Alaska Department of Environmental Conservation
Air Permits Program

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Alyeska Pipeline Service Company (APSC)
Valdez Marine Terminal

STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0082TVP03

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit AQ0082TVP03.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit AQ0082TVP03 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned by BP Pipelines (Alaska) Inc., ExxonMobil Pipeline Company, ConocoPhillips Transportation (Alaska) Inc., Unocal Pipeline Company, and Koch Alaska Pipeline Company, LLC. The stationary source is operated by Alyeska Pipeline Service Company (APSC) and Alyeska Pipeline Service Company (APSC) is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 4491 - Marine cargo handling.

The stationary source primarily engages in the loading of crude oil onto marine vessels either directly from the Trans-Alaska Pipeline or from one or more of the crude oil storage tanks. The stationary source's primary activities are conducted using the crude oil storage tanks and marine vessel-loading berths. The stationary source also engages in several activities that support the primary function, including power generation, vapor collection and destruction, miscellaneous maintenance, fire-fighter training, ballast and industrial wastewater treatment, and tank cleaning.

APSC indicated in the application for Operating Permit AQ0082TVP03 that EU IDs 16, 43 through 46, and 58 have been removed from service. Therefore, those emission units are not included in Operating Permit AQ0082TVP03.

EMISSION 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 CFR 71.5(c)(3).

The emission units at the Valdez Marine Terminal (VMT) that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit AQ0082TVP03.

Table A of Operating Permit AQ0082TVP03 contains information on the emission units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE, as indicated in the application for the Valdez Marine Terminal, is shown in the table below.

Table E – Emissions Summary, in tons per year (tpy)

Pollutant	NOx	CO	PM-10	SO_2	VOC	CO_2e	HAPs	Total
PTE	786	211	50	2,371	639	736,464	21	4,057
Assessable PTE	786	211	50	2,371	639	0	0	4,057

The assessable PTE listed under Condition 46.1 is the sum of the emissions of each individual regulated air pollutant, other than greenhouse gases (GHGs), for which the stationary source has the potential to emit 10 tpy or greater. The emissions listed in Table E are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source.

PTE is as provided in the application for Operating Permit AQ0082TVP03. VOC PTE includes emissions allowed under 40 CFR 63 Subpart Y that were inadvertently omitted from the statement of basis for Operating Permit AQ0082TVP02. Hazardous air pollutant (HAP) emissions are not included in the totals of Table E because all significant HAPs are also VOCs.

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 CFR 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 three 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 under Section 111 of the Clean Air Act or national emission standards under Section 112 of the Clean Air Act;
- Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the stationary source as specified under 18 AAC 50.326(a) and 40 CFR 71.3(a) because the stationary source is a major stationary source. This stationary source is a major source because:

- it directly emits, or has the potential to emit, 100 tpy or more of any air pollutant.
- it emits or has the potential to emit, in the aggregate, 10 tpy or more of a HAP (n-hexane).

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

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

AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The Department issued Permit to Operate 9671-AA001 on June 6, 1996. This permit included all construction authorizations issued through June 6, 1996 and was issued before January 18, 1997 (the effective date of the Department's new divided operating and construction permitting program). All stationary source-specific requirements established in this permit are included in the new operating permit as described in Table F.

Title I (Construction and Minor) Permits

The Department issued Construction Permit 9871-AC008 to this stationary source on April 28, 1999 to allow operation of a new soil vapor extraction (SVE) system.

The Department issued Construction Permit 9971-AC003 on June 22, 1999 for a crude oil tank bottom processing system to process the tank bottoms removed during crude oil storage tank cleaning. Both of the construction permits above were issued as PSD-avoidance permits for modification to an existing PSD major stationary source.

The Department issued Construction Permit 0071-AC005 on June 22, 1999 and rescinded Construction Permits 9971-AC003 and 9871-AC008.

The Department issued Construction Permit 082CP04 on July 30, 2003 and rescinded Construction Permit 0071-AC005. Construction Permit 082CP04 Revision 1 was issued May 7, 2004. All stationary source-specific requirements established in Construction Permit 082CP04 Revision 1 are included in the new operating permit as described in Table G.

The Department issued Construction Permit 082CP05 on September 25, 2003 to revise terms and conditions of Permit to Operate 9671-AA001. All stationary source-specific requirements established in Construction Permit 082CP05 are included in the new operating permit as described in Table H.

The Department issued Minor Permit AQ0082MSS01 on June 9, 2008 to authorize addition of four air strippers (EU IDs 75 – 78) and two Regenerative Thermal Oxidizers (RTO) (EU IDs 79 and 80). The permit also established owner requested limits (ORLs) to avoid the project from being classified under 18 AAC 50.502(c)(3)(A) for SO_2 emissions and to limit VOC emissions.

The Department issued Minor Permit AQ0082MSS02 on December 7, 2009 to authorize installation of two emergency electric generator sets (EU IDs 8A and 9A, intended to replace EU IDs 8 and 9) and a backup emergency power generator (EU ID 8T). EU ID 8T has been removed from the stationary source. The permit establishes ORLs to avoid the project from being classified under 18 AAC 50.502(c)(3)(A) by restricting the annual hours of operation of EU IDs 8A, 8T, and 9A. On February 10, 2010, the Department issued Minor Permit AQ0082MSS02 Revision 1 to address the decisions made by the Air Quality Division Director concerning the informal review of Minor Permit AQ0082MSS02. All stationary source-specific requirements established in Minor Permit AQ0082MSS02 Revision 1 are included in the new operating permit as described in Table I.

The Department issued Minor Permit AQ0082MSS03 on October 15, 2010 and rescinded Minor Permit AQ0082MSS01. The Permittee requested the reduction of the SO_2 emissions limit of the regenerative thermal oxidizers, EU IDs 79 and 80, from 9.5 to 9.2 tons combined per 12-month period, as well as revisions to the associated monitoring, recordkeeping, and reporting (MR&R) requirements. All stationary source-specific requirements established in Minor Permit AQ0082MSS03 are included in the new operating permit as described in Table J.

Title V Operating Permit Application, Revisions and Renewal History

The Department issued Operating Permit AQ0082TVP01 on November 11, 2003. On August 1, 2005, the Department issued Revisions 1 and 2 to address administrative, minor, and significant revisions. On May 16, 2007, the Department issued Revision 3 to address a minor revision for the marine vessel visible emissions monitoring requirements in Condition 6.1 of the revised permit.

The Department issued Operating Permit AQ0082TVP01 on November 11, 2003.

The Department received the operating permit renewal application for Operating Permit AQ0082TVP03 on July 14, 2016.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1975.

ADEC conducted a full compliance evaluation (FCE) covering the period September 1, 2012 through June 15, 2014 with onsite inspections on June 11 and 12, 2014. Based on this evaluation, the Department found the stationary source to be out of compliance with the following conditions of Operating Permit No. AQ0082TVP02: 3.2(a), 15.5(a), 18, 84.1(c) and 89.2. The Permittee is addressing the only remaining compliance issue for Condition 89.2 and has agreed to submit the required information to EPA and the Department on or before February 28, 2017.

ADEC conducted an FCE covering the period June 16, 2014 through December 31, 2015 with an onsite inspection on December 4, 2015. Based on this evaluation, the Department found the stationary source to be out of compliance with the following conditions of Operating Permit No. AQ0082TVP02: 3.2a, 3.2d, 6.1, 7.1, 18, 19.7, 24.5b, 82.1c, 83.1, 83.2, and 93. The Department issued a compliance case closure letter for these violations on November 23, 2016.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 CFR Part 71.2 defines "applicable requirement" to include the terms and conditions of any pre-construction permit issued under rules approved in Alaska's State Implementation Plan (SIP).

Alaska's SIP includes the following types of pre-construction permits:

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

Pre-construction 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 emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table F through Table J below list the requirements carried into Operating Permit AQ0082TVP03 to ensure compliance with applicable requirements from preconstruction permits. The tables do not include all standard and general conditions.

Table F – Comparison of Permit-to-Operate 9671-AA001 Conditions to Operating Permit AQ0082TVP03 Conditions [1]

Permit 9671-AA001 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
5	40 CFR 63 Subpart Y requirements	36	Each applicable requirement of Subpart Y is included in the permit.
6	Modification notification requirement	NA	The standard condition under 18 AAC 50.346(d) for HAP reconstruction approval requirement specifically for hazardous air contaminant sources was repealed on 10/1/04.
7 & Exhibit B, Item A	Fuel use limits	16 & Table B	The 3,846-gallons/hour limit for fuel combusted in EU IDs 1 through 3 was removed in Operating Permit 082TVP01 because the heat-input limit (in MMBtu/hr) is sufficient to carry out compliance monitoring. Changed "an alternative instrumentation and methodology approved by the Department" from initial Title V Permit No. AQ0082TVP01 Condition 8.3 to "in line gas chromatograph (GC)" in Condition 15.3, as an alternative heat content monitoring method.
8 & Exhibit B, Item C	Fuel sulfur content limit and EU ID 4 through 6 BACT	23	Not revised.
9 & Exhibit B, Item A	Operational hour limits	17 & Table B	Did not include EU IDs 8, 9, and 16 because those units have been removed.
10	Crude oil storage tank inspection and cleaning	NA	Rescinded by Construction Permit 082CP05.
11	Crude oil storage tank vapor control	NA	Revised by Condition 4 of Construction Permit 082CP05.

Permit 9671-AA001 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
12	Crude oil storage tank venting	NA	Rescinded by Condition 3 of Construction Permit 082CP05.
13	Vapor Recovery Best Operational Management Plan	19.4	Referred to the most recent approval of the plan.
14	Marine vessel loading and unloading	NA	Rescinded by Condition 3 of Construction Permit 082CP05.
15	Marine vessel visible emissions monitoring	5	Revised to reflect the requirements in 18 AAC 50.070. Added specific MR&R requirements.
16	Source test requirement for the Tanker Vapor Collection System	NA	Rescinded by Construction Permit 082CP05.
23	Monitoring for EU IDs 1 through 3	NA	Rescinded by Construction Permit 082CP05.
24	Fuel sulfur content monitoring	23.1 and 23.2	Used language from Standard Operating Permit Condition XI – SO_2 Emissions From Oil Fired Fuel Burning Equipment.
25	Crude oil tanker fuel monitoring	NA	Revised by Condition 4 of Construction Permit 082CP05.
Exhibit B, Items B & D	EU ID 4 through 6 BACT	21, 22, and 24	All limits and standards marked as "enforceable limits" and the NOx and PM limits (BACT limits which were not marked "enforceable") are carried into this permit.
Exhibit C	Monitoring requirements	NA	Revised by Exhibit C of Construction Permit 082CP05.

Notes:

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

Table G – Comparison of Construction Permit 082CP04 Revision 1 Conditions to Operating Permit AQ0082TVP03 Conditions [1]

Permit 082CP04 Rev 1 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
8	Operational requirements	15	Not revised.
9	Authorization to install/operate SVE system	NA	The SVE system is no longer operational and has been permanently shut down.
10	TBP maintenance requirements	20.4.c & 48	The SVE system is no longer operational and has been permanently shut down.
11	PSD avoidance for VOC emissions	20	Did not include Condition 11.2 from 082CP04 Rev 1 because the SVE system is no longer in operation.
12	TBP system hours of operation limit	20.1	Not revised.
13	TBP system throughput limit	20.2	Not revised.
14	TBP system emission control requirements	20.3	Included the reporting requirement in Condition 14.4 of 082CP04 Rev 1 under Condition 20.8 of AQ0082TVP03.
15	TBP system monitoring requirements	20.4	Not revised.
16	SVE system monitoring	NA	The SVE system is no longer operational and has been permanently shut down.
17	TBP and SVE system recordkeeping requirements	20.5	Did not include Conditions 17.3 through 17.5 from 082CP04 Rev 1 because the SVE system is no longer in operation.
18	TBP system reporting requirements	20.7 & 20.8	Included the reporting requirement in Condition 14.4 of 082CP04 Rev 1 under Condition 20.8 of AQ0082TVP03.

Notes:

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

Table H – Comparison of Construction Permit 082CP05 Conditions to Operating Permit AQ0082TVP03 Conditions [1]

Permit 082CP05 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
4	Revision to Condition 11 of Permit to Operate 9671-AA001	19.1	Not revised.
4	Revision to Condition 25 of Permit to Operate 9671-AA001	18	Not revised.
26	Excess emissions and permit deviation reports	70	Current standard permit condition language is used. Deleted the requirement to notify the Valdez Marine Terminal Oversight Unit (VMTOU) when marine vessel Method 9 observations exceed the limit in the permit. This requirement is no longer valid since the VMTOU no longer exists and the standard condition for excess emissions is included in the permit.
27	Air pollution prohibited	52 & 53	Current standard permit condition language is used.
Exhibit C	Monitoring requirements	16.1, 16.3, 16.4, 16.5.a, 19.3, 23.1, & 24.3	Not revised.

Notes:

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

Table I – Comparison of Minor Permit AQ0082MSS02 Revision 1 Conditions to Operating Permit AQ0082TVP03 Conditions [1]

Permit AQ0082MSS02 Rev 1 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
5	ORL to avoid project classification under 18 AAC 502(c)(3)(A)	25	Not revised.
6	ORL to avoid project classification under 18 AAC 502(c)(3)(A)	NA	EU ID 8T has been removed.

Notes:

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

Table J – Comparison of Minor Permit AQ0082MSS03 Conditions to Operating Permit AQ0082TVP03 Conditions [1]

Permit AQ0082MSS03 Condition	Description of Requirement	Permit AQ0082TVP03 Condition	How Condition was Revised
3	ORL to avoid project classification under 18 AAC 502(c)(3)(A)	26	Not revised.
4	ORL to avoid project classification under 18 AAC 502(c)(3)(A)	27	The Department did not carry forward the original text allowing "…an alternative method if given approval by the Department." This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.
5	ORL for VOC emissions	28	Not revised.

Notes:

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

NON-APPLICABLE REQUIREMENTS

Each permit is required to contain a discussion of all applicable requirements as set forth in 40 CFR 71.6(a) adopted in 18 AAC 50.040(j). This section discusses conditions that are not included in the permit for specific reasons.

- **40 CFR 60 Subparts D, Da, Db, and Dc:** EU IDs 1 through 3 and 18 are not subject to the requirements of Subpart D because all the units are rated less than 250 MMBtu/hr.

  EU IDs 1 through 3 are not subject to the requirements of Subparts Da, Db, and Dc because the units were constructed prior to the applicability dates of these subparts.

  EU ID 18 is not subject to the requirements of Subparts Da, Db, and Dc because each boiler under EU ID 18 must be rated less than 6.2 MMBtu/hr.

- **40 CFR 60 Subpart K:** In a letter to APSC dated March 3, 1983, EPA states the requirements under Subpart K are no longer considered enforceable by EPA because EPA did not have the authority to promulgate equipment standards under Section 111 of the Clear Air Act prior to the 1977 Clean Air Act amendments.

- **40 CFR 60 Subpart Ka and Kb:** EU IDs 29 through 42 are not subject to the requirements of Subparts Ka and Kb because the tanks were constructed prior to May 18, 1978.

- **40 CFR 63 Subpart ZZZZ:** Under 40 CFR 63.6590(b)(1) and (b)(1)(i), EU IDs 8A and 9A do not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for the initial notification requirements of 40 CFR 63.6645(f) because the engines are new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).

  Under 40 CFR 63.6590(b)(3) and (b)(3)(iii), EU IDs 10 through 15 do not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A including initial notification requirements because the engines are existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).

  If any of EU IDs 8A, 9A, or 10 through 15 ceases to meet the emergency engine criteria in 40 CFR 63.6640(f), the engine will not be considered an emergency engine under Subpart ZZZZ and will need to meet all requirements for nonemergency engines in Subpart ZZZZ.

  EU IDs 24 through 27 are nonroad engines. Therefore, in accordance with the stationary reciprocating internal combustion engine definition in 40 CFR 63.6675, these engines are not subject to the requirements of 40 CFR 63 Subpart ZZZZ. If any of EU IDs 24 through 27 cease to meet the nonroad engine definition under 40 CFR 1068.30, that engine will need to meet all applicable requirements in Subpart ZZZZ.

- **40 CFR 64 – Compliance Assurance Monitoring (CAM):** EU IDs 4 through 6 are used to control HAP and/or VOC emissions under 40 CFR 63 Subparts Y and EEEE. However, these subparts were proposed by EPA after 1990. Therefore, these emission limits are exempt from CAM requirements under 40 CFR 64.2(b)(1)(i).

  EU IDs 24 through 28 control VOC emissions from the tank bottoms processing system, and EU IDs 18 through 28 are subject to a VOC emission limit of 18.5 tpy. However, the VOC emission limit is an emissions cap that allows the operational flexibility of trading emissions between units (as described in 40 CFR 71.6(a)(13)(iii)) as long as the total stays below the cap. Therefore, CAM requirements do not apply, as stated in 40 CFR 64.2(b)(1)(v).

  Emissions from EU IDs 72 through 74 may be controlled by EU IDs 79 and 80, and EU IDs 75 through 78 are routed through EU IDs 79 and 80. However, there are no emission limits for EU IDs 72 through 78. Therefore, CAM requirements are not applicable.

- **40 CFR 68 – Risk Management Plan:** The Permittee is not subject to the applicable provisions under the requirements of 40 C.F.R. 68 Chemical Accident Prevention Procedures for the crude oil at the stationary source because 68.115(b)(2)(iii) states: "Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following: condensate, crude oil, field gas, and produced water, each as defined in §68.3 of this part." VMT is not a natural gas processing plant or a petroleum refining process unit, and is prior to the entry point in the crude oil refining process.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 CFR 71, as specified in 18 AAC 50.040(j), in addition to developing state-specific regulations, to establish an operating permit program. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 CFR 70. As required in 40 CFR 71.11(b), this section of the statement of basis briefly describes the derivation of the conditions of the operating permit and the reasons for them by providing the legal and factual basis for each condition of Operating Permit AQ0082TVP03. Additionally, and as required by 40 CFR 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) and 18 AAC 50.070.

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 through 6, 8A, 9A, 10 through 15, 18, 79, and 80 are fuel-burning equipment.
- 18 AAC 50.070 applies to the marine vessels loading or unloading operations at the stationary source.

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).

EU IDs 24 through 27 are nonroad engines as defined in 40 C.F.R. 89.2, and are therefore not subject to the SIP visible emissions standards.

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). Condition 2 prohibits the Permittee from causing or allowing visible emission in excess of the applicable standard in 18 AAC 50.070.

Gas-Fired Equipment:

Monitoring – For propane and crude-oil vapor gas-fired emission units, EU IDs 79 and 80, the monitoring of gas-fired emission units for visible emissions is waived; i.e., no VE or PM source testing will be required. The Department has found that propane and crude-oil vapor gas-fired equipment inherently has negligible PM emissions. However, the Department can request VE observations and/or PM source test from any equipment emitting visible emissions.

Reporting – The Permittee must state in each operating report whether only gas was fired in the emission unit for the period covered by the report.

Liquid Fuel-Fired and Waste Gas-Fired Equipment:

For EU IDs 1 through 6, although these units are gas-fired, this "gas" is waste gas collected from crude oil tanks and marine vessel loading and does not meet the quality of "fuel gas" described in the guidance. Moreover, liquid fuel is co-burned with the waste gas in these emission units. Therefore the exemption from monitoring requirements for gas-fired units does not apply to EU IDs 1 through 6. Instead, these units must comply with the MR&R conditions for liquid fuel-fired boilers.

Monitoring – For EU IDs 1 through 6, 8A, 9A, and 10 through 12, visible emissions must be initially observed by smoke/no smoke observations. If significant visible emissions are then observed by a certified Method 9 reader, the Method 9 Plan must be followed.

Recordkeeping – The Permittee is required to record the results of all visible emission observations.

Reporting – The Permittee is required to report: 1) emissions in excess of the state visible emissions standard, 2) deviations from permit conditions, and 3) the corrective actions taken. The Permittee is required to include copies of the results of all visible emission observations with the operating report.

The visible emissions MR&R contains the stationary source-specific monitoring for fuel-burning emission units as agreed on by the Permittee and the Department during the initial Title V operating permit processing. The Permittee proposed stationary source-specific MR&R for fuel-burning equipment in accordance with its existing procedures on excess visible emissions reporting under Post Orders 136. The source-specific MR&R was requested after the stationary source demonstrated continuous compliance with the visible emissions standards through six months of Method 9 visible emissions observations on EU IDs 1 through 6. Based on this demonstration, the Department concurred that the emission units meet the criteria for stationary source-specific MR&R requirements, consistent with Policy and Procedure No. 04.02.103, Topics #5 and #9. This source-specific MR&R is carried forward to this renewal permit, except that the 400 hours per calendar year visible emission monitoring trigger for EU IDs 10 through 15 has been modified as follows: EU IDs 8A, 9A, 10 through 15 (backup/emergency generators) and EU ID 18 (3 TBP boilers) are emission units that are potentially insignificant based on actual and potential emissions. As long as EU IDs 8A, 9A, 10 – 12 do not exceed the significant emissions thresholds in 18 AAC 50.326(e), and for as long as EU IDs 13 through 15 and 18 meet the operational limits in Table B and Conditions 15.1.a and 20.1.a, they are considered insignificant emission units and no monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3.

The Permittee observes exhaust using security personnel as part of their daily routine, and their standing order requires any personnel becoming aware of visible smoke to report the incident. If smoke is observed, the strategy requires APSC to call a certified Method 9 observer to immediately determine if the smoke is significant, and if the smoke is significant, conduct Method 9 observations. If Method 9 readings document opacity greater than the applicable VE standard, the Permittee is required to report the incident as excess emissions and include the corrective actions taken.

The Permittee is not required to record and report observations if no smoke or insignificant smoke is observed. However, the Permittee must certify compliance with the daily monitoring requirement in the annual compliance certification report.

Marine Vessels:

The Department considers tanker vessel loading or unloading operations to be support activities for the VMT. The Permittee is accountable for tanker vessel emissions from dockside activities that directly serve the purposes of the Permittee or are under the control of the Permittee to a substantial extent. Therefore, the Permittee is responsible for MR&R of tanker vessel visible emissions while the tanker vessel is berthed at the VMT. In the event of a tanker vessel opacity exceedance, the Department will review whether the exceedance results from such dockside activities. Visible emissions surveillance of each tanker vessel is performed by a trained observer during the time the vessel is berthed up to the time it has finished initial startup. For smoke observations that may be 15 percent opacity or greater, the Permittee must conduct Method 9 readings.

Conditions 8 through 13, Particulate Matter (PM) Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b). This requirement applies to operation of all industrial processes and fuel burning equipment in Alaska.

- EU IDs 1 through 6, 8A, 9A, 10 through 15, 18, 79, and 80 are fuel-burning equipment.

These PM standards also apply because they are contained in the federally-approved SIP.

Factual Basis: Condition 8 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. MR&R requirements are listed in Conditions 9 through 13.

The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Operation and Maintenance Program that the emission unit is in continuous compliance with the State's emission standards for particulate matter.

Gas Fuel-Fired Equipment:

Monitoring – For gas-fired emission units, EU IDs 79 and 80, the monitoring of gas-fired emission units for particulate matter is waived, i.e. no source testing will be required. The Department has found that natural gas-fired equipment inherently has negligible PM emissions. However, the Department can request for VE observations and/or PM source test 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-Fired Burning Equipment:

For EU IDs 1 through 6, although these units are gas-fired, this "gas" is waste gas collected from crude oil tanks and marine vessel loading and does not meet the quality of "fuel gas" described in the guidance. Moreover, liquid fuel is co-burned with the waste gas in these emission units. Therefore the exemption from monitoring requirements for gas-fired units does not apply to EU IDs 1 through 6. Instead, these units must comply with the standard MR&R conditions for liquid fuel-fired boilers.

For EU IDs 1 through 6 and EU IDs 8A, 9A and 10 through 15 and 18, the MR&R conditions are from Standard Permit Condition IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid-Fired Emission Units and Flares adopted into regulation pursuant to AS 46.14.010(e).

EU IDs 8A, 9A, 10 through 15 (backup/emergency generators) and EU ID 18 (3 insignificant TBP boilers) are emission units that are potentially insignificant based on actual and potential emissions. As long as EU IDs 8A, 9A, and 10 through 12 do not trigger the significant status thresholds in 18 AAC 50.326(e), and for as long as EU IDs 13 through 15 and 18 meet the operational limits in Table B and Conditions 15.1.a and 20.1.a, they are considered insignificant emission units and no monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3 (http://dec.alaska.gov/air/ap/policy.htm).

Condition 14, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires the Permittee to comply with the sulfur compound emission standard in 18 AAC 50.055(c) for all fuel-burning equipment and industrial processes in the State of Alaska.

- EU IDs 1 through 6, 8A, 9A, 10 through 15, 18, 79, and 80 are fuel-burning equipment.

These sulfur compound standards also apply because they are contained in the federally-approved SIP.

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment.

Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils).

Gaseous (waste gas) Fuels:

An analysis within one year of the effective date of the operating permit is required to determine the total sulfur concentration of the waste gas to verify compliance with the SO_2 standard. The Department chose this monitoring requirement due to the very low amount of sulfur in the waste gas stream and because the Department expects little variation in sulfur concentration. On June 23, 2004 the Permittee determined the waste gas H_2S concentration was 0.31 ppm, thus indicating that the sulfur compound emissions from burning the waste gas are well below the standard.

Propane Fuel:

Propane fuel is used as supplementary fuel fired in EU IDs 18, 79, and 80. No fuel testing is necessary to ensure compliance with the 500 ppm SO_2 standard in Condition 14. Commercial propane contains a maximum sulfur concentration of 185 ppm (0.0185 percent) and therefore exhaust from emission units using propane fuel won't exceed the SO_2 standard. The Permittee must include a statement in each operating report indicating whether or not propane was the only supplementary fuel burned in EU ID 18 (if in operation during the reporting period) and EU IDs 79 and 80.

Hydrocarbon Vapors:

Hydrocarbon vapors from ballast water treatment processing are burned by the regenerative thermal oxidizers, EU IDs 79 and 80. According to the technical analysis report (TAR) for Minor Permit No. AQ0082MSS03, the owner requested limit for SO_2 emissions from EU IDs 79 and 80 is based on the assumption that the H_2S concentration (as total sulfides) in the ballast water is 3 ppm (annual average) under worst case scenario. In order to streamline and simplify MR&R requirements, Condition 14.5 references Condition 27 and its associated MR&R to demonstrate compliance with the standard in Condition 14.

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

Liquid Fuels:

For oil-fired equipment, the MR&R conditions are from Standard Operating Permit Condition XI – SO_2 Emissions From Oil Fired Fuel Burning Equipment. These conditions have been modified in this permit as follows. The Department corrected Standard Operating Permit Condition XI.2.2 to replace the text *"…method listed in 18 AAC 50.035 or an alternative method approved by the Department*" with *"…method listed in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1)".* The text *"…or an alternative method approved by the Department"* was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA's September 2006 Title V Program Review. This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.

Conditions 15 through 28, Pre-Construction Permit Requirements

Legal Basis: The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permit(s), SIP approved minor permits, operating permits issued between January 18, 1997 and September 30, 2004, or owner requested limits established under 18 AAC 50.225. These requirements include best available control technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: These conditions require the Permittee to comply with pre-construction permit terms and conditions.

Condition 15 contains operational requirements, and Conditions 16 through 19 are requirements for protecting ambient air quality. Permit to Operate No. 9671-AA001 includes a fuel limit of 3,846 gallons in addition to the 500 MMBtu/hr limit for EU IDs 1 through 3. APSC used 469 MMBtu/hr as (based on 1993-1994, 2-year average fuel use) modeling input to demonstrate compliance with the ambient air quality standards. The margin of compliance for all pollutants was sufficiently adequate to set the boiler operational limit to 500 MMBtu/hr. The 3,846 gallons/hr limit appears to be based on 500 MMBtu/hr operation burning fuel oil with a heating value of 130,000 Btu/gal. APSC burns fuel gas in combination with fuel oil. Therefore, the fuel use limit of 3,846 gallons/hour is not necessary and was removed from Operating Permit AQ0082TVP01.

Condition 16.3 provides the flexibility to measure heat content of the waste gas using an inline calorimeter or gas chromatograph. The Department also added Condition 16.6.a to clarify that heat input calculations are to be done for each type of fuel burned since EU IDs 1 through 6 use both liquid and gaseous fuels.

For the waste gas incinerators, EU IDs 4 through 6, the establishment of the 522 MMBtu/hr limit was based on the annual average fuel use in 1993-1994. APSC relied on the operational-hour limits for EU IDs 10 through 15 in Condition 17, and 500 MMBtu/hr limit on the power boilers (EU IDs 1 through 3) in Condition 16 to demonstrate that the National Ambient Air Quality Standards (NAAQS) could be met.

For Condition 18, APSC relied on fuel oil sulfur content of two percent for Berths 1 and 5 (EU IDs 47 and 50), and one percent for Berths 3 and 4 (EU IDs 48 and 49), for short term modeling assuming there are 4 tankers simultaneously at berth for their 1996 permit application. This worst case scenario resulted in cumulative predicted impacts approaching 91 percent of the 3-hour SO_2 standard. Until APSC demonstrates that the short-term impacts are below 60 percent of the 3-hour NAAQS, APSC is required to continue monitoring fuel oil bunker sulfur content.

Condition 19 carries forward the requirement for the crude storage tanks (EU IDs 29 through 42) from Permit to Operate No. 9671-AA001 and as revised in Construction Permit No. 082CP05prohibiting the venting of tanks to the atmosphere. Venting must be monitored through internal pressure readings. A reading of 1.5" water column or higher indicates venting. When the internal pressure reading drops to 1.2" water column or less, it is an indication that vent valves have closed and venting has ended. The Permittee must also operate the crude oil storage tanks and vapor recovery systems in accordance with the Best Operational Management Plan (BOMP), as required by the settlement agreement (item No. 19) in Compliance Order by Consent (COBC) No. 90-2-4-6-262-1.

In Condition 20, the Permittee is required to limit VOC emissions from the tank bottom processing (TBP) system (EU IDs 18 through 28) to no more than 18.5 tons per 12-month consecutive period. Condition 20.1 also includes an operational hour-limit for the TBP system and TBP boilers, as well as a limit for TBP system throughput. APSC relied on these limits in the construction permit application to demonstrate that the project does not cause or contribute to a violation of an ambient air quality standard or increment.

Condition 20.3 includes operational restrictions for VOC emissions. Required VOC emission controls consist of internal combustion engines with catalytic converters (EU IDs 24 through 27) to combust hydrocarbon vapors emitted from the TBP system during all times of TBP operations, along with two carbon adsorption beds (EU ID 28) run in parallel to handle VOC vapors in excess of the engines' capacity. Conditions 20.4 through 20.8 provide MR&R requirements associated with the TBP operations and VOC emissions. APSC has indicated EU IDs 24 through 27 are nonroad engines (NREs). Therefore, the Department included Condition 20.9 in this permit to ensure that EU IDs 24 through 27 maintain their NRE status.

Conditions 21 through 24 contain BACT limits for PM, nitrogen oxides, and SO_2 for the waste gas incinerators, EU IDs 4 through 6; and a stationary source-wide sulfur content limit for fuel.

Condition 21 contains the 10-percent BACT opacity limit, which was imposed as a surrogate measure to ensure that EU IDs 4 through 6 continuously comply with the PM BACT limit.

For Condition 22, the 34.4 lb/hr limit for PM emissions for EU IDs 4 through 6 is based on the 400 MMBtu/hr rating of each incinerator and the emission factor of 0.086 lbs/MMBtu which was used as a basis for modeling analysis in the 1995 BACT determination. Permit to Operate No. 9671-AA001 required APSC to source test the incinerators to ensure compliance with the standard. Source tests conducted on EU ID 5 in 2012 revealed that the average (three 1-hr test runs) total particulate matter emission rate is 2.62 lb/hr. Condition 22.3 requires PM source tests at least once every five years to demonstrate compliance with the limit since the most recent source testing showed a significant margin of compliance.

Condition 23 contains a stationary source-wide sulfur content limit for liquid fuel (0.5 percent). However, this limit is BACT for EU IDs 4 through 6 only. The Permittee must record the sulfur content of each diesel fuel shipment to determine compliance with the sulfur content limit.

The Department determined that fuel-staged NO_X burners are BACT for the waste gas incinerators, and Condition 24 contains the associated emission limitation of 0.4 lb/MMBtu. Source tests conducted on EU ID 5 in 2006 showed NO_X emissions of 0.28 lb/MMBtu, and source tests conducted in 2012 on EU ID 5 showed NO_X emissions of 0.197 lb/MMBtu. Due to the large margin of compliance, source testing is required once every five years to determine compliance with the NO_X emission limit. Since the last two tests were conducted on EU ID 5, at least one NO_X test must be conducted on EU ID 4 or 6 during the life of Operating Permit AQ0082TVP03.

Condition 25 contains an ORL, and associated MR&R, from Minor Permit AQ0082MSS02 which prevented permitting due to 18 AAC 50.502(c)(3)(A) by restricting the annual hours of operation for EU IDs 8T, 8A, and 9A. EU ID 8T has been removed from the stationary source.

Conditions 26 through 28 contain ORLs and MR&R from Minor Permit AQ0082MSS03 for SO_2 and VOC emissions.

Conditions 29, Insignificant Emission Units

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

Factual Basis: The conditions reiterate the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions and require compliance for insignificant emissions units. Insignificant emissions units are not listed in operating permits unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance. However, the Permittee may not cause or allow their insignificant emission units to violate these standards.

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

Condition 29.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Conditions 30 and 31, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with applicable New Source Performance Standard (NSPS) provisions incorporated by reference, as listed in 18 AAC 50.040[3].

Most affected facilities subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 8A and 9A are subject to the requirements of NSPS Subpart IIII and therefore subject to Subpart A.

[3] EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

Condition 30 - The Permittee is subject to notification requirements in the event an existing facility[4] is reconstructed.

Condition 31 - Concealment of emissions prohibitions in 40 CFR 60.12 are applicable to EU IDs 8A and 9A.

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

Condition 32, 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 ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU IDs 8A and 9A are emergency engines that were manufactured in 2009.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs 8A and 9A. The Permittee may not cause or allow EU IDs 8A and 9A to violate these standards. These conditions also include MR&R specifically required in 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.

Condition 33, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 CFR 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and 50.040(b)(2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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 34 and 35, 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. The Permittee must comply with the requirements of 40 CFR 63 Subparts Y and EEEE and, therefore, must comply with the general provisions of Subpart A as specified in the provisions for the applicability of Subpart A in Table 1 to 40 CFR 63.560 in NESHAP Subpart Y and Table 12 to NESHAP Subpart EEEE.

[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 CFR 60.2.

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

Condition 36, NESHAP Subpart Y Requirements

Legal Basis: NESHAP 40 C.F.R. 63 Subpart Y and the associated general provisions in Subpart A apply to facilities engaged in marine tank vessel loading operations subject to MACT or RACT standards. NESHAP 40 C.F.R. 63.562(d) Subpart Y provides specific MACT and RACT standards for the VMT. Additionally, the VMT is specifically defined as an affected source under 40 CFR 63.561.

Factual Basis: These standards regulate HAP emissions during marine tank vessel loading and unloading operations.

The Permittee conducted VOC destruction testing on the incinerators (EU IDs 4 through 6) on June 21, 2007. The performance test demonstrated > 98 percent VOC destruction efficiency with lower incinerator combustion chamber temperatures at 1078 ºF for two-unit operation and 1074 ºF for single unit operation. VMT is required to operate these non-flare control devices at greater than a maximum of 50 ºF below these established temperatures.

There are four loading berths, EU IDs 47 through 50, at the VMT. EU IDs 47 and 48 are not equipped with vapor control system (VCS) and are no longer in service. EU IDs 49 and 50 are equipped with VCS. 40 C.F.R. EU IDs 49 and 50 are not limited to loading operations only when using the vapor controls. EU IDs 49 and 50 are also allowed uncontrolled loading operations when VMT is performing maintenance on the loading berth(s), in which case, VMT is subject to the maintenance loading allowances provided in 40 C.F.R. 63.562(d)(2)(ii)(B).

EU IDs 1 through 3 (power boilers) are considered air pollution control devices under Subpart Y because they burn the waste gas and excess vapors from marine tank vessel loading operations. Per 40 C.F.R. 63.563(b)(2)(ii) these units are exempt from the initial performance test required by 40 C.F.R. 63.563(b)(1) and 40 C.F.R. 63.565(d) and from the continuous monitoring required by 40 C.F.R. 63.564(e). Therefore, no baseline operating parameter for compliance demonstration with the standard was established for these boilers. On June 20, 2005, the Department requested that EPA provide an official determination regarding applicability of 40 C.F.R. 63.562(d)(2) to EU IDs 1 through 3 and received no response. NESHAP Subpart Y regulations do not include periodic testing or monitoring requirement to show compliance with the standard of 63.562(d)(2) for such exempted sources.

EU IDs 1 through 3 and the vapor collection system are not subject to the operation and maintenance (O&M) plan requirements of 63.562(e)(2) through (5), per EPA applicability letter dated August 1, 2000, because the O&M plan is targeted for air pollution control units equipped with continuous monitoring equipment.

VMT completed the initial performance testing required under 40 CFR 63.563(a)(3), 63.563(b)(1), and 63.565(b) on August 1-7, 1998.

Conditions 37 and 38, NESHAP Subpart EEEE and SS Requirements

Legal Basis: The Permittee owns and operates an organic liquid distribution (OLD) operation that is located at, or is part of, a major source of HAP emissions and therefore is subject to the NESHAP provisions of 40 C.F.R. 63 Subpart EEEE, in accordance with 40 C.F.R. 63.2334(a). NESHAP Subpart EEEE provides emission limitations, operating limits, and work practice standards for the affected emission units and references Subpart SS for requirements for associated closed vent systems, control devices, recovery devices, routing to a fuel gas system or a process, and continuous monitoring.

Factual Basis: The requirements of Subpart EEEE affect storage, transfer, and loading of organic liquids, defined as follows: any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP, or any crude oils downstream of the first point of custody transfer. Per 40 C.F.R. 63.2338(b), the affected sources at the VMT include the existing crude oil storage tanks, EU IDs 29 through 42. The stationary source does not utilize equipment leak components identified in 40 C.F.R. 63.2338(b)(3) or transfer racks, transport vehicles, or containers identified in 40 C.F.R. 63.2338(b)(2) through (5); therefore requirements for this equipment are not included in the permit.

The control devices (EU IDs 4 through 6) are thermal oxidizers and also incinerators as defined in 40 C.F.R. 63.981. Therefore, they differ from, and have different requirements, than a flare although they appear to be a shrouded flare. These incinerators are not the same as those with requirements under 18 AAC 50.050.

Condition 38 incorporates the applicable NESHAP Subpart SS requirements. The monitoring plan required under 40 C.F.R. 63.985(c)(1), and referenced in 40 C.F.R. 63.2366(b) for the incinerators, EU IDs 4 through 6, was submitted by the Permittee on August 20, 2007 (Alyeska Letter No. 13266) as part of the Notice of Initial Compliance required under 40 C.F.R. 63.2386(c).

Condition 39, Protection of Stratospheric Ozone, 40 CFR 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 39.1 requires compliance with the applicable requirements in 40 CFR 82, which are adopted 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 CFR 82 Subpart F.

Conditions 39.2 and 39.3 also require compliance with the applicable requirements adopted under 18 AAC 50.040(d). Conditions 39.2 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 39.3 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 Valdez Marine Terminal uses halon and is therefore subject to the federal regulations contained in 40 CFR 82.

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 this federal regulation. These conditions also incorporate applicable 40 CFR 82 requirements.

Condition 40, NESHAPs Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAPs, and requires record keeping for those determinations if required by the source classification.

Factual Basis: This condition requires the Permittee to notify the Department and the Administrator if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 CFR 63 and to keep records of applicability determinations and make those records available to the Department.

Condition 41, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Federal Administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). 40 CFR 70 Appendix A 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 CFR 60, 40 CFR 61, and 40 CFR 63. The reports themselves provide monitoring for compliance with this condition.

Conditions 42 through 44, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e) through (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) through (7).

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

Condition 45, Administration Fees

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

Conditions 46 and 47, Emission Fees

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.410 through 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: These emission fee conditions are Standard Permit Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). Since no emission unit or stationary source-specific conditions would better meet the requirements of AS 46.14.250, the Department concluded that the standard conditions best meet these requirements.

These standard conditions require 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 at 10 tons per year or greater (AS 46.14.250(h)(1)).

The conditions allow the Permittee to calculate 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 based on actual emissions must be 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.

Condition 48, 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 through 6, 8A, 9A, 18, 24 through 42, and 47 through 50.

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 Standard Operating Permit Condition VI – Good Air Pollution Control Practices pursuant to AS 46.14.010(e).

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 49, Dilution

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

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

Condition 50, 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.

Factual Basis: The Department used the language in Standard Permit Condition X – Reasonable Precautions to Prevent Fugitive Dust 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 51, Stack Injection

Legal Basis: 18 AAC 50.055 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 C.F.R. 71.2.

This condition requires compliance with the applicable requirement in 18 AAC 50.055(g). It 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). 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 ensured by inspections, because the unit or stack would need to be modified to accommodate stack injection.

Conditions 52 and 53, Air Pollution Prohibited

Legal Basis: 18 AAC 50.110 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 CFR 71.2.

This condition requires compliance with 18 AAC 50.110. 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 CFR 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in Standard Permit Condition 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 54, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain 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 70. Excess emission reporting under Condition 70 requires information on the steps taken to minimize emissions.

Condition 55, Open Burning

Legal Basis: 18 AAC 50.065 is included in the SIP approved by EPA. The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 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: http://dec.alaska.gov/air/ap/OpenBurn.htm.

Condition 55.1 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.

Condition 56, 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).

Conditions 57 through 59, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 57 and 59 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 58 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 57 through 59.

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

Condition 60, 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 61 through 64, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Conditions 62 through 64 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o), which are included in the SIP approved by EPA. Condition 61 contains the requirement in 18 AAC 50.345(l). The requirements in 18 AAC 50.345(l) through (o) constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 345(a). 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 65, Particulate Matter (PM) 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 PM source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 66, Recordkeeping Requirements

Legal Basis: This condition requires compliance with 40 CFR 71.6(a)(3)(ii)(A) and (B), which have been adopted by the Department under 18 AAC 50.040(j) and applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping and supplements the recordkeeping defined for specific conditions in the permit.

Condition 67, Certification

Legal Basis: All operating permits must contain a requirement to certify any permit application, report, affirmation, or compliance certification, per 18 AAC 50.345(j) and with the certification requirement in 18 AAC 50.205. Both requirements are part of the SIP approved by EPA.

Factual Basis: 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). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the operating report, even though it must still be submitted more frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 68, Submittals

Legal Basis: This condition requires the Permittee to comply with the standardized reporting requirements in 18 AAC 50.326(j) and applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit reports, compliance certifications, and other submittals required by this permit, either electronically or by hard copy. This condition supplements the standard reporting and notification requirements of this permit.

Condition 69, 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 70, Excess Emission and Permit Deviation Reports

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). The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii) and 71.6(c)(1). 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.

The Department used the language in Standard Permit Condition III – Excess Emissions and Permit Deviation Reports for the permit condition. The Department used the notification form in Standard Permit Condition IV for the notification requirements.

Condition 71, Operating Reports

Legal Basis: This condition requires compliance with the applicable requirement in 18 AAC 50.346(b)(6). The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) and 71.6(c)(1).

Factual Basis: The Department used the language in Standard Operating Permit Condition VII – Operating Reports for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements 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 72, 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 72.2 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 73, 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 as required under 40 CFR 51.321. The emission inventory requirement applies to sources defined as point sources in 40 CFR 51.20. The state must report all data elements in Table 2A of Appendix A to Subpart A of 40 CFR 51 to EPA.

Factual Basis: The condition is Standard Permit Condition XV – Emission Inventory Reporting as adopted into regulation pursuant to AS 46.14.010(e).

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1)). A due date of April 30 pressures the Department to have sufficient time to enter the data into EPA's electronic reporting system. Therefore, Permittees should consider submitting the emission inventory through Air Online Services, Permittee Portal.

The air emissions reporting requirements under 40 CFR Part 51 Subpart A apply to states; however, states rely on information provided by point sources to meet the reporting requirements. The Department has determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 CFR 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 CFR Part 51). All Type A sources are also classified as Type B sources. However the Department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

Condition 74, Permit Applications and Submittals

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

Factual Basis: The condition is Standard Permit Condition XIV as adopted into regulation pursuant to AS 46.14.010(e). Standard Permit Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee. The Department revised the standard condition language to provide the current address provided by EPA.

Conditions 75 through 77, Permit Changes and Revisions Requirements

Legal Basis: 40 CFR 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 CFR 71.6(a)(12) and (13) specify changes that may be made without a permit revision and 40 CFR 71.6(a)(8) 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 CFR 71.6(a)(13)(iii).

Condition 78, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue stationary source operation in accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 CFR 71.5, 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 CFR 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 CFR 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 CFR 71.5(c) and remits payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 CFR 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 CFR 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 79 through 83, 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 CFR 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 84 and 85, Permit Shield

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

Factual Basis: Table D of Operating Permit AQ0082TVP03 shows the permit shield the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits, and inspection reports.