approval for an alternative NO_x stack emissions monitoring method. The Permittee proposed to use a portable handheld analyzer to determine compliance with the Subpart GG NO_x standard when the results from the last source test were less than 50 percent of the Subpart GG NO_x standard; and, if the results of a portable analyzer test are greater than 50 percent of the Subpart GG NO_x standard, the Permittee proposed to conduct source testing using an appropriate reference test method.

The Department denied this request. Subpart GG NO_x testing requires the use of an approved method to determine the NO_x emission rate. Hand held analyzers do not meet the standards of an approved testing method. In addition, the Permittee is required to establish compliance with NO_x emission limits for the turbines as discussed in Condition 20 to avoid classification as a PSD major source. Source testing of turbines for NO_x (and CO) is necessary to determine emission unit specific emission factors used to verify compliance with annual emission limits accepted by the Permittee in order to avoid classification as a PSD major source. Periodic determination of emission factors using applicable reference test methods is necessary because of operational and sampling variability.

Condition 35, SO_2 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 SO_2 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 35.1 through 35.4 includes periodic monitoring, recordkeeping, and reporting requirements for all turbines subject to the NSPS Subpart GG SO_2 emissions standards. No additional monitoring outside of the Subpart GG requirements is necessary to ensure compliance with the Subpart GG SO_2 standard.

Monitoring: Condition 35.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements. The Permittee may demonstrate compliance with the Subpart GG SO_2 standard by either periodically monitoring the total sulfur content of the gaseous fuel being fired in the affected turbine (as described in Condition 35.1.a) or by demonstrating that the gaseous fuel burned at the stationary source meet the definition of natural gas in 40 C.F.R. 60.331(u) using representative fuel sampling data, as described in Condition 35.1.b. The Permittee has completed sufficient monitoring under previous Title I permits to demonstrate that the gaseous fuel used meets the definition of natural gas and therefore does not need to be periodically monitored for sulfur content. The language describing periodic monitoring requirements remains in the permit as it reflects the subpart language as it was written.

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 70.

Reporting: NSPS Subpart GG SO_2 reporting requirements are incorporated in the permit in Condition 35.4.a. For the purpose of the EEMSP report and summary report 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 79.1, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 75. Because 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 35.1.b, the reporting requirements under Condition 35.4.a do not apply. The language describing periodic reporting requirements remains in the permit as it reflects the subpart language as it was written. The Department added Condition 35.4.b to gap-fill reporting requirements if the Permittee elects to comply with Condition 35.1.b.

Condition 36, 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 Subparts 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 37 through 41, 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. Kustatan Production Facility is an area source that owns and operates RICE units, EU IDs 9 and 9a, subject to NESHAP Subpart ZZZZ.

Factual Basis: These conditions incorporate the current (as amended through May 30, 2023) NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 9 and 9a. Kustatan Production Facility is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS). EU ID 9 is an existing emergency RICE rated less than 300 hp. EU ID 9a is a non-emergency RICE rated at 530 hp. 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 9a) 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. Likewise, emergency stationary CI RICE located at area sources of HAP (as in the case of EU ID 9) are not subject to the numerical CO emission and operational limitations, but are subject to work and management practices as specified in Table 2d, Item 4. Conditions 39.1 and 39.2 provide these applicable work and management practices for EU IDs 9 and 9a.

The NESHAP GAPCP requirements, as reflected in Condition 38, suffice 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 40. The reporting requirements are provided in Condition 41. 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). The Department also added an excess emissions and permit deviation gap-fill reporting requirement in Condition 41.2.

The Permittee is 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 37 through 41 are current as amended through May 30, 2023. 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 42, 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 §61.145 and §61.154 of Subpart M (Asbestos), along with other sections and appendices which are referenced in §61.145, as §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 43 through 45, 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 43 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 44 and 45 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 44 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 45 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 Kustatan Production Facility 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 46, NESHAP Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAP, and requires record keeping 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 47 through 49, 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 50, 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 51 and 52, 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.

As indicated in Condition 52.3, if the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit a waiver letter certified by the responsible official under 18 AAC 50.205 indicating that the assessable emissions for the source is zero for the previous fiscal year.

The Department has modified Condition 51 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 53, 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 emission 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, 9, and 9a.

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 53.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 70 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 54, 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 55, 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 56, 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 57, 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 58, 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 74. Excess emission reporting under Condition 74 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 74.

Condition 59, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 18 AAC 50.065 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: The Permittee may conduct open burning by following the provisions of 18 AAC 50.065 and by following the Department guidelines posted at the website http://dec.alaska.gov/air/air-permit/open-burn-info. Condition 59.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning.

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 76.

Condition 60, 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 61 through 63, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 61 and 63 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

62 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 61 through 63.

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

Condition 64, 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 65 through 68, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Condition 65 contains the requirement in 18 AAC 50.345(l), while Conditions 66 through 68 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 69, 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 70, 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 70 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 71, 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 74 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 72, 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 73, 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 74 and Section 14, 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 14) for the notification requirements.

The Department has modified Condition 74.3 and the Notification Form in Section 14 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 75, 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 76, 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 76.2 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.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required report electronically at their discretion.

Condition 77, 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 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.

The Department has modified the triennial reporting requirements under Condition 77 by including stationary sources' PTEs that are below the thresholds for annual reporting for Type A sources, 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. 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 78, Consistency of Reporting Methodologies

Legal Basis: Condition 78 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 78.1 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 77 or assessable emissions under Condition 51.2, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

Condition 79, NSPS and NESHAP Reports

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 80, 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. Condition 80.2 lists the methods, in EPA's preferred order, to which the applicant may submit the application documents, as specified in the EPA's February 12, 2024 memorandum guidance for Submitting Air Permits to EPA Region 10. 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 81 through 83, 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 82 and 83, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 81) 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 81.

Condition 84, 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 85 through 90, 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 91 and 92, 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 B of Operating Permit No. AQ0741TVP04 shows the permit shield that the Department granted to the Permittee. The following table shows the requests that were denied and the reasons that they were denied. 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.

Table E - Permit Shields Denied

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 C.F.R. 60, Subpart A 60.7(a)(1 & 3) – Notification and Recordkeeping (Initial Notification) and 60.8(a) – Performance Test (Initial Performance Test Only)	Source tests were completed as required.	The Department includes 40 C.F.R. 60.7 requirements in all operating permits and only specifically excludes emission units that are subject to NSPS subparts that contain the requirements.
40 C.F.R. 60 Subparts B, C, Cb, Cc, Cd, Ce, Cf, D, E, Ea, Eb, Ec, F, G, Ga, H, I, K, Ka, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, BBa, CC, DD, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, VVa, WW, XX, AAA, BBB, DDD, FFF, HHH, III, JJJ, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, XXX, AAAA, BBBB, CCCC, DDDD, EEEE, FFFF, JJJJ, KKKK, LLLL, MMMM, QQQQQ, TTT, and UUUU	No affected emission units exist within the stationary source or not an affected stationary source, operation, or industry, including, no incinerator onsite.	A shield is not necessary for NSPS Subparts that are inherently irrelevant and inapplicable to the stationary source's line of operations and activities. No shield included in the permit does not mean the requirement is applicable.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 C.F.R. 61 Subpart B, C, D, E, F, H, I, K, L, N, O, P, Q, R, T, and W	No affected emission units exist within the stationary source or not an affected stationary source, operation, or industry, including, no incinerator onsite.	A shield is not necessary for NESHAP Subparts that are inherently irrelevant and inapplicable to the stationary source's line of operations and activities. No shield included in the permit does not mean the requirement is applicable.
40 C.F.R. 61 Subpart J	Stationary source does not contain any equipment in benzene service (≥10% by weight).	
40 C.F.R. 61 Subpart V, Y, BB, FF	Stationary source does not operate equipment in volatile hazardous air pollutant (VHAP) service, as defined under 40 C.F.R. 61.241 (≥10% VHAP by weight).	
40 C.F.R. 62	Stationary source does not operate any affected emission units and is not an affected source, operation, or industry.	A shield is not necessary for Subparts that are inherently irrelevant and inapplicable to the stationary source's line of operations and activities. No shield included in the permit does not mean the requirement is applicable.
40 C.F.R. 63 Subparts, F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, II, JJ, KK, LL, MM, NN, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, YYYY, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, UUUUU, WWWWW, YYYYY, ZZZZZ, BBBBBB, CCCCCC, DDDDDD, EEEEEE, FFFFFF, GGGGGG, HHHHHH, LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, QQQQQQ, RRRRRR, SSSSSS, TTTTTT, VVVVVV, WWWWWW, XXXXXX, YYYYYY, ZZZZZZ,	No affected emission units exist within the stationary source or not an affected stationary source, operation, or industry, including, no incinerator onsite.	A shield is not necessary for NESHAP Subparts that are inherently irrelevant and inapplicable to the stationary source's line of operations and activities. No shield included in the permit does not mean the requirement is applicable.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD, EEEEEEE, HHHHHHH		
40 C.F.R. 63 Subpart DDDDD, 40 C.F.R. 63, Subpart YYYY, 40 C.F.R. 63.6600, 63.6601, 63.6602, 63.6610, 63.6611 – Subpart ZZZZ	This stationary source is not a major source of Hazardous Air Pollutants.	
40 C.F.R. 68	Stationary source does not have more than the threshold quantity of a regulated substance in process.	40 C.F.R. 68 contains General Duty Clause in addition to threshold quantities of regulated substances. Therefore, 40 C.F.R. 68 is included under Non-Applicable Requirements and a shield is not necessary.
40 C.F.R. 82.158 Subpart F	Stationary source does not manufacture or import recovery and recycling equipment. Stationary source does not contain commercial, industrial, or comfort air conditioning appliances containing ozone depleting substances used as refrigerant.	Condition 43 is included in the operating permit regardless of Permittee activity. 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.
40 C.F.R. 82.160	Stationary source does not contain commercial, industrial, or comfort air conditioning appliances containing ozone depleting substances used as refrigerant.	
40 C.F.R. 82.164	Stationary source does not sell reclaimed refrigerant.	
40 C.F.R. 82, Subpart F, Appendix C	Stationary source is not a third party entity that certifies recovery equipment.	
40 C.F.R. 82 Subpart F, Appendix D	Stationary source does not have a technician certification program.	
40 C.F.R. 82, Subpart A 40 C.F.R. 82.60, Subpart C 40 C.F.R. 82.100, Subpart E	Stationary source is not a manufacturer or distributor of Class I and II products or substances.	A shield is not necessary for Regulation Subparts that are inherently irrelevant and inapplicable to the stationary source's line of operations and activities. No shield included in the permit does not mean the requirement is applicable.
40 C.F.R. 82 Subpart B	Stationary source and its employees do not perform service on motor vehicle air conditioners, for consideration or otherwise.	
40 C.F.R. 82.80, Subpart D	Subpart applies only to Federal Departments, agencies, and instrumentalities.	
40 C.F.R. 82.174(a), Subpart G	Stationary source does not manufacture substitute chemicals or products for ozone-depleting compounds.	

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 C.F.R. 82.270(a), Subpart H	Stationary source does not manufacture halon.	
18 AAC 50.055, Industrial processes and fuel burning equipment	The standards do not apply to the non-road engines. The non-road engines are not "industrial processes" or "fuel burning equipment" as defined in 18 AAC 50.990(39) or (49).	AQ0741TVP04 does not list any nonroad (mobile) engines.
18 AAC 50.050(b)	No incinerators are located at the facility.	These are not potentially applicable requirements and therefore a permit shield is not relevant.
18 AAC 50.055(a)(2), 18 AAC 50.055(a)(3)-(9), 18 AAC 50.055(b)(2)-(6), 18 AAC 50.075, 50.076, 50.077	Stationary source has no emission units as described in cited regulations or in operation before November 1982.	
18 AAC 50.055(d)-(f)	The stationary source does not contain sources subject to these sulfur standards.	
18 AAC 50.060, 50.070, 50.085, 50.090	Stationary source does not belong to the affected sources regulated by these standards.	