Alaska Department of Environmental Conservation
Air Permits Program

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United States Air Force
Eielson Air Force Base

STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0264TVP03

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0264TVP03.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0264TVP03 contains information on the stationary source as provided in the Title V permit application.

The Eielson Air Force Base is owned and operated by, United States Department of the Air Force and United States Air Force is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 9711 - National Security.

The stationary source is located approximately 37 kilometers southeast of Fairbanks, Alaska. The 354th Fighter Wing is the host unit at Eielson Air Force Base and is assigned to the 11th Air Force, headquartered at Joint Base Elmendorf/Richardson near Anchorage. The wing supports operations, maintenance, mission support, and medical group functions and is host to ten tenant units. The 354th Fighter Wing delivers lethal airpower to combatant commanders in defense of national military objectives.

Eielson Air Force Base, like many other military installations, differs from most industrial facilities in that the base hosts and supports a wide variety of functions and activities not normally associated with an industrial site. Eielson Air Force Base consists of an operational airfield, residential housing, office buildings, gas stations, utilities, military police and fire departments, and more.

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 Eielson Air Force Base that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0264TVP03. These emission units are predominately associated with either primary or backup heating or power generation. Primary heating and power generation is accomplished using six large coal-fired boilers and associated steam and generating equipment. Backup heating and power are provided via distillate-fired boilers and generators. Other significant sources of air pollution include jet engine testing and diesel fuel-fired engines and water pumps.

Table A of Operating Permit No. AQ0264TVP03 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.

A number of the emissions units included in Table A are inactive or abandoned in place. EU IDs 38 – 40 and 43 – 48, as well as EU ID 64B are inactive but remain in place. Because the units may be required to resume operation, the Department has retained them in the permit inventory. Removal of the emissions units would require a new emissions unit ID if a unit was later requested re-added to the inventory.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as indicated in the application and verified by the Department from the Eielson Air Force Base is shown in the table below.

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

Emissions	NO_x	CO	PM	SO_2	VOC	CO_2e[1]	HAPs	Total[2]
PTE	624.31	490.57	49.25	394.49	31.93	490,827	11.50	1,602.05
Assessable PTE	624.31	490.57	49.25	394.49	31.93	0	2.97	1,593.52

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 CO_2e and volatile HAPs.
3. HAP emissions that are a subset of either VOC emissions or PM_{10} emissions are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 114.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table F 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 were provided in the 2017 application and revised by the 2025 application amendment package. Full emission calculation details are presented in the emissions summary Table A-1 of Minor Permit AQ0264MSS07.

The Applicant calculated HAP emissions using a combination of AP-42 emission factors, manufacturer data, and the EPA TANKS 5.1 online calculation tool. The Department verified these calculations and clarified assessable HAP emissions are those not included in VOC or PM_{10} emissions. .

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;
- 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.

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

[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)].

The Permittee is required to obtain an operating permit for the Eielson Air Force Base 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
  - it is a major stationary source as defined in Part D of Title I of the Act.
- A source, including an area source, subject to a standard, limitation or other requirement under Section 111 of the Act (NSPS) not exempted or deferred under AS 46.14.120(e) or (f);
- A source, including an area source, subject to a standard or other requirement under Section 112 of the Act (NESHAP) not exempted or deferred under AS 46.14.120(e) or (f);
- A source designated by the Federal Administrator by regulation, or the Department under a finding that public health or air quality effects provide a reasonable basis to regulate the source.

AIR QUALITY PERMITS

Permits to Operate

The last Permit to Operate issued for this stationary source is Permit to Operate No. 9331-AA001, issued April 30, 1993 and amended on December 29, 1994. This Permit to Operate included all construction authorizations since it was issued before January 18, 1997 (the effective date of the new divided Title I/Title V permitting program). All stationary source-specific requirements established in this permit are included in this Title V operating permit, Permit No. AQ0264TVP03, as described in Table G.

Title I (Construction and Minor) Permits

Construction Permit No. 9831-AC019. The Department issued Construction Permit No. 9831-AC019 to this stationary source on December 1, 1998. This permit granted authorization for the installation of four new backup generators at the base plant (EU IDs 20 through 23). This permit was revised and replaced by Minor Permit No. AQ0264MSS04.

Construction Permit No. 264CP02. The Department issued Construction Permit No. 264CP02 to this stationary source on May 13, 2002. This permit granted authorization for the installation of two new oil fired boilers (EU IDs 7 and 8) and six new backup generators (EU IDs 49 through 54). This permit was revised and replaced by Minor Permit No. AQ0264MSS04.

Construction Permit No. 264CP03. The Department issued Construction Permit No. 264CP03 to this stationary source on March 4, 2004. This permit granted authorization for the installation of two industrial sized oil fired boilers (EU IDs 15 and 16). This permit was revised and replaced by Minor Permit No. AQ0264MSS04.

Construction Permit No. 264CP04. The Department issued Construction Permit No. 264CP04 to this stationary source on June 8, 2004. This permit addressed retroactive construction permitting requirements for emission units installed between 1977 and 2001 and retroactive Prevention of Significant Deterioration (PSD) pre-construction review for modifications made between 1982 and 2001. This permit was revised and replaced by Minor Permit No. AQ0264MSS04.

Minor Permit No. AQ0264MSS01. The Department issued Minor Permit No. AQ0264MSS01 to this stationary source on February 14, 2007. This permit granted authorization for the installation of a portable asphalt/rock crusher. This permit was revised and replaced by Minor Permit No. AQ0264MSS03.

Minor Permit No. AQ0264MSS03. The Department issued Minor Permit No. AQ0264MSS03 to this stationary source on June 6, 2008. This permit granted authorization for the installation of a portable asphalt/rock crusher. This permit was revised and replaced by Minor Permit No. AQ0264MSS04.

Minor Permit No. AQ0264MSS04. The Department issued Minor Permit No. AQ0264MSS04 to this stationary source on January 10, 2013. This permit revised and replaced Construction Permit Nos. 9831-AC019, 264CP02, 264CP03, and 264CP04; and Minor Permit No. AQ0264MSS03. This minor permit also granted authorization for the installation of two existing (unpermitted) air heaters (EU IDs 17 and 18); five new emergency generators (EU IDs 63, 75, 77, 78, and 80); one existing (unpermitted) emergency generator (EU ID 76); and six existing (permitted – increased operations) aircraft arrestor engines (EU IDs 65B through 70A). This permit was rescinded by Minor Permit No. AQ0264MSS06.

Minor Permit No. AQ0264MSS05. The Department issued Minor Permit No. AQ0264MSS05 to this stationary source on August 9, 2010. This permit granted authorization for the replacement of six existing boilers (EU IDs 1 through 6) with five new coal-fired boilers (EU IDs 1A, 2A, 4A, 5A, and 6A). All terms and conditions of this permit are included in the renewal permit as explained in Table H.

Minor Permit No. AQ0264MSS06. The Department issued Minor Permit No. AQ0264MSS06 to this stationary source on May 27, 2020. This permit authorized replacement of diesel generator EU ID 19 with 19A, following replacement and decommissioning conditions. This permit was rescinded by Minor Permit No. AQ0264MSS07.

Minor Permit No. AQ0264MSS07. On February 2, 2025, the Permittee submitted a minor permit amendment application to revise Minor Permit AQ0264MSS06's emission unit inventory, remove crusher engines, revise EU IDs 20-23A generator BACT operating load limit, remove emergency engine operating hour limits, and remove a fuel tank loading limit. The Department accepted the application as a new minor permit application instead of a permit revision because of the quantity of changes and permit hygiene that would occur.

The Department issued Minor Permit No. AQ0264MSS07 to this stationary source on *DATE*. 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. AQ0264TVP03 as described in Table I.

Title V Operating Permits

Permit No. AQ0264TVP01. The owner or operator submitted an application for an initial Title V operating permit in December 1997. The owner or operator amended the application in January 2000. The Department deem the application timely and complete on February 5, 1998. The Department issued Operating Permit No. AQ0264TVP01 on September 2, 2003.

- Revision No. 1 was issued on September 24, 2007 to correct BACT limits that were changed to an hourly limit in the original Title V permit.

Permit No. AQ0264TVP02. The Permittee submitted an application to renew Operating Permit No. AQ0264TVP01 dated April 1, 2008. The application was deemed timely and complete on June 6, 2008. The Department receives additional information on December 17, 2009 for the Coal Preparation Plant. The Permittee submitted changes and applicability determinations for the previously insignificant RICE units on January 20, 2011. The Permittee submitted an application amendment on November 18, 2011 to include three additional emergency wastewater pump engines. For all these updates, emissions were insignificant and added to the assessable PTE. On August 15, 20111, the Department received an updated CAM plan in response to the Department's information request. The Department issued Operating Permit No. AQ0264TVP02 on April 15, 2013.

- Revision No. 1. This revision was issued on May 8, 2013 to correct visible emissions limits needed to report as excess emissions.
- Revision No. 2. On August 12, 2014, the Department received an application for a significant modification to the Title V permit to obtain a federally enforceable limit to classify EU ID 5 as a limited use boiler under 40 C.F.R. 63 Subpart JJJJJJ. Under 40 C.F.R. 71.6(a)(1), the conditions of the permit must include "…those operational requirements and limitations that ensure compliance with all applicable requirements…". Because EU ID 5 can only comply with Subpart JJJJJJ as a limited use boiler, the Department believed a requirement to operate it as a limited use boiler is an operational limitation that ensures compliance with Subpart JJJJJJ and could therefore establish a limit directly in the Title V permit. The Department issued Revision No. 2 to the stationary source on October 21, 2014.
- Revision No. 3. The Department received a request from the Permittee on September 22, 2015 to revise Condition 106 of Operating Permit No. AQ0264TVP02, Revision 2 to reflect all applicable provisions of 40 C.F.R. 61, Subpart M National Emission Standard for Asbestos. The Department issued Revision 3 on November 10, 2015 with the requested revision.
- Revision No. 4. The Department received a request from the Permittee on November 16, 2015 to revise Condition 46.1 of Operating Permit No. AQ0264TVP02, Revision 3 to correct a typographical error in the calculation of moles of oxygen in Standard Operating Permit Condition XIII – Coal Fired Boilers (Condition 3.1.a.iii) adopted into 18 AAC 50.346(c) Table 7 pursuant to AS 46.14.010(e).
- Revision No. 5. The Department received a request from the Permittee on February 25, 2020 to administratively amend Operating Permit No. AQ0264TVP02, Revision 4 for incorporating Minor Permit No. AQ0264MSS06.

Permit No. AQ0264TVP03. United States Air Force submitted an application to renew Operating Permit No. AQ0264TVP03 under a October 11, 2017 cover letter. The Department received the application on October 16, 2017. The Permittee amended the application on September 25, 2018, on June 3, 2019, and on August 30, 2020. On October 18, 2022, the Department requested emissions unit inventory updates, as the source's inventory had been further revised and updated outside the scope of the application and amendments. On October 29, 2022, the Department met with USAF staff and consultants to discuss the need for a Title I permit application to address new projects requiring permit conditions that could not be added in a Title V permit action, along with inventory updates and new EU additions. On November 25, 2022, the USAF agreed to apply for

and submit a Title I permit revision for permit hygiene, along with a Title V application amendment package to incorporate the original application and all subsequent application amendments under one application package.

The TVP03 application amendment package was received on February 2, 2025. The Department received additional information on April 4, April 10, and April 29, 2025. The Department issued Operating Permit No. AQ0264TVP03 on *DATE*.

COMPLIANCE HISTORY

Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations indicate a stationary source generally operating in compliance with its operating permit. However, there are a number of compliance actions that have been taken since the previous operating permit issuance. In all circumstances listed, the Permittee has already taken steps to address each of the compliance concerns. In 2018, the stationary source replaced several engines without providing Off Permit Change notifications. Additionally during the 2018 Full Compliance Evaluation (FCE), the stationary source was found in violation of numerous monitoring and recordkeeping requirements for NESHAP Subparts ZZZZ and JJJJJJ. In 2019 the emergency engine EU ID 55 was operated for 277 non-emergency hours, exceeding the NESHAP Subpart ZZZZ 50-hour non-emergency limit. During the 2021 FCE, the Permittee was found in violation of requirements to operate the coal-fired boilers with CEMS operational, as well as not performing required calibration gas audits for the CEMS, and failing to track refrigerant repair and disposal records. During the 2023 FCE, initial Method 9 observations were found to not be completed for recently replaced units. Additionally, CEMS data was found intermittently unavailable for the coal-fired boiler EU ID 6A. In January 2024, the ammonia injection system used to control NO_x emissions from EU IDs 5A and 6A experienced a freeze in one line and a circulating motor failure in the other line, resulting in the control system being unavailable. Due to energy demands, EU IDs 5A and 6A were operated without NO_x control systems intermittently between January and May 2024. Since the freeze, the Permittee has integrated a number of preventative measures to prevent loss of the ammonia controls in future deep freeze scenarios. These include additional recirculating pumps purposed for ammonia environments, cross-tank feed capability, additional recirculating lines, additional heat trace, and recirculating pump insultation.

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. AQ0264TVP03.

Table G, Table H, and Table I below lists the requirements carried into Operating Permit No. AQ0264TVP03 to ensure compliance with the preconstruction permit requirements.

Table G - Comparison of Permit to Operate No. 9331-AA001 Conditions to Operating Permit No. AQ0264TVP03 Conditions[1]

9331-AA001 Condition No.	Description of Requirement	AQ0264TVP03 Condition No.	How Condition was Revised
5.a, 5.b	Control of Fugitive Dust from Coal and Coal Ash	80 – 86	Replaced with NSPS Subpart Y requirements.
7.b	Coal Boiler Steam Production Rate Limit	39.3	Condition replaced with specific steam production limits for EU IDs 1 – 4, 5A, and 6A as established by the source tests conducted in April 2025.
7.e	COMS Non-Operation Reporting	38.3	Added reporting requirements for EU IDs 1A, 2A, 4A, 5A, and 6A.
19	COMS Monitoring	Section 5	Incorporated into default Performance Audits for COMS procedure.
20	Monitoring of Baghouse Pressure Drop	105	Replaced with requirements from approved CAM plan to monitor baghouse pressure drop.
Exhibit E item 2	Quarterly Coal Consumption	31.1	Incorporated under MSS05 Condition 4 coal combustion recording.
Exhibit B item B, Exhibit E item 4	Sulfur Content of Coal Fuel	42 – 45	Incorporated into Standard Permit Condition XIII – Standard Operating Permit Conditions for Coal Fired Boilers

Note:

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

Table H - Comparison of Construction Permit No. AQ0264MSS05 Conditions to Operating Permit No. AQ0264TVP03 Conditions[1]

AQ0264MSS05 Condition No.	Description of Requirement	AQ0264TVP03 Condition No.	How Condition was Revised
2	Replacement Schedule	21	Denoted Stages 1 and 2 as Completed.
3	CEMS and COMS requirements	32.1	Incorporated with MSS05 Condition 5.
4	Coal Consumption Limit	31	Removed separation of MR&R requirements for existing and replacement boilers. Retained MSS05 language specifying "all" boilers in coal tracking requirement.
5	NO_x, CO, and SO_2 Emissions Limits	32	Added CEMS requirements of MSS05 Condition 3.
6	PM Emission Control for Boilers	33	Revised reference to COMS opacity monitoring and recording to Section 4. Clarified coal-fired boilers and not all boilers.

Note:

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

Table I - Comparison of Minor Permit No. AQ0264MSS07 Conditions to Operating Permit No. AQ0264TVP03 Conditions[1]

AQ0264MSS07 Condition No.	Description of Requirement	AQ0264TVP03 Condition No.	How Condition was Revised
7	BACT Limits	20	No change.
8	Fuel Sulfur Limit	22	No change.
9	Emergency Engine Hourly Operational Limit	23	No change.
10	Hush House Limits	24	No change.
11	Asphalt/Rock Crusher Location	25	Revised to reference annotated Google Earth image in Attachment B.
12	Asphalt/Rock Crusher Signage	26	No change.
13	EU IDs 86 – 103 Crusher Equipment Limits	27	No change.
14	EU IDs 15 and 16 Fuel Limit	28	No change.
18	EU IDs 7 and 8 Hour Limits	29	No change.
19	Asphalt/Rock Crusher Engine Limits	30	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.

- **Open Burning:** The Permittee may certify that they do not open burn at this source, but there are other manners in which they may open burn by getting a permit from the Department under 18 AAC 50.065.
- **40 C.F.R. 63 Subpart GG, NESHAP for Aerospace Manufacturing and Rework Facilities.** Eielson Air Force Base operates facilities that are engaged in the manufacture or rework of military aerospace vehicles or components, however Subpart GG applies only to HAPS major sources per §63.741(a).
- **40 C.F.R. 63 Subpart PPPPP, NESHAP for Engine Test Cells.** Eielson Air Force Base operates several jet engine test cells, however Subpart 63 exempts these at area sources of HAPS in §63.9285.
- **40 C.F.R. 63 Subpart HHHHHH, NESHAP for Paint Stripping and Surface Coating Operations (Area Sources).** Eielson Air Force Base operates aerospace rework facilities that conduct paint stripping and miscellaneous surface coating operates while refurbishing or repairing aircraft. Part 63 exempts these operations at Department of Defense facilities in §63.11169(d)(1).
- **40 C.F.R. 60 Subpart EEEE, Standards of Performance for Other Solid Waste Incineration Units (OSWI).** The 732nd Air Mobility Squadron (a tenant organization at Eielson Air Force Base) has been operating a SmartAsh cyclonic barrel burner incinerator since 2015. This incinerator combusts contraband or prohibited goods (overseas garbage and agricultural food products). In accordance with 40 C.F.R. 60.2887(p), an incineration unit is excluded if it is owned or operated by a government agency to destroy only prohibited goods such as agriculture food products that cannot be transported in the country.
- **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. AQ0264TVP03. 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 8, 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 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 86 - 103, 110 - 120, 122, 124, 125, and 129 - 132 are fuel-burning equipment or industrial processes.

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

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 (for liquid fuel-burning equipment) 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 modified these conditions, as follows:

- Included MR&R for crusher engines EU IDs 82 – 84;
- Included MR&R for rock crushing equipment EU IDs 86 – 103; and
- Included MR&R for coal processing equipment EU IDs 110A – 111.

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

The Department added emissions-unit-specific MR&R for asphalt/crusher engines and crusher components as set out by Conditions 5 and 6 through 8. MR&R for coal processing equipment VE standard is performed using the requirements of NSPS Subpart Y in Conditions 84.1 and 84.2.

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 either the Method 9 Plan or the Smoke/No Smoke 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 a statement of which visible emissions plan was used for each emissions unit and copies of the results of all visible emission observations.

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

For EU IDs 24A, 25, 28A-41, 43-53, 55A, 56, 59, 60, 62-71, 73-80, and 122, no visible emissions monitoring is required when these emissions units are insignificant based on actual or potential emissions due to permit Condition 23 that limits their hours of operation from reaching significant emissions thresholds in 18 AAC 50.326(e). As long as the emissions units operate within the limit, 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 140 with the visible emissions standard based on reasonable inquiry.

EU IDs 10, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-120, 122, and 124-132 do not qualify as insignificant per 18 AAC 50.326(d)(1) because they are subject to operational limits established under a Title I permit and standards established under NESHAP CCCCCC. EU ID 10 is a small 2.9 MMBtu/hr boiler, EU IDs 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-120, 122, 124, 125, and 129-132 are emergency engines below 500 hours of operation, and EU IDs 126-128 are gasoline storage tanks; thus, these units have potential emissions less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived visible emissions monitoring for EU IDs 10, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80,

112-120, 122, and 124-132 but these units are subject to compliance certification requirements, in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

Conditions 9 through 15, 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 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 86 - 103, 110 - 120, 122, 124, 125, and 129 - 132 are fuel-burning equipment or industrial processes.

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

Factual Basis: Condition 9 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 10 through 12, and 13 through 15 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, as modified, 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 gr/dscf corresponds to 16.8% opacity
- For stacks normalized to 10 inches – 0.05 gr/dscf corresponds to 14.3% opacity

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 24A, 25, 28A-41, 43-53, 55A, 56, 59, 60, 62-71, 73-80, and 122, no monitoring is required when these emissions units are insignificant based on actual or potential emissions due to permit Condition 23 that limits their hours of operation from reaching significant emissions thresholds in 18 AAC 50.326(e). As long as the emissions units operate within the limit, 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 140 with the PM emissions standard based on reasonable inquiry.

EU IDs 10, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-120, 122, and 124-132 do not qualify as insignificant per 18 AAC 50.326(d)(1) because they are subject to operational limits established under a Title I permit and standards established under NESHAP CCCCCC. EU ID 10 is a small 2.9 MMBtu/hr boiler, EU IDs 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-120, 122, 124, 125, and 129-132 are emergency engines below 500 hours of operation, and EU IDs 126-128 are gasoline storage tanks; thus, these units have potential emissions less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived visible emissions monitoring for EU IDs 10, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-120, 122, and 124-132 but these units are subject to compliance certification requirements, in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

Condition 16 through 19, 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 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 86 - 103, 110 - 120, 122, 124, 125, and 129 - 132 are fuel-burning equipment or industrial processes.

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

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

Liquid Fuels:

For the liquid fuel-burning equipment, EU IDs 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 112 – 120, 122, 124, 125, and 129 – 132, 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 14, or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3), to calculate the sulfur-dioxide concentration to show that the standard is not exceeded.

For EU IDs 7 – 16, 19A – 80, 112 – 120, 122 – 125, and 129, to protect the SO_2 ambient air quality standards, the Permittee is required to limit sulfur contents of diesel fuel burned in the emissions units to concentrations lower than necessary, as shown in Condition 22. Therefore, the MR&R requirements in Condition 17 for compliance with the state SO_2 standard in Condition 16 have been streamlined based on the more stringent fuel sulfur content limit of 0.15 percent by weight rather than have two sets of MR&R.

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

Propane Fuels:

The Department did not include any sulfur standard condition for the propane-fired boilers EU IDs 17 and 18. Commercial propane innately has a low sulfur content (15 grains sulfur per 100 cubic feet, equated to 1.5 lb SO_2 per thousand gallons propane per EPA AP-42 Table 1.5).

Conditions 20 through 33, 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: Condition 20 is a BACT limit originally established in Permit to Operate 9831-AC019 and currently implemented in Minor Permit AQ0264MSS07. The condition limits NO_x emissions of diesel generators EU IDs 20 – 23A by implementing a power output limit. The condition allows for power output to be increased should a performance test demonstrate compliance with the emission limit at a higher power output. The Department added a footnote stating that a performance test was conducted and accepted showing compliance with the emissions limit at 1,425 kW power output.

Conditions 21 and 31-33 incorporate requirements from Minor Permit AQ0264MSS05. This permit authorized the replacement of six existing boilers (EU IDs 1 – 6) with five new coal-fired boilers (EU IDs 1A, 2A, 4A, 5A, and 6A). To date, EU IDs 5 and 6 have been replaced with EU IDs 5A and 6A. Condition 21 specifies the order in which the boilers are replaced. Condition 31 limits the combined annual coal consumption throughout the replacement project. Condition 32 restricts the annual emissions of NO_x, CO, and SO_2 from the boilers during each stage of the replacement project and for the completed project. The condition requires installation of CEMS on the replaced boilers. Condition 33 requires the Permittee to install baghouses and COMS to control PM emissions from the coal-fired boilers. The Department returned the wording of Condition 31 to how it was written in AQ0264MSS05 to require recording the coal consumption of all coal-fired boilers, instead of each boiler as was written in AQ0264TVP02 Revision 5. The Department additionally kept the minor permit conditions together under the Preconstruction Requirements section instead of separating them as was done in the previous operating permit.

Conditions 22 through 33 incorporate requirements implemented in Minor Permit AQ0264MSS07. Condition 22 limits fuel sulfur in emergency engines originally listed in Permit to Operate 9831-AC019 and carried forward by Construction Permits 264CP03 and 264CP04 and Minor Permits AQ0264MSS04 and AQ0264MSS07. Condition 23 limits emergency engines originally listed in Construction Permit AQ0264CP03 to 200 hours of operation annually. Additional emergency engines were added to the limit in AQ0264MSS04 and AQ0264MSS06. The number of jet engine tests performed in the Hush House are limited by Condition 24 to 70 tests per year. Conditions 25 through 27 limit the asphalt crusher equipment to locations, signage, and emission limits. Condition 28 limits the cumulative fuel consumption of EU IDs 15 and 16, while Condition 29 limits the cumulative hours of operation of EU IDs 7 and 8. Condition 30 limits the operating hours for crusher engines 82-84.

Condition 34, 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 34.4.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 35 through 45, Standard Operating Permit Conditions for Coal-Fired Boilers

Legal Basis: The Permittee is required to comply with coal-fired fuel burning equipment standards set out in 18 AAC 50.055 for visible emissions, particulate matter and sulfur compounds. These standards are part of 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: These conditions are SPC XIII and adopted into 18 AAC 50.346(c) and Table 7 pursuant to AS 46.14.010(e). Except for the modification noted in the last paragraph of this "Factual Basis", the Department determined that these standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emissions unit or stationary source-wide operational or compliance factors indicate that unit-specific or stationary source-wide conditions would better meet these requirements.

Conditions 37 and 38 were added to provide corresponding visible emissions recordkeeping and reporting requirements for the coal-fired boilers, which are not included in SPC XIII. In addition, the Department added Conditions 36.6 and 37.2 to provide monitoring requirements in the event that the COMS is out of service. These gap-fill requirements are consistent with the Method 9 monitoring requirements of 40 C.F.R. 60 Subpart Dc for boilers not required to install COMS.

To ensure compliance with the particulate matter standard, the Department added Condition 39.3. This condition limits the steam production for EU IDs 1 – 4, 5A, and 6A to the rates determined in the latest April 2025 source tests. These steam production limits were originally listed in Permit to Operate No. 9331-AA001, Amendment #2, dated December 29, 1994, and previously were updated by October 2005 and September 2010 source tests. The original condition limited EU IDs 1 – 6 and did not include steam production limits for replacement boilers 5A and 6A. Eielson requested and the Department agreed that the steam production limits from the April 2025 source tests were appropriate methods for EU IDs 5A and 6A to

demonstrate compliance with the particulate matter standard, and added the respective limits to the condition.

The Coal Fired Boiler PM MR&R conditions require the Permittee to source test for PM and operate at a rate no higher than where compliance was demonstrated during the source test. The Permittee requested in the source test reports dated May 12 2025 and June 23 2025 from the latest source tests that the steam limits be updated to the average steam production rates during each boiler's source tests. The Department accordingly updated the steam load limits to the average steam loads shown for each boiler during the 2025 source tests.

Condition 46, Performance Audits for COMS

Legal Basis: The Permittee is required to follow the Department's performance audits for Continuous Opacity Monitoring Systems (COMS) in 18 AAC 50.030(9). EPA approved this provision as part of the Alaska SIP, as noted in 40 C.F.R. 52.74(c).

Factual Basis: This stationary source contains coal-fired boilers required to install a COMS under Condition 32.1. Condition 33 requires opacity monitoring for coal-fired boiler baghouses to follow coal-fired boiler COMS procedures in Conditions 36 through 38. The condition cross-references the obligation to perform COMS audits periodically during the life of the permit in accordance with 18 AAC 50.030(9).

Conditions 47 through 56, NSPS Subpart A Requirements

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

The NSPS provisions under Subparts Db, Dc, OOO, Y, and IIII 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 6.

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 1A-6A, 7, 8, 15, 16, 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 86-103, 110B, 111, 116, 118A, 119, 124, 125, and 129-132 are subject to NSPS Subparts Db, Dc, OOO, Y, and IIII and therefore subject to Subpart A.

Conditions 47.1 through 47.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for numerous emissions units. 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.

Conditions 47.4 through 47.6 - The requirements to notify the EPA and the Department of the date of a continuous monitoring system performance demonstration, no less than 30 days before demonstration commences (40 C.F.R. 60.7(a)(5) – (7)) are applicable to EU IDs 1A, 2A, and 4A because a CMS is installed as an NSPS requirement.

Condition 47.7 - 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 48 – The requirements in 40 C.F.R. 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to most NSPS affected facilities subject to Subpart A.

Conditions 49 and 50 - NSPS excess emission and monitoring systems performance report and summary report form in 40 C.F.R. 60.7(c) and (d) are applicable to an owner or operator required to or electing to install a continuous monitoring device to monitor EUs subject to an NSPS emissions standard. Excess emissions are defined in applicable subparts. The Department has included in Attachment A of the statement of basis a copy of the federal EEMSP summary report form for use by the Permittee.

Condition 51 – 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 133, which requires at least five years of records retention, in accordance with 40 C.F.R 71.6(a)(3)(ii)(B) adopted under 18 AAC 50.040(j)(4).

Condition 52 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 5A, 6A, 7, 8, 110B, 111. 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 53 - 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 1A – 6A, 7, 8, 15, 16, 86 – 103, 110B, and 111).

Condition 54 - The condition states that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards for EU IDs 1A-6A, 7, 8, 15, 16, 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 86-103, 110B, 111, 116, 118A, 119, 124, 125, and 129-132.

[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 55 - Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs EU IDs 1A-6A, 7, 8, 15, 16, 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 86-103, 110B, 111, 116, 118A, 119, 124, 125, and 129-132.

Condition 56 - Monitoring requirements in 40 C.F.R. 60.13 are applicable to EU IDs 1A-6A because a CMS is used to determine compliance with Subpart Db emission standards.

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 57 through 62, NSPS Subpart Db Requirements

Legal Basis: NSPS Subpart Db applies to steam generating units that commence construction, modification, or reconstruction after June 198, 1984, and have a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBtu/hr. EU IDs 5A and 6A were constructed, and EU IDs 1A, 2A, and 4A are planned to be constructed after June 19, 1984 and have maximum design heat input capacities greater than 100 MMBtu/hr, and are therefore subject to Subpart Db.

Factual Basis: These conditions require the Permittee to comply with the Subpart Db SO_2, PM, and NO_x standards. The Permittee may not cause or allow EU IDs 1A, 2A, and 4A – 6A to violate these standards. To ensure compliance, the Permittee is required to install, calibrate, maintain, and operate CEMS for measuring NO_x, SO_2, and O_2 (or CO_2) emissions discharged to the atmosphere. The Permittee has elected not to use the percent reduction standard which is an option for the SO_2 emission standard. Therefore, the Department did not include this option in the permit. To ensure compliance with the PM and opacity standards, the Permittee is allowed to utilize a baghouse as an alternative to installing, calibrating, maintaining, and operating COMS for measuring PM emissions discharged to the atmosphere. The Permittee has elected to not use the CEMS option for compliance with the PM and opacity standard, so the Department excluded this option from the permit.

The Department corrected several references made in the federal subpart language. NSPS Db references a federal standard 60.48(b) that does not exist. The Department added citation references instead to 60.48b(b).

Conditions 63 through 66, NSPS Subpart Dc Requirements

Legal Basis: NSPS Subpart Dc applies to steam generating units that commence construction, modification, or reconstruction after June 9, 1989 and have maximum heat input capacities of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. EU IDs 7, 8, 15, and 16 were constructed after June 9, 1989 and have maximum design heat input capacities between 10 and 100 MMBtu/hr, and are therefore subject to NSPS Subpart Dc.

Factual Basis: These conditions require the Permittee to comply with the Subpart Dc SO_2 and PM standards. The Permittee may not cause or allow EU IDs 7, 8, 15, and 16 to violate these standards.

EU IDs 7, 8, 15, and 16 are subject to the SO_2 emission standard of 40 C.F.R. 60.42c(d). In lieu of operating SO_2 CEMS, compliance with the SO_2 emission standard may be demonstrated with either fuel oil sulfur content testing or certification of fuel sulfur content

from the fuel supplier. USAF has elected to demonstrate compliance with the SO_2 emission standard and fuel oil sulfur limit using fuel supplier certification under 40 C.F.R. 60.42c(h)(1). Therefore, the Department has included the fuel supplier certification requirements and omitted the Subpart Dc SO_2 CEMS requirements.

EU IDs 7, 8, 15, and 16 are subject to the PM opacity standard of 40 C.F.R. 60.43c(c). Subpart Dc allows operators to conduct Method 9 observations in lieu of utilizing COMS for demonstrating compliance with the opacity standard. The units are exempt from the PM emission standard under 40 C.F.R. 60.43c(e) because they combust fuel with sulfur content at or below 0.5 percent, per 40 C.F.R. 60.43c(e)(4). Therefore, the Department has omitted the Subpart Dc PM emission standard requirement and included the fuel supplier certification requirements.

Conditions 67 through 74, NSPS Subpart IIII Requirements

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

EU IDs 19A, 75, and 82-84 are non-emergency CI ICE, while EU IDs 24A, 28A, 30A, 32A, 33, 50, 55A, 56, 63-70B, 72-74, 77-80, 116, 118A, 119, 124, 125, and 129-132 are emergency CI ICE and EU IDs 35A-37A are certified fire pump emergency engines. These EUs meet the applicability criteria of Subpart IIII.

EU IDs 65B-70B are exempt from the requirements of Subpart IIII due to receiving an exemption for national security following 60.4200(d).

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132. The Permittee may not cause or allow these emissions units to violate these standards. These conditions also provide MR&R specifically called out for the EUs within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer.

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

EU IDs 75 and 82-84 are subject to pre-2007 non-emergency engine standards as specified in Table 1 to Subpart IIII. EU ID 19A is subject to Tier 4 emission standards for post-2011 model year non-emergency engines with a maximum power greater than 2,237 kW as specified in 40 C.F.R. 1039.101. EU IDs 118A and 119 are subject to post-2007 emergency engine standards for engines with maximum power between 19 and 37 kW as specified in Table 2 to Subpart IIII. EU IDs 55A, 124, and 125 are subject to Tier 3 emission standards for post-2007 emergency engines with maximum power between 37 and 75 kW as specified in 40 C.F.R. 1039 Appendix I, Table 3. EU IDs 28A, 33, 56, 64A, 64B, 78, 116, 129, and 131 are subject to Tier 3 emission standards for post-2007 emergency engines with maximum power between

75 and 130 kW as specified in 40 C.F.R. 1039 Appendix I, Table 3. EU IDs 24A, 30A, 32A, 50, 63, 72, 73, 74, 77, 79, 80, 130, and 132 are subject to Tier 3 emission standards for post-2007 emergency engines with maximum power greater than 130 kW as specified in 40 C.F.R. 1039 Appendix I, Table 3. EU IDs 35A-37A are subject to stationary fire pump standards as specified in Table 4 to Subpart IIII.

The affected emissions units are required to demonstrate compliance with the applicable standards in accordance with one of the methods described in 60.4211(b), (c), and (g). The affected emissions units are also required to comply with the applicable diesel fuel requirements specified in 60.4207, as provided in Condition 70.

For emergency CI ICE subject to emission standards under 60.4205, any operation other than emergency operation, and maintenance and testing as permitted is prohibited. Additionally, should the emergency CI ICE not meet the standards of equivalent model year non-emergency CI ICE, they must install and operate hour meters recording their operation.

The Department added Condition 73 to gap-fill the operating and excess emissions and permit deviation reporting requirements. The NSPS GAPCP requirements provided in 40 C.F.R. 60.4211(a), as reflected in Condition 69, suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). MR&R requirements are provided in Conditions 72 through 73. Provisions for importing or installing stationary CI ICE in previous model years required under 40 C.F.R. 60.4208 are provided in Condition 74.

The provisions of NSPS Subpart IIII listed in Conditions 67 through 74 are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Conditions 75 through 79, NSPS Subpart OOO Requirements

Legal Basis: NSPS Subpart OOO applies to nonmetallic mineral processing plants whose construction, modification, or reconstruction commences after August 31, 1983. EU IDs 86 – 103 are subject to Subpart OOO.

Factual Basis: The conditions require the Permittee to comply with the Subpart OOO fugitive emission standards. The Permittee may not cause or allow EU IDs 86 – 103 to violate these standards. Opacity limits are separated based on the data of construction, installation, or reconstruction of the emissions unit. Monitoring for compliance is performed with Method 9 visual emissions testing. Due to a Title I condition requiring usage of water spray to control fugitive emissions, the Department omitted Subpart OOO requirements for facilities that are not controlled by water spray.

Conditions 80 through 86, NSPS Subpart Y Requirements

Legal Basis: NSPS Subpart Y is applicable to coal preparation and processing plants and affected facilities that process more than 200 tons of coal per day. The Sandwich Belt Conveyer (EU ID 110A), the segment crusher (EU ID 110B) and the Coal Tripper System equipped with six identical Bin Vent Filters (EU ID 111) are affected facilities. Any open coal storage piles constructed, reconstructed, or modified after May 27, 2009 are also affected facilities.

Factual Basis: The conditions require the Permittee to comply with the Subpart Y opacity and PM standards. The Permittee may not cause or allow EU IDs 110A, 110B, or 111 to violate these standards. The conditions also require the Permittee to develop, submit, and follow a fugitive coal dust emissions control plan for any affected open coal storage piles. Eielson currently has an open coal storage pile, but it was constructed prior to May 27, 2009. The coal storage pile is not required to comply with the fugitive coal dust emissions control plan unless it is reconstructed or modified.

Although the sandwich belt is subject to Subpart Y, it does not vent to the atmosphere through a mechanical vent. While unloading coal in the thaw shed, the workers wear powered air purifying respirators (PAPR). The unloading dust settles in the building after approximately one half hour. For facilities subject to Subpart Y that are enclosed in a building without a vent to the atmosphere, the opacity standard still applies to the facility. Opacity readings can be taken directly on the affected facility inside the building or on fugitive emission points from the building, such as doors or windows.

Each affected facility demonstrates compliance with the emission and opacity standards through performance testing. Frequency of testing for EU IDs 110B and 111 are according to 60.225(b)(1) and (2). EU ID 110A requires performance testing for compliance with the PM standard, but the subpart does not specify test frequency for affected facilities constructed before 2008. Therefore, the Department determined that periodic performance testing for EU ID 110A shall follow the frequency specified for affected facilities constructed after 2008 (i.e., within 12 months of previous testing).

For EU IDs 111, the Permittee received a waiver from the EPA allowing observation of one bin vent as representative of all six bin vents. The waiver requires that the results of the observation remain below 50% of the PM limit.

Condition 87, 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, CCCCCC and JJJJJJ, 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, Table 3 to NESHAP Subpart CCCCCC and in Table 8 to NESHAP Subpart JJJJJJ.

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 88 through 90, 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. The Eielson Air Force Base is an area source that

owns and operates RICE units, EU IDs 20-23A, 25, 26, 29, 31, 34, 38-41, 43-49, 51-54, 59, 60, 62, 71, 76, 112-115, 117, 120, and 122, subject to NESHAP Subpart ZZZZ.

Factual Basis: These conditions incorporate the current (as amended through August 30, 2024) NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 20-23A, 25, 26, 29, 31, 34, 38-41, 43-49, 51-54, 59, 60, 62, 71, 76, 112-115, 117, 120, and 122. New stationary RICE demonstrate compliance with Subpart ZZZZ by complying with NSPS Subpart IIII.

Existing non-emergency RICE EU IDs 20 through 23A are subject to CO emission limits and operational requirements. These include a ULSD fuel requirement, performance testing every 8,760 hours of operation, operating in compliance with NESHAP GAPCP requirements, and operating a continuous parameter monitoring system as required in Table 5 of NESHAP Subpart ZZZZ.

Existing emergency RICE EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117 are not subject to emission limits, but are subject to operational requirements. These include a ULSD fuel requirement, an oil and filter maintenance schedule, operating in compliance with NESHAP GAPCP requirements, and following the emergency RICE requirements of 63.6640(f). These emergency RICE requirements require that operation in non-emergency situations are limited to 100 hours per calendar year, and to record operation with a non-resettable hour meter.

Existing institutional or commercial emergency RICE EU IDs 25, 29, 38-41, 43-49, 59, 60, 62, 76, 120, and 122 are exempt from the requirements of Subpart ZZZZ under 63.6585(f)(ii) and (iii), provided they continue to operate as emergency RICE and do not supply power as part of a financial agreement as described under 63.6640(f)(4)(ii). In operating as emergency RICE, these units must meet the requirements of 63.6640(f) to be considered an emergency engine under Subpart ZZZZ.

The Permittee must comply with the recordkeeping requirements for non-emergency and emergency RICE as provided in Conditions 89.10 and 90.8, respectively. The reporting requirements are provided in Conditions 89.11 and 90.9, for non-emergency and emergency RICE. 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 provisions of NESHAP Subpart ZZZZ listed in Conditions 88 through 90 are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Conditions 91 through 95, NESHAP Subpart CCCCCC

Legal Basis: NESHAP Subpart CCCCCC applies to each gasoline distribution facility located an area source for HAPS. The Eielson Air Force Base is an area source that operates a gas distribution facility with three 26,000 gallon gasoline storage tanks, EU IDs 126 – 128.

Factual Basis: EU IDs 126 – 128 have individual annual throughputs between 30 and 60 thousand gallons with between 1 and 3 turnovers per year on average per 2025 application amendment documents on years 2019-2023. As a result, the tanks and associated affected emission sources under 40 C.F.R. 63.11112(a) are subject to the requirements for tanks with a combined monthly average throughput of 10,000 gallons or more, and less than 100,000

gallons. Should the monthly throughput for the tanks increase to over 100,000 gallons, additional requirements shall apply to the source from that time forward as per 63.11111(i).

Affected facilities under Subpart CCCCCC must meet GAPCP requirements and operating requirements, which are specified as operating using submerged filling procedures. The Permittee must record and report occurrences of malfunction, as well as actions taken to minimize emissions during malfunction.

Conditions 96 through 103, NESHAP Subpart JJJJJJ

Legal Basis: NESHAP Subpart JJJJJJ is a federal rule that took effect on May 20, 2011. This subpart applies to owners and operators of industrial, commercial, or institutional boiler as defined in 40 C.F.R. 63.11237 that is located at, or is part of, an area source of HAP emissions. The Eielson Air Force Base is an area source of HAP emissions that operates boilers (EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16) subject to the provisions of NESHAP Subpart JJJJJJ. EU IDs 1, 2, 3, 4, and 7 – 12 under 40 C.F.R. 63.11194(b) are existing industrial boilers whose construction or reconstruction commenced on or before June 4, 2010 while EU IDs 1A, 2A, 4A, 5A, 6A, and 13 – 16 under 40 C.F.R. 63.11194(c) are new industrial boilers that were constructed or are planned to be constructed after June 4, 2010.

Factual Basis: These conditions incorporate the Subpart JJJJJJ work or management practices applicable to EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16. The Permittee is required to operate and maintain the emissions units according to the manufacturer's emission-related operation and maintenance instructions which provides for the maintenance and operation of the emissions units in a manner consistent with good air pollution control practice for minimizing emissions.

As existing coal-fired boilers greater than 10 MMBtu/hr, EU IDs 1-4 are subject to emission limits, performance testing, fuel analysis, and triennial stack testing requirements, as well as general operating requirements.

New coal-fired boilers with a heat input capacity of 30 MMBtu/hr or greater, EU IDs 1A, 2A, 4A, 5A, and 6A, are subject to emission limits, PM operating limit standards, initial compliance demonstrations, continual compliance through stack testing, and general operating requirements. EU IDs 5A and 6A have completed initial compliance demonstrations under 63.11210(a).

EU IDs 13 and 14 are new oil-fired boilers with heat input capacity below 10 MMBtu/hr and are subject to biennial tune-up requirements in addition to general operating requirements. As new oil-fired boilers with work practice standards, EU IDs 13 and 14 do not require initial tuning under 63.11210(g).

New oil-fired boilers with heat input capacity greater than 10 MMBtu/hr, EU IDs 15 and 16, are subject to a PM emission standard, operating limit standard, initial compliance demonstration requirements through stack testing, triennial tune-up requirements, and general operating requirements. Should the results of initial compliance demonstrations show PM emissions below half the PM emission limit, EU IDs 15 and 16 may perform tune-ups on a 5-year basis under 63.11220(c). The Department did not include an exemption to the PM standard for boilers firing ULSD under 63.11210(f), because these boilers are only limited to Arctic Diesel. Arctic Diesel has a sulfur content of 0.15 weight percent, while ULSD has a sulfur content of 0.0015 weight percent.

Existing oil-fired boilers EU IDs 7 – 12 are subject to biennial tune-up and general operating requirements. Initial compliance demonstrations have been performed for each of these units. EU IDs 9 and 10, boilers under 5 MMBtu/hr, are required to perform a tune-up every 5 years.

General operating requirements applicable to all boilers include a GAPCP requirement, work practice standards for emission reduction, creating and following a monitoring plan for boilers subject to CEMS and COMS requirements, and submitting notifications for demonstrating compliance. Recordkeeping and reporting requirements are as listed in Conditions 102 and 103.

The provisions of NESHAP Subpart JJJJJJ listed in Conditions 96 through 103 are current as amended through July 2, 2018. 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 104, 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.

Condition 105, Compliance Assurance Monitoring (CAM)

Legal Basis: The coal-fired boilers EU IDs 1-4, 5A, and 6A use a control device to achieve compliance with the State coal-fired boiler PM limits in Conditions 39.1 and 39.2. Each of these boilers have potential pre-control device emissions equal to or greater than the major source threshold for PM (100 TPY). This condition applies because the stationary source has pollutant-specific emitting units that satisfy all of the CAM applicability criteria in 40 C.F.R. 64.2(a)(1-3): (1) the EUs are subject to an applicable emission limitation or standard; (2) the units use a control device to comply with any such applicability emission limitation or standard; and (3) the units have potential pre-control device emissions of the applicable regulated air pollutant equal to or greater than the major source thresholds for the applicable regulated air pollutant.

Factual Basis: The Permittee is subject to the requirements of 18 AAC 50.055(b)(1) & (2) that restrict the potential PM emissions of EU IDs 1-4, 5A, and 6A. The boilers each use a control device to achieve compliance with the PM limit, and have potential pre-control device emissions equal to or greater than the major source thresholds for PM (100 TPY). The control

device used for each boiler is a full stream baghouse (FSB) that reduces PM emissions from the boilers.

The FSBs are capable of reducing PM emissions to levels less than 0.01 grains per dry standard cubic foot (gr/dscf) when in operation. A pulse jet is used when PM accumulates in the filter bags of the FSB to remove caked PM. The Permittee uses exhaust gas opacity and differential pressure of the FSBs as monitoring indicators to demonstrate compliance with the PM emission reduction requirements. The Permittee has a prepared a Compliance Assurance Monitoring strategy shown in Attachment B1-1 in their 2025 Title V Renewal Application Addendum to ensure fulfillment of the 40 C.F.R. 64 CAM rule. The Department incorporates USAF's plan in Condition 105 as specified by 40 C.F.R. 64.6(c).

Conditions 106 through 108, 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 106 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 107 and 108 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 107 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 108 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.

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 109, 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 110 through 112, 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 113, 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 114 and 115, Emission Fees

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

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

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

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

The Department has modified Condition 114 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 116, 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 1-4, 1A, 2A, 4A, 5A, 6A, 7-16, 19A-26, 28A-41, 43-56, 59, 60, 62-80, 82-103, 109, 110A-120, 122, 124, and 125-132.

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 116.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 133 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 117, 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 118, 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.

This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). The applicable listed emission units and activities in Table 7 are: coal-fired boilers; coal handling facilities; and construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air.

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 119, 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 120, 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 121, 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 137. Excess emission reporting under Condition 137 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 137.

Condition 122, 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 122.1 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 140.

Condition 123, 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 124 through 126, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 124 and 126 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 125 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 124 through 126.

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

Condition 127, 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 128 through 131, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Condition 128 contains the requirement in 18 AAC 50.345(l), while Conditions 129 through 131 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 132, 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. The Permittee must use the equation given in this condition to calculate the particulate matter emission concentration from the source test results. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 133, 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 133 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 134, 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 137 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 135, 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: With exception of Condition 135.2, 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).

Under SPC XVII, Permittees may submit materials to the Department via email under a certified cover letter or by hard copy instead of through the online portal AOS. The Department included Condition 135.2 to specify this alternative submittal allowance.

Condition 136, 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 50.345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 137 and Section 16, 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 16).

The Department has modified Condition 137.3 and the Notification Form in Section 16 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 138, 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 139, Regional Haze Visibility Protection Area

Legal Basis: Condition 139 contains requirements from 18 AAC 50.265(1) and 50.265(4)(B) for stationary sources located in the Regional Haze Visibility Protection Area (RHVPA), as specified in 18 AAC 50.025(a)(4), which is shown in Figure III.K.13 H-1 of the July 5, 2022 Amendments to: State Air Quality Control Plan (Regional Haze SIP)[5] and adopted by reference in 18 AAC 50.030. To assist the state's efforts in meeting the requirements in 40 C.F.R. 51.308(f)(2), the RHVPA was established with the intent to track and control current and potential new sources that may affect visibility in the Class I areas.

Factual Basis: 18 AAC 50.265 was added to the Department's regulations on August 21, 2022 to satisfy requirements from Section III.K.13.H Long-Term Strategy for Regional Haze, Subsection 2B.[5] Condition 139.1 contains the requirements from 18 AAC 50.265(1) which requires Permittee's to maintain onsite for 10 years, records of any maintenance to any significant emissions unit that has or may have an effect on any emission that affects visibility of Class I areas. Condition 139.2 contains the requirements from 18 AAC 50.265(4)(B) which requires Permittee's to report a best estimate of the projected equipment life in the first operating report required in Condition 138 after a new significant emissions unit is installed (i.e., significant EUs installed after July 5, 2022) at the stationary source.

Condition 140, 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).

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

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

Condition 140.2 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 141, 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 shown in Condition 141.1 for Type A (large) sources, as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every year for the previous calendar year (also known as the inventory year). For triennial inventory years, Type A sources only need to submit one report, not both an annual report and a separate triennial report.

Stationary sources, excluding owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230, that do not meet any of the emission thresholds in Condition 141.1 for Type A (large) sources are required to report emission inventory data every third year (i.e., triennially) for the previous inventory year under Condition 141.2. As of the issue date of this permit, the Eielson Air Force Base is required to report under Condition 141.2.

The Department has modified the triennial reporting requirements under Condition 141.2 by including stationary sources' PTEs that are below the thresholds for annual reporting in Condition 141.1, 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 142, Consistency of Reporting Methodologies

Legal Basis: Condition 142 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 142.1 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 141 or assessable emissions under Condition 114.2, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

Condition 143, 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 144, Federal Electronic Reporting Allowance

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

Factual Basis: The electronic reporting provisions in Condition 144 is a general advisory option for stationary sources subject to federal rules to facilitate and streamline reporting requirements, in lieu of paper or email format. CROMERR establishes electronic reporting as an acceptable regulatory alternative to paper reporting and establishes requirements to assure that electronic documents are as legally dependable as their paper counterparts. The submittals must be in acceptable digital formats. *Acceptable digital formats* are file types that are compatible with CEDRI or other EPA electronic document receiving system that the Administrator may designate.

Condition 145, 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 145.2 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 146 through 148, 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 147 and 148, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 146) 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 146.

Condition 149, 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 150 through 155, 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 40s 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 156 and 157, 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 E of Operating Permit No. AQ0264TVP03 shows the permit shield that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.

ATTACHMENT A

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

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

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

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

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

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

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

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

Name: _____

Signature: _____ *Date*: _____

Title: _____

ATTACHMENT B

Map of Eielson Air Force Base's Loop Access Road, Mullin's Pit, and Cathers Lake.