

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

**Public Comment - August 16, 2024**

**Missile Defense Agency  
Missile Defense Complex**

**STATEMENT OF BASIS  
for the terms and conditions of  
Permit No. AQ1071TVP04**

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## INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ1071TVP04.

### STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ1071TVP04 contains information on the stationary source as provided in the Title V permit application.

The Missile Defense Complex is owned and operated by Missile Defense Agency/MSRN and Missile Defense Agency is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 9711 - National Security.

The stationary source (Missile Defense Complex) previously belonged to part of a larger facility complex (Fort Greely) that was transferred on October 1, 2002 from the U.S. Army Alaska (USARAK), a subordinate command of the U.S. Army Pacific, to the U.S. Army Space and Missile Defense Command (USASMDC). On August 23, 2002, the Alaska Department of Environmental Conservation (Department) received a revision to USARAK's original operating permit application for AQ0238TVP01 to reflect Fort Greely's change in ownership. The transfer in ownership recognized that only a portion of the original Fort Greely, approximately 7,000 acres, was to be transferred from USARAK to USASMDC.

On January 20, 2006, the Department decided that Fort Greely could be disaggregated based on SIC code and control. This allowed separate and distinct functional areas to be grouped into separate permits by source classification and control. New Title I and Title V permits were developed for the Missile Defense Complex to include only the functions and emissions units (EUs) associated with the Missile Defense Complex. The purpose of the base re-organization was to support the U.S. Army's defense program development consistent with the U.S. EPA's 1996 Military Installation Policy.

### 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 Missile Defense Complex that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ1071TVP04.

Table A of Operating Permit No. AQ1071TVP04 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

## EMISSIONS

A summary of the potential to emit (PTE)<sup>1</sup> and assessable PTE as calculated by the Department from the Missile Defense Complex is shown in the table below.

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

Emissions	NO <sub>x</sub>	CO	PM	SO <sub>2</sub>	VOC	CO <sub>2</sub> e <sup>1</sup>	HAPs	Total <sup>2</sup>
PTE	203.19	19.68	97.06	0.30	6.60	31,961	0.20	326.82
Assessable PTE	203.19	19.68	97.06	0.30	6.60	0	0	326.82

Notes:

1. CO<sub>2</sub>e 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<sub>2</sub>e and HAPs.
3. HAP emissions are a subset of either VOC emissions or PM<sub>10</sub> emissions and are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 67.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table C are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants, emissions are as provided in the application, as follows: NO<sub>x</sub> emissions are based on the PSD avoidance limit of 197 TPY. SO<sub>2</sub> emissions are calculated using the fuel sulfur content limit of 0.12 percent by weight. Emissions for EU IDs 10 – 15 were calculated using vendor data emission factors. EU IDs 1 – 3 emissions were calculated using AP-42 emission factors. Fugitive emissions from rock crusher equipment were calculated based on AP-42 Section 11.19 emission factors. Insignificant emissions units' emissions were not included in AQ1071TVP03 emissions summary but are included here.

The Applicant calculated HAP and CO<sub>2</sub>e emissions using emission factors from AP-42.

## BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source<sup>2</sup> 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.

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

<sup>2</sup> *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 Missile Defense Complex 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.

## AIR QUALITY PERMITS

### Permits to Operate

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

### Title I (Construction and Minor) Permits

The Department issued no construction permit for this stationary source after January 17, 1997 (the effective date of the new divided operating and construction-permitting program).

Minor Permit No. AQ1071MSS01. On September 28, 2006, the Permittee submitted a minor permit application to disaggregate the original Fort Greely stationary source and make the Missile Defense Complex a stand-alone stationary source. The Department issued Minor Permit No. AQ1071MSS01 to this stationary source on April 14, 2008. The Department established stationary source-specific requirements in this Title I permit.

Minor Permit No. AQ1071MSS02. On November 19, 2008, the Permittee submitted a minor permit application to revise the emissions units associated with the Interim and Permanent Power Phases. The Department issued Minor Permit No. AQ1071MSS02 to this stationary source on April 28, 2010. The Department established stationary source-specific requirements in this Title I permit. This permit rescinded Minor Permit AQ1071MSS01.

- Revision No. 1. The Department issued this revision on April 4, 2011 to revise fuel meter accuracy requirements.

Minor Permit No. AQ1071MSS03. On December 11, 2017, the Permittee submitted a minor permit application to revise a limit for concurrent engine operation. The permit also removed conditions from Minor Permit AQ1071MSS02, Rev 1 that were no longer applicable. The Department issued Minor Permit No. AQ1071MSS03 to this stationary source on January 23, 2018. The Department established stationary source-specific requirements in this Title I permit.

- Revision No. 1. The Department issues this revision on August 28, 2018 to clarify that Minor Permit AQ1071MSS02, Revision 1 is rescinded rather than revised. All stationary source-specific requirements established in Minor Permit AQ1071MSS03, Revision 1 are included in Operating Permit AQ1071TVP04 as described in Table D.

Minor Permit No. AQ1071MSS04. On April 4, 2019, the Permittee submitted a minor permit application to authorize the operation of a rock crusher. The Department issued Minor Permit No. AQ1071MSS04 to this stationary source on April 26, 2019. The Department established stationary source-specific requirements in this Title I permit. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ1071TVP04 as described in Table E.

## **Title V Operating Permits**

Permit No. AQ1071TVP01. The owner or operator submitted an application for an initial Title V operating permit dated October 17, 2006. The Department issued Operating Permit No. AQ1071TVP01 on March 13, 2008.

- Revision No. 1. The Department issues this significant modification on January 31, 2012 to incorporate the requirements of Minor Permit AQ1071MSS02, Rev 1.

Permit No. AQ1071TVP02. The Permittee submitted an application to renew Operating Permit No. AQ1071TVP01 dated September 12, 2012. The Department issued Operating Permit No. AQ1071TVP02 on December 11, 2013.

Permit No. AQ1071TVP03. The Permittee submitted an application to renew Operating Permit No. AQ1071TVP02 dated May 29, 2018. The Permittee amended the application on August 31, 2018. The Department issued Operating Permit No. AQ1071TVP03 on November 14, 2019.

Permit No. AQ1071TVP04. Missile Defense Agency submitted an application to renew Operating Permit No. AQ1071TVP03 under a May 7, 2024 cover letter. The Permittee amended the application on June 5, 2024. The Department issued Operating Permit No. AQ1071TVP04 on <DATE>.

## **COMPLIANCE HISTORY**

The Missile Defense Complex has operated as a stand-alone stationary source since 2008. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations, indicates a stationary source generally operating in compliance with its operating permit. In 2022, permit deviations were submitted for late oil changes on EU IDs 10 – 15. All deviations have been resolved.

## **APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS**

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

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

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

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation. These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ1071TVP04.

Table D and Table E below lists the requirements carried into Operating Permit No. AQ1071TVP04 to ensure compliance with the preconstruction permit requirements.

**Table D - Comparison of Minor Permit No. AQ1071MSS03 Rev 1 Conditions to Operating Permit No. AQ1071TVP04 Conditions<sup>1</sup>**

1071MSS03 Rev 1 Condition No.	Description of Requirement	AQ1071TVP04 Condition No.	How Condition was Revised
4 through 6	Ambient air quality protection requirements	20 through 22	No change.
7 and 8	PSD avoidance requirements for NO <sub>x</sub>	24 and 25	Did not include “or use an alternate method approved by the Department” from Condition 8.1a in Minor Permit AQ1071MSS03 because it would allow the Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods. Included gapfill “beginning” and “end” of each month to clarify requirements.

Note:

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

**Table E - Comparison of Minor Permit No. 1071MSS04 Conditions to Operating Permit No. AQ1071TVP04 Conditions<sup>1</sup>**

1071MSS04 Condition No.	Description of Requirement	AQ1071TVP04 Condition No.	How Condition was Revised
2	Maintenance requirements	26	No change.
5.1 & 5.2	Rock Crusher visual emission standard	5 through 7	No change.
7	Rock Crusher particulate matter standard	15	No change.
8	Ambient air quality protection requirements	23	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.

- 40 C.F.R. 60 Subpart Ka: None of the diesel fuel storage tanks at the stationary source have a capacity greater than 40,000 gallons. Therefore, under 40 C.F.R. 60.110a(a), the requirements of Subpart Ka do not apply to any of the diesel fuel storage tanks at the stationary source.

- 40 C.F.R. 64 Compliance Assurance Monitoring (CAM): None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.
- 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. AQ1071TVP04. 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 7, Visible Emissions Standard and MR&R

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

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 - 3, 10 - 20, and 22 - 30 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). These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid Fuel-Burning Equipment and Flares.

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

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.



### **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.

### **Rock Crusher Equipment**

Conditions 5 through 7 detail visual emission MR&R requirements for rock crusher units EU IDs 22 – 34 as specified in Minor Permit AQ1071MSS04.

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

For EU IDs 10 and 11, no visible emissions monitoring is required when these emissions units are insignificant based on potential emissions due to permit Condition 24.2 that limits their hours of operation. As long as the emissions units operate within these limits, 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 91 with the visible emissions standard based on reasonable inquiry.

### **Conditions 8 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 1 - 3, 10 - 20, and 22 - 30 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 8 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 9 through 11, 12 through 14, and 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 meet the requirements of 40 C.F.R. 71.6(a)(3).

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.

### **Liquid Fuel-Burning Equipment:**

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

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

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

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

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

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

### **Rock Crusher Equipment**

Condition 15 details particulate matter MR&R requirements for rock crusher units EU IDs 22 – 34 as specified in Minor Permit AQ1071MSS04.

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

For EU IDs 10 and 11, no monitoring is required when these emissions units are insignificant emissions units based on potential emissions due to permit Condition 24.2 that limits their hours of operation. As long as the emissions units operate within these limits, 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 91 with the PM emissions standard based on reasonable inquiry.

### **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 1 - 3, 10 - 20, and 22 - 30 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 1 – 3 and 10 – 20, 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 11, or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3), to calculate the sulfur-dioxide concentration to show that the standard is not exceeded.

For the liquid fuel-burning equipment, EU IDs 1 – 3 and 10 – 20, to protect the SO<sub>2</sub> 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 20.

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).

### **Conditions 20 – 26, Preconstruction Permit Requirements**

**Legal Basis:** The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate (PTO) issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT), limits to ensure compliance with the attainment or

maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

**Factual Basis:** Conditions 20 – 26 reflect the emissions unit- or stationary source-specific requirements that are in effect from Title I Minor Permits AQ1071MSS03 Rev 1 and AQ1071MSS04. All limits and MR&R are as specified in the Title I permits. The Air Quality Permits section, Table D, and Table E of the SOB describe which emissions units were authorized and how the terms and conditions have been revised, rescinded, and replaced in the Title I permits issued for the stationary source and how they are carried forward into the Title V permit. Background information details for these requirements are found in the corresponding Technical Analysis Report (TAR) for the Title I permits.

### **Condition 27, Insignificant Emissions Units**

**Legal Basis:** The Permittee is required to meet the state emission standards in 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. 18 AAC 50.050(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 27.4.a requires certification that the insignificant emissions units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution, based on reasonable inquiry.

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

### **Conditions 28 through 34, 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 IIII and OOO 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 Condition 28.

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 16 – 20 and 22 – 30 are subject to NSPS Subparts IIII and OOO, respectively, and therefore subject to Subpart A.

Conditions 28.1 through 28.4 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU IDs 16 – 20 and 22 – 30. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility<sup>3</sup> or in the event of a modification or reconstruction of an existing facility<sup>4</sup> into an affected facility.

Condition 28.5 - The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 29 – The requirements in 40 C.F.R. 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to all NSPS affected facilities subject to Subpart A.

Condition 30 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 16 – 20. 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 31 – Opacity standards in NSPS Subpart OOO apply to EU IDs 22 – 30.

Condition 32 – 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 22 – 30).

Condition 33 - The condition states that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards for EU IDs 22 – 30.

Condition 34 - Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 16 – 20.

**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.

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<sup>3</sup> *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.

<sup>4</sup> *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.

### Conditions 35 through 41, NSPS Subpart III Requirements

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

EU IDs 16 – 20 are non-emergency CI ICE. These EUs meet the applicability criteria of Subpart III under 40 C.F.R. 60.4200(a)(2)(i) and (ii).

**Factual Basis:** These conditions incorporate the Subpart III emissions standards applicable to EU IDs 16 – 20. 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 III-affected CI ICE depend on several factors, including, but not limited to, the unit's purpose (whether emergency or non-emergency), model year, displacement in liters/cylinder (L/cyl), and location. Some of this information are provided in Table A of the permit.

EU ID 16 – 20 are subject to EPA Tier 2 for new nonroad CI engines as specified in Table 3 to 40 C.F.R. 1039(c) Appendix I.

EU IDs 16 – 20 do not need and are not equipped with diesel particulate filter to comply with the applicable PM standard. Therefore, the provisions regarding diesel particulate filter in 40 C.F.R. 60.4209(b) and 60.4214(c) are not included in the permit.

The Department added Condition 40 to gap-fill the operating and excess emissions and permit deviation reporting requirements. The Department has also added Condition 39.4 to provide compliance monitoring for the fuel requirements under Condition 37.

The NSPS GAPCP requirements provided in 40 C.F.R. 60.4211(a), as reflected in Condition 36, suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). MR&R requirements are provided in Conditions 39 through 40. Provisions for importing or installing stationary CI ICE in previous model years required under 40 C.F.R. 60.4208 are provided in Condition 41.

The provisions of NSPS Subpart III listed in Conditions 35 through 41 are current as amended through March 27, 2023. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

### Conditions 42 through 46, NSPS Subpart OOO Requirements

**Legal Basis:** NSPS Subpart OOO applies to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin. EU IDs 22 – 30 are subject to Subpart OOO because they are either screens, crushers, or conveyors.

**Factual Basis:** EU IDs 22 – 30 are subject to opacity standards under Subpart OOO for facilities constructed after April 22, 2008. MR&R requirements are as specified in the subpart.

#### **Condition 47, NESHAP Subpart A Requirements**

**Legal Basis:** Most sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements are subject to NESHAP Subpart A. This stationary source is subject to 40 C.F.R. 63 Subparts ZZZZ and JJJJJ, 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 and in Table 8 to NESHAP Subpart JJJJJ.

**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 48 through 52, 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 Missile Defense Complex is an area source that owns and operates RICE units, EU IDs 10 – 20, subject to NESHAP Subpart ZZZZ.

**Factual Basis:** These conditions incorporate the current (as amended through May 30, 2023) NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 10 – 15. EU IDs 16 – 20 are new stationary RICE at an area source of HAP emissions. Therefore, the Permittee must meet the requirements of 40 C.F.R. 63 for these engines by meeting the requirements of 40 C.F.R. 60 Subpart III as stated in 40 C.F.R. 63.6590(c). There are no further requirements for these new RICE under 40 C.F.R. 63.

EU IDs 10 – 15 are emergency stationary CI RICE located at an area source of HAP emissions. These engines are subject to work and management practice standards as specified in Table 2d, Item 4 to Subpart ZZZZ. For the emergency engines, the Permittee is required to perform inspections and maintenance at intervals specified by the subpart (see Conditions 50.1 through 50.5); as well as, comply with the NESHAP GAPCP requirements, as reflected in Condition 49, which suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). If any of EU IDs 10 – 15 no longer meet the criteria for an emergency engine, as defined in 40 C.F.R. 63.6675, the emissions unit must meet all applicable requirements for non-emergency engines.

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e), 63.6625(i), and 63.6660, as set out in Condition 51. The reporting requirements are provided in Condition 52. The Permittee is required to include reports of deviations from NESHAP Subparts A and ZZZZ requirements with the semiannual operating reports, per 40 C.F.R. 63.6650(f). The Department also added an excess emissions and permit deviation gap-fill reporting requirement in Condition 52.3.

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

The provisions of NESHAP Subpart ZZZZ listed in Conditions 48 through 52 are current as amended through May 30, 2023. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

### **Conditions 53 through 57, NESHAP Subpart JJJJJ**

**Legal Basis:** NESHAP Subpart JJJJJ 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 Missile Defense Complex is an area source of HAP emissions that operates boilers (EU IDs 1 – 3) subject to the provisions of NESHAP Subpart JJJJJ under 40 C.F.R. 63.11194(a)(1) and (b) for existing industrial boilers whose construction or reconstruction commenced on or before June 4, 2010.

**Factual Basis:** These conditions incorporate the Subpart JJJJJ work or management practices applicable to EU IDs 1 – 3. 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. The Generally Available Control Technology (GACT) work or management practice standard applicable to EU IDs 1 – 3 are those of existing oil-fired units with a heat input capacity of greater than 5 MMBtu/hr, as set forth in Condition 55. As such, biennial tune-ups for EU IDs 1 – 3 (greater than 5 MMBtu/hr) are required.

The initial tune-ups on EU IDs 1 – 3 as required in 40 C.F.R. 63.11196(a)(1) were completed before March 21, 2012. Subsequent biennial performance tune-ups are to be conducted no more than 25 months after the previous tune-up.

Recordkeeping and reporting requirements that apply to EU IDs 1 – 3 are provided in Conditions 56 and 57.

The provisions of NESHAP Subpart JJJJJ listed in Conditions 53 through 57 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 58, Asbestos NESHAP**

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



received delegation for Subpart M for sources not required to obtain an operating permit under Alaska's regulations.

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

### **Conditions 59 through 61, 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 59 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 60 and 61 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 60 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 61 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements. The Missile Defense Complex uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

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

### **Condition 62, 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 63 through 65, 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 66, 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 67 and 68, 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 67 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 69, Dilution**

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

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

### **Condition 70, Reasonable Precautions to Prevent Fugitive Dust**

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

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

### **Condition 71, Stack Injection**

**Legal Basis:** This condition reiterates 18 AAC 50.055(g), which prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e., disposing of material by injecting it into a stack). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

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

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

### **Condition 72, Air Pollution Prohibited**

**Legal Basis:** This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

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

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

### **Condition 73, Technology-Based Emission Standard**

**Legal Basis:** The Permittee is required to take reasonable steps to minimize emissions if unavoidable emergency, malfunction, or non-routine repair activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements

apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

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

### **Condition 74, Open Burning**

**Legal Basis:** The condition 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 74.1 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 91.

### **Condition 75, Requested Source Tests**

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

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

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

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

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

### **Condition 79, Test Exemption**

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

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

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

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

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

### **Condition 84, Particulate Matter Calculations**

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

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

### **Condition 85, Recordkeeping Requirements**

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

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

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

### **Condition 86, Certification**

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

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

### **Condition 87, Submittals**

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

**Factual Basis:** The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. This condition lists the Department's appropriate address for reports and written notices. This condition states that the Department requires one certified copy of submitted reports (except as otherwise required by the Department or other conditions of the permit) and provides an allowance for either electronic or hard copy document submittals. The condition also directs the Permittee to refer to the submission instructions on the Department's Standard Permit Conditions webpage for additional information regarding document submittals (e.g., the appropriate Department address).

### **Condition 88, Information Requests**

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

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

### **Condition 89 and Section 12, 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 12).

The Department has modified Condition 89.3 and the Notification Form in Section 12 to reflect the electronic submittal requirements in 18 AAC 50.270 using the Department's online form to submit notification of excess emissions and permit deviations beginning September 7, 2023. The electronic notification form is found at the Division of Air Quality's Air Online Services (AOS) system webpage <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option. Submittal through other methods may be allowed only upon written Department approval. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

### **Condition 90, Operating Reports**

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

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

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

### **Condition 91, Annual Compliance Certification**

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

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

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

and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

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 92, 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 30<sup>th</sup> 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 92.1 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 92.1 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 92.2. As of the issue date of this permit, the Missile Defense Complex is required to report under Condition 92.2.

The Department has modified the triennial reporting requirements under Condition 92.2 by including stationary sources' PTEs that are below the thresholds for annual reporting in Condition 92.1, 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 93, Consistency of Reporting Methodologies**

**Legal Basis:** Condition 93 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 93.1 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 92 or assessable emissions under Condition 67.2, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

### **Condition 94, 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 95, 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 95.2 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 96 through 98, 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 97 and 98, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 96) 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 96.

### **Condition 99, 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 100 through 105, General Compliance Requirements and Schedule**

**Legal Basis:** These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in

18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

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

**Conditions 106 and 107, Permit Shield**

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

**Factual Basis:** Table B of Operating Permit No. AQ1071TVP04 shows the permit shield that the Department granted to the Permittee. The following table shows the requests that were denied and the reasons that they were denied. The Department based the determinations on the permit application, past operating permit, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.

**Table F - Permit Shields Denied**

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 C.F.R. 60.752(a), Subpart WWW	Permittee submitted the one-time initial design capacity report to the EPA.	40 C.F.R. 60.752(a)(1) requires amended design capacity reports in accordance with 40 C.F.R. 60.757(a)(3).
40 C.F.R. 60 Subpart Ka	Subpart Ka does not apply to liquid storage vessels with a capacity of less than 420,000 gallons.	The exemption under 40 C.F.R. 60.110a(b) is for petroleum or condensate stored, processed or treated <u>prior to custody transfer</u> . The threshold for Subpart Ka applicability is 40,000 gallons under 40 C.F.R. 60.110a(a).