

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT
RESPONSE TO COMMENTS

Owner Name: Alyeska Pipeline Service Company
Public Comment Closing Date: May 23, 2011
Stationary Source Name: Valdez Marine Terminal

Permit No. AQ0082TVP02

The public comment period for the Alyeska Pipeline Service Company (APSC), Valdez Marine Terminal operating permit closed on May 23, 2011. Comments were received from APSC and Prince William Sound Regional Citizens' Advisory Council (PWSRCAC), and appear exactly as submitted. This document provides ADEC's responses to comments received.

From APSC:

1. Section 1, Stationary Source Information

APSC Request: Update stationary source information in Section 1 as indicated in the marked-up draft permit.

Basis: Updates information as appropriate.

Response from ADEC: *ADEC agrees to update the stationary source information contained in Section 1 of the permit.*

2. Table A

APSC Request: Update Table A in Section 2 as indicated in the marked-up draft permit.

Basis: The description for EU 4-6 (and footnote 2) have been changed to clarify that the units are thermal oxidizer air pollution control devices, not incinerators, e.g., CISWI. Similar changes were made for EU 79-80.

Response from ADEC: *ADEC agrees to change the sub-title description for EU IDs 4 – 6 from “Waste Gas Incinerators” to “Air Pollution Control Devices” and the related revision to table footnote 2, as requested. However, ADEC does not accept the revisions requested to delete “Waste Gas” as fuel burned in EU IDs 4 – 6 because waste gas are being burned in these units. ADEC also does not accept the proposed deletion of “waste gas incinerator” under the “Emission Unit Description” column but instead changed to “waste gas combustor” to give EU IDs 4 – 6 a more appropriate description. ADEC agrees to add “Air Pollution Control Devices” under the description for EU IDs 79 – 80, as requested, but does not accept the proposed deletion of “vapors” because EU IDs 79 – 80 do burn vapors.*

Basis: EU 9 has been removed. EU 8 has been permanently taken out of service and will be removed in summer 2011. EU 8T has been removed.

Response from ADEC: ADEC agrees to delete EU IDs 8, 8A and 9 from Table A as requested. In addition table footnote 4 has been deleted. To explain the removal of EU IDs 8T, 8, and 9 from the inventory table, the following statement has been added to table footnote 3: “EU ID 8T is a temporary and portable unit that is intended to be used only in place of EU IDs 8, 9, 8A, or 9A, if necessary, during the installation phase of EU IDs 8A and 9A. EU IDs 8, 9, and 8T have been removed from the source and have been taken out of service as of March 2011. Therefore, they are not included in this table.”

Basis: EU 18-20 and 22-28 are temporary equipment not permanently located at VMT.

Response from ADEC: ADEC agrees to change the construction/installation dates for EU IDs 18 – 20 and 22 – 28 to “NA” (not applicable), as requested.

3. Table A, Footnote 4

APSC Request: Delete Footnote 4 of Table A as indicated in the marked-up draft permit.

Basis: See above.

Response from ADEC: In accordance with response to APSC Comment #2, ADEC agrees to delete table footnote 4 as requested.

4. Table A, Footnote 5

APSC Request: Update Footnote 5 of Table A as indicated in the marked-up draft permit.

Basis: The portion of the footnote deleted is incorrect, and also irrelevant. Alyeska has deleted it from the attached marked draft permit.

Response from ADEC: (Now footnote 4). ADEC agrees the underlying basis of this footnote is misstated. The basis of Conditions 20.1a (now 19.1a) and 20.1b (now 19.1b) are to protect ambient air quality. However the text is redundant with the statement of basis for this condition. Instead of deleting the second sentence: “The boilers are subject to operational limits in Conditions 20.1a and 20.1b to keep them insignificant under 18 AAC 50.326(e)”, ADEC modified it to state: “The boilers are subject to operational limits in Conditions 20.1a and 20.1b (now Conditions 19.1a and 19.1b) to demonstrate that the stationary source does not cause or contribute to a violation of an ambient air quality standard or increment.”

5. Condition 1.2

APSC Request: Delete “for the remainder of the permit term” from condition 1.2.

Basis: The language "for the duration of the permit term" addressing insignificant EU is unnecessary. ADEC has previously indicated concern about "additional complexities" without this language. Alyeska disagrees and finds no value in the text. If anything it confuses the Permittee and Department staff as to its meaning and purpose. Alyeska already tracks operation hours and emissions from these EU and finds no "complexity" associated with the monitoring or permit condition; once equipment emissions fall below the thresholds no additional monitoring is required. In addition, suppose an insignificant EU becomes significant during the 1st permit year and a VE is conducted. Then, the EU is not operated (except for maintenance checks) for the remainder of the permit term. Due to ADEC's language, a VE must be performed every year even though the unit is clearly insignificant. This monitoring is neither required nor necessary under Part 71.

Response from ADEC: *ADEC does not agree to the request to delete the phrase "for the duration of the permit term" at the end of Condition 1.2. The condition's intent is to require VE/PM monitoring for the duration of the permit term once a unit exceeds the significant threshold rather than switching in and out of a permit requirement. This is not a confusing requirement since Condition 3.1 specifies monitoring only on units that are in operation. ADEC does not require an emission unit to be started solely for the purpose of conducting a visible emissions observation. The distinction is however that an EU that becomes significant during the permit term remains subject to periodic monitoring, recordkeeping and reporting beyond an annual certification for the remainder of the permit term, and thus does not pose the added complexity of a unit switching in and out of differing MR&R regions based on changes in current actual emissions. A determination of the EU classification status can be re-visited during the next renewal of this permit.*

6. Conditions 2 and 5-7

APSC Request: Delete condition 2 and conditions 5 – 7 for marine vessel visible emissions.

Basis: Based upon the plain language of the definition of a facility under AS 46.14.990, and supported by 40 C.F.R. 70.2, and 40 C.F.R. 51.166(b)(5), and EPA guidance (EPA, 2/29/1996), it is clear that marine vessel emissions are not part of the VMT stationary source for purposes of a Title V permit. Said another way marine vessel applicable requirements are not applicable requirements attributable to a shore side facility, including the VMT stationary source. This issue has been decided by EPA Region 10, and the Department has recently agreed with that analysis in principle in the CIPL Title V Permit. In addition, the genesis of the existing marine vessel visible emission terms in the VMT Title V permit did not arise under PSD or other Title I permitting action. Rather, Department staff inserted them into the permit without regard to an underlying Title I or other applicable requirement.

Note our comments do not address the unrelated issue of what constitutes a stationary source for purposes of PSD.

Regulatory Background

The ADEC definition of building, structure, facility, or installation (i.e., “stationary source”) excludes tank vessels in the trade of transporting cargo. The following state statute and EPA and ADEC regulations demonstrate this regulatory distinction:

- 18 AAC 50.990(105) “stationary source” has the meaning given in AS 46.14.990.
- AS 46.14.990(27) “stationary source” has the meaning given 40 C.F.R. 51.166(b) or 40 C.F.R. 70.2, depending on the context in which the term is used.
- 40 C.F.R. 70.2 “stationary source” means any building, structure, facility, or installation that emits or may emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.
- 40 C.F.R. 51.166(b)(5) “stationary source” means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
- 18 AAC 50.990(17) “building, structure, facility, or installation” has the meaning given in AS 46.14.990.
- AS 46.14.990(4) "building, structure, facility, or installation" has the meaning given in 40 C.F.R. 51.166(b) except that it includes a vessel (A) that is anchored or otherwise permanently or temporarily stationed within a locale; (B) upon which a stationary source or stationary sources are located; not including stationary sources engaged in propulsion of the vessel; and (C) that is used for an industrial process, excluding a tank vessel in the trade of transporting cargo; in this subparagraph, "industrial process" means the extraction of raw material or the physical or chemical transformation of raw material in either composition or character (emphasis added).

As shown above, State statute, and EPA and ADEC regulations work together to distinguish marine vessels from the shore side facilities at which they temporarily dock or berth. Furthermore, while the federal definition in 40 C.F.R. 51.166(b)(6) of “building, structure, facility, or installation” does not expressly exclude tank vessels in the trade of transporting cargo, EPA Region 10 policy has firmly stated that opacity and particulate matter monitoring for berthed vessels are not a requirement of shore side Title V permit (EPA, 2/29/1996). That policy was specific to Title V permitting and has not been overturned by the Region, or at the national level. Further, Alaska law generally requires that the State’s air program not exceed the federal program. In the Region 10 policy EPA stated to Oregon DEQ that, “Even when there is common ownership, though, the facility may not reasonably be expected to control all ship board emissions. For example, the facility generally has little ability to assure that the docked ships comply with OAR 340-030-0470 which requires ships to comply with opacity and particulate standards.” As such, EPA found that “OAR-340-030-0470 is not an applicable requirement for the Title V permitted facility” and "relieves the facility from the responsibility for assuring that the ships comply.” That analysis precisely analogizes with the VMT stationary source: marine tank vessels temporarily berth at the VMT to load crude oil. Some of the vessels are owned or operated by affiliates of TAPS owners and some are not related at all (e.g., Tesoro).

Previous Imposition of Marine Vessel Visible Emissions Monitoring Conditions

As the Department is aware, in 2004 Alyeska appealed the continuing imposition of the marine vessel visible emissions monitoring terms in Title V Operating Permit No.

AQ0082TVP01 issued November 2003. The issue was not resolved through formal adjudication or settlement agreement but through an informal “undocumented” agreement with the Department prior to the beginning of oral arguments on February 1, 2005 with the state hearings officer. At the time, Alyeska management was sensitive to ADEC management’s concern that marine vessel opacity be given special attention, and as such agreed to continue vessel monitoring with the understanding that Alyeska had no real control over marine vessel berth side emissions. This agreement was made without Alyeska’s knowledge of EPA’s 29, 1996 guidance, which clarified that marine vessel compliance is not the responsibility of a stationary source, nor are vessel opacity standards or monitoring provisions a Title V requirement. This information would have been a valuable part of the discussions between Alyeska and Department management because it clearly articulates that the vessels are responsible for their opacity, and that the Department must look exclusively to the vessels for compliance.

The Department’s response to CIPL’s draft permit comments, dated February 28, 2011, implies that other SIC 4491 Marine Cargo facilities such as the VMT can be handled differently. Alyeska sees no distinction between the CIPL facility and the VMT. Marine vessels dock or berth at both facilities to load crude oil. Vessels may or may not be affiliated. The fact that a vessel at one facility may exceed the opacity standard and not at the other is not a legal basis for different treatment. Indeed, the Region 10 policy precisely states that compliance rests with the vessel and not the shore side facility. Neither federal nor state law distinguishes who the applicable requirement rests with based upon the level of compliance. The fundamental concept is control, and EPA has clearly stated that control of opacity lies with the vessel and not the shore side facility. Alyeska expects to be treated consistent with other marine shore side facilities in the state of Alaska. State law requires fairness in treatment. If the Department wishes to pursue another course, we recommend rulemaking where the state and all shore side marine facilities discuss this matter consistent with the state administrative procedures act.

Response from ADEC: *The Department chose not to delete Condition 2 and Conditions 5 through 7 for tanker vessel visible emissions and surveillance. Contrary to APSC’s statement that “the existing marine vessel visible emission terms in the VMT Title V permit did not arise under PSD or other Title I permitting action,” this issue was re-evaluated under Construction Permit No. 082CP05 upon APSC’s request to remove the marine vessel visible emission terms as part of the revisions requested for Permit No. 9671-AA001. It was decided then through construction permitting action under Permit No. 082CP05 issued September 25, 2003 that the marine vessel visible emission condition be retained in the permit with some modifications to the monitoring requirements. The Department modified the monitoring, record keeping and reporting text to more closely follow the text in the expiring permit and removed additional record keeping from the draft final permit. ADEC has added the citation “Construction Permit No. 082CP05, 9/23/03” under Condition 5.3.*

ADEC agrees with APSC’s assertion that “the fundamental concept is control” in determining applicability of the rule. ADEC asserts that the marine vessels are under APSC’s operational control during the loading and unloading of crude oil, which is the main

reason for the marine vessels existence at the stationary source. The TAR for Permit No. 082CP05 states:

“The Department counters that loading and unloading operations at the VMT are under APSCs operational control. The activities are logically part of the Terminal Stationary Source. APSC and the moored tanker vessel are jointly responsible for compliance with the marine vessel visible emission standard. In addition, APSC’s Port Manual states that terms and conditions of the Port Manual are enforceable as contractual obligations. These rules would give APSC control over the loading and unloading activities. If not for the existence of the terminal, the tanker vessels would not be there. Therefore it is the responsibility of APSC to ensure that the tanker vessels comply while moored to the terminal. As such, the Department is logically requiring APSC, as the owner and operator of the terminal, to continue visible emission surveillance on moored tanker vessels at the terminal.”

ADEC understands that APSC does not have a direct control of the vessels’ non-permitted activities-related exhaust emissions (e.g. propulsion), hence, as provided in Condition 5.1b, VMT is required only to contact the tanker vessel if a Method 9 observation shows that visible emissions exceed the State standard, and turn over to the tanker vessel the responsibility to take corrective actions to comply with the opacity standard and prevent recurrence. The distinction here should be clear: Alyeska’s permit requires them to monitor those emissions which are directly related to tanker vessel operations at the stationary source as part of the stationary source’s permitted activities. Alyeska acknowledges this fact in the “informal agreement to continue monitoring” as stated above on Page 4 in APSC’s comment. The Department does not require Alyeska to regulate or enforce State visible emissions limitations on either partially-owned or 3rd party marine vessels. With regards to EPA Region X policy (discussed in Elizabeth Waddell (AT-082)’s letter of Feb 29, 1996) EPA concluded that it was not reasonable to expect the facility to ensure¹ that the vessel moored alongside the permitted stationary source comply with Oregon Department of Environmental Quality, which is consistent with ADEC’s implementation of only the requirement to monitor and report vessel emissions. ADEC does not see any conflict with EPA’s policy and ADEC’s implementation in the proposed permit, brought forward from the previous Title V permit. Further, State rulemaking is not required to allow ADEC to put applicable requirements into Title V permits.

The Department has precedent by which a Permittee is required to monitor emissions outside of the source. For example, permits issued to Teck Alaska require the Permittee to monitor fugitive dust from concentrate vessel loading and from Delong Mountain transportation System traffic.

ADEC does acknowledge that the Technical Report erroneously identifies APSC as the owner of the Valdez Marine Terminal. APSC has shared that assets are owned by the owner corporations, not APSC.

¹ *Emphasis added by ADEC.*

In comparison with ADEC's decision on Cook Inlet Pipe Line's (CIPL) Title V permit, ADEC did not include the same requirements to CIPL's permit based on the fact that CIPL's tanker vessel loading processes and physical configuration of the Christy Lee Loading Platform (CLLP) while tanker vessels are moored and conducting loading operations are entirely different from that of VMT, as pointed out in the following:

- *CIPL does not conduct off-loading or de-ballasting operations at the CLLP, processes that would require operation of the shipboard inert gas generators. These emission units would be the source of emissions that are considered directly related to vessel operations at the stationary source. In addition, the vessels inert gas generators are not operated during loading operations, the only operation conducted at CLLP.*
- *All the marine vessel tankers that call at CLLP to take on crude oil cargo are EPA Tier II certified to meet MARPOL Annex VI.*
- *CIPL handles a much lower periodicity of tanker vessel traffic in a remote area of Cook Inlet not frequented by the general public, again a condition not at all similar to Alyeska VMT in Valdez. Tanker vessels are alongside CLLP conducting on-load operations for approximately 6% of the time² compared to Alyeska VMT which has a tanker conducting a port of call to conduct loading operations almost every day.*

Such vessels at CIPL remain independently subject to the requirements of 18 AAC 50.070 directly enforced by the State.

In summary, ADEC finds it has not established new tanker vessel policy for CIPL that conflicts with the 2003 VMT construction permit decision. The preceding July 2002 CIPL operating permit, which was relatively contemporaneous with that of VMT's preceding permit, also did not require tanker vessel surveillance.

ADEC has retained marine vessel tanker surveillance text fundamentally equivalent to that of the expiring VMT operating permit.

7. Condition 8.2

APSC Request: Delete “for the remainder of the permit term” from condition 8.2.

Basis: *See above.*

Response from ADEC: *APSC requests deletion of the phrase “for the remainder of the permit term” in Condition 8.2. ADEC denies this request, consistent with the response provided in Comment 5. See ADEC's Response to APSC Comment #5.*

8. Condition 14

APSC Request: Delete condition 14.

² Data provided by Cook Inlet Pipeline Co., 28 February 2011.

Basis: As shown in the marked up permit, Alyeska requests that ADEC eliminate condition 14. We further suggest ADEC revise the draft statement of basis document to explain why no monitoring is necessary, and we have proposed revisions therein the draft SOB.

Conditions 14.1-14.3

The new monitoring requirements are unnecessary to demonstrate compliance with the underlying SO₂ standard. As ADEC notes in the statement of basis, the H₂S content of the crude/waste gas is less than 1 ppm, an extremely low value. Alyeska is unaware of any reason the H₂S content of the gas would increase significantly. However, let us assume that the H₂S content increases by 1,000% to 10 ppm. As ADEC has previously noted the H₂S must exceed 8,000 ppm to violate the SO₂ standard. This value is 80,000% higher than our assumed value of 10 ppm. Clearly there is zero chance of violating the standard, and therefore no monitoring is needed or necessary. We are concerned that in this case, ADEC is simply fulfilling an assumed obligation to require MR&R for any and all underlying standards, but we note that "no monitoring required" is an acceptable and previously used approach in such cases where compliance is assured inherently, e.g., ADEC does not require VE monitoring for equipment burning natural gas.

Response from ADEC: *ADEC has changed the monitoring requirement from H₂S in the draft permit, to total sulfur in the proposed permit to capture the contribution of sulfur content in the blanket vapors used as waste gas. ADEC also changed the monitoring frequency for total sulfur content of the waste gas burned in EU IDs 1 – 6 from “annually” to “once during the life of this permit and no later than five years from the last test ...” to demonstrate compliance with the sulfur compound emission standard in Condition 14, consistent with the decision made on the significant revision requested in APSC Letter No 1513 dated August 23, 2004 and Partial Agreement signed June 18, 2004, which was reflected in Revision 1 to Permit No. AQ0082TVP01. The following text from the Statement of Basis of the initial Tile V Permit No. AQ0082TVP01 Revision 3 explains the relevant background of this issue:*

“Operating Permit No. 082TVP01 issued November 28, 2003 included condition 5.5 that required semi-annual analyses for H₂S by EPA Method 11 in samples representative of the waste gas burned in Source IDs 1 - 3 to verify compliance with the SO₂ standard in condition 5. However, the Permittee contested the semi-annual analyses frequency as excessive and unnecessary considering it is unlikely that analytical results will show H₂S amounts greater than 4000 ppm. The Department agreed to grant removal of the semi-annual monitoring requirement through an amendment request from the Permittee provided the Permittee will perform Method 11 analyses once that show H₂S concentrations in the waste gas indicative of the relatively low values previously reported for waste gas. Such test shall be considered sufficient for the life of the permit to demonstrate compliance with sulfur compound emissions standard for the waste gas burned in Source ID(s) 1 – 3. The test was performed on June 23, 2004 with relatively low H₂S results, averaged at 0.31 ppm. As requested by the Permittee, this significant operating permit revision (AQ0082TVP01

Revision 1) addresses the removal of the semi-annual monitoring previously required in condition 5.5.”

Conditions 14.4-14.6

EU 18 burns diesel or propane. Compliance while burning diesel is addressed under Conditions 14.10 - 14.13. EU 79 and 80 burn propane as supplementary fuel in addition to vapors, which is addressed in Conditions 14.7-14.9. Therefore we assume ADEC is addressing propane under Conditions 14.4 - 14.6.

Condition 14.4 is flawed in two ways. First, the requirement to “obtain a semiannual statement from the fuel supplier” is appropriate for the continuous supply of natural gas by pipeline, not for propane purchased in bulk containers. As we understand ADEC is aware, EU 18 is also an intermittently operated unit that may not be utilized for a year or more. How will Alyeska request a semiannual statement for a hypothetical supplier of propane when no propane was purchased?

Second, the sulfur content of propane is limited by federal law to 10 gr S/100 scf, which is equivalent to 169 ppm. Therefore Alyeska cannot purchase propane with a sulfur content higher than 169 ppm. As discussed above, the level of sulfur required to violate the SO₂ standard is about 8,000 ppm. Alyeska fails to understand how any propane fired equipment is capable of violating the state SO₂ standard. The simple fact is a violation is impossible while burning propane. We again believe that ADEC is fulfilling an assumed obligation to require MR&R for any and all underlying standards. This approach is clearly not required under Part 71, and serves no purpose. However, it does create unnecessary work for the Permittee and ADEC, which is clearly not an intended purpose of a permit term. If ADEC believes necessary, Alyeska would be very comfortable certifying compliance via a statement that only propane was burned as supplementary fuel in EU 79 and 80.

Response from ADEC: *The “fuel gas” in Conditions 14.4 through 14.6 refers to the propane fuel co-burned in EU IDs 18, 79, and 80. ADEC agrees to remove these conditions. Based on the Gas Processors Association (GPA) product specifications for liquefied petroleum gases, commercial propane sulfur content is at 185 ppmw as S (254 ppmv as S, 239 ppmv as H₂S) maximum and therefore would not exceed the 500 ppm SO₂ standard in Condition 14. ADEC replaced the conditions with a requirement to include a statement in each operating report that only propane was burned as supplementary fuel in EU ID 18 (if in operation during the reporting period) and EU IDs 79 and 80. The statement of basis is likewise modified to reflect this revision. Conditions 14.a through 14.6b are deleted and Condition 14.4 now reads, as follows:*

For ~~Fuel Gas~~ Propane Fuel (EU IDs 18, 79, and 80)

14.2 ~~Monitoring.~~ The Permittee shall ~~either~~ include a statement in each operating report under Condition 83 that only propane was burned as supplementary fuel in EU ID 18 (if in operation during the reporting period) and EU IDs 79 and 80.

Conditions 14.7-14.9

Alyeska is unsure of the ADEC's intent in Condition 14.7. The condition describes "analyzing a sample of vapors burned" and then indicates "as described in condition 27.3 on a quarterly basis."

Condition 27.3 requires daily analyses of H₂S content, not quarterly. The samples are of ballast water, not vapors burned. Alyeska believes the monitoring under Condition 27.3 could be used to demonstrate compliance with the SO₂ standard if that is ADEC's intent. No additional monitoring is necessary because there is not enough H₂S in the ballast water to generate SO₂ emissions anywhere near 500 ppm SO₂ in the stack gas of EU 79 and 80. Calculations using the maximum SO₂ allowed (9.2 tpy) from EU 79 and 80 show a worst case SO₂ concentration of 32 ppm in the stack gas. To violate the SO₂ standard, Alyeska would need to emit more than 10 times the SO₂ emissions allowed under condition 27. As a result, compliance with Condition 27 demonstrates compliance with the SIP standard, and the ADEC could indicate this finding in the statement of basis, or if deemed necessary, in a reference to Condition 27.3 under Condition 14.7.

Response from ADEC: *Draft Condition 14.7 (now 14.5) requires the Permittee to demonstrate compliance with the sulfur compound emissions standard in Condition 14 by monitoring and analyzing a sample of the vapors burned from the ballast water treatment system on a quarterly basis using an approved method specified in 18 AAC 50.035(c). However, the Statement of Basis states that compliance with the sulfur compound emissions standard in Condition 14 is demonstrated by monitoring and analyzing the H₂S content of the ballast water treatment vapors as described in draft Condition 27.3 (now 25.3), which requires daily monitoring. ADEC agrees with APSC's assertion that compliance with the sulfur compound emissions standard in Condition 14 could be demonstrated through compliance with the owner requested limit (ORL) monitoring in draft Condition 27 (now 25). To streamline and simplify MR&R requirements for ballast water vapors under Condition 14, draft Condition 14.7 (now 14.5) has been revised to reference the ORL in draft Condition 27 (now 25) and associated MR&R to demonstrate compliance with the standard in Condition 14. Conditions 14.7 through 14.9 (now 14.5 through 14.6) are revised to read, as follows:*

- 14.5 Monitoring and Recordkeeping.*** *The Permittee shall demonstrate compliance with the sulfur compound emissions standard in Condition 14 by*
- a. complying with the owner requested limit in Condition 27³; and*
 - b. monitoring and analyzing a sample of the vapors burned from the ballast water treatment system on a quarterly basis using an approved method specified in 18 AAC 50.035(e); recording in accordance with Conditions 27.2 through 27.8 and 27.10.*

³ Compliance with the ORL in Condition 27 to limit the combined SO₂ emissions of EU IDs 79 and 80 to 9.2 tons per consecutive twelve-month period will assure compliance with the 500-ppm SO₂ emission limit of Condition 14.

14.6 Recordkeeping. *Keep records of the total sulfur concentration analyses performed under Condition 14.7*

14.7 Reporting. *The Permittee shall report as excess emissions, in accordance with Condition 87, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 14.*

a. *<Deleted>*

b. *<Deleted>*

Relevant to these revisions, ADEC has also added a gap-fill operating report requirement in draft Condition 27 (now 25), as follows:

25.10 *Include with the operating report required under Condition 88 the monthly and rolling 12-month SO₂ emissions of the RTOs (EU IDs 79 and 80) as calculated under Conditions 27.7 and 27.8 for the period covered by the report.*

The Department further updated the SOB to show that the maximum H₂S from the BWT system does not approach that equivalent to the state standard.

Conditions 14.10-14.13

As Alyeska has stated previously, facilities burning No. 2 or lighter diesel fuel are incapable of violating the SO₂ standard. ADEC's own standard language used in the statement of basis for operating permits (e.g., the existing VMT operating permit) states (emphasis added) "Fuel containing no more than 0.75% sulfur by weight will always comply with the emission standard."

The current monitoring and recordkeeping is unnecessary. Alyeska is limited by the permit to 0.5% sulfur fuel oil. By specification No. 2 diesel, No. 1 diesel, and ULSD all meet this limit. Alyeska has never, nor will it ever burn any high sulfur heavy fuel oil such as residual fuel in these EU, and we are very comfortable certifying compliance based on this fact. We also note that Condition 14.11.b.ii repeats the language in 14.11.b.i rather than the standard language regarding fuel sulfur testing.

Response from ADEC: *ADEC does not agree to the deletion of draft Conditions 14.10 through 14.13 (now 14.7 through 14.10) as requested. These conditions are Standard Permit Condition XI adopted by reference under 18 AAC 50.346(c). Draft Condition 14.11a (now 14.8a) addresses fuel grades requiring less than 0.5 percent sulfur content (such as No. 2 diesel, No. 1 diesel, and ULSD) by only requiring recordkeeping and reporting of receipts. On the other hand, draft Condition 14.11b (now 14.8b) provides an option for fuels with sulfur content at 0.5 percent or more to show compliance through sulfur content test results. Keeping this option in the permit would give the Permittee the flexibility to provide other means of compliance demonstration with the State sulfur compound emission standards rather than reporting as noncompliant if the sulfur content was more than 0.5 percent because such sulfur content level does not necessarily mean exceeding the 500 ppm State standard. ADEC has corrected draft Condition 14.11b(i) (now 14.8b(i)) to read "test the fuel for sulfur content; or".*

9. Conditions 15.5 and 15.6

APSC Request: Update conditions 15.5 and 15.6 to be consistent with underlying construction permit.

Basis: The proposed language is consistent with the existing operating permit and underlying construction permit.

Response from ADEC: ADEC revised Condition 15.5 to match the language in Permit No. 082CP05 Exhibit C, where this condition originated. The condition now reads: “Calibrate, operate, and maintain the continuous monitoring systems used in Conditions 15.1 and 15.3 in good working order and in accordance with the ~~according to~~ manufacturer’s specifications procedures or other written documentation submitted to the Department by the Permittee.”

ADEC does not agree with the proposed deletion of draft Conditions 15.5a and 15.6a. Draft Condition 15.5a was added as gap filling to ensure accuracy of the in-line calorimeter or in-line gas chromatograph by requiring a semi-annual comparison testing of the waste gas for heat content using a method approved in 18 AAC 50.035. Condition 15.6a was added to clarify that heat input calculations are to be done for each type of fuel burned since EU IDs 1 – 6 use both liquid and gaseous fuels. ADEC corrected the referenced condition in Condition 15.8 from 15.a to 15.6b.

10. Condition 16

APSC Request: Delete, “For each month, the Permittee shall” in Condition 16.1.

Basis: The deleted phrase is redundant.

Response from ADEC: ADEC corrected the redundancy in Condition 16.1. The condition now reads, as follows: “~~For each month, the Permittee shall~~ record the operational hours of each of EU IDs 8 – 16 for each month and total the monthly operating hours for the most recent consecutive 12-month period.”

11. Table B

APSC Request: Delete “maximum” in Table B.

Basis: The proposed language for the limit is consistent with the existing operating permit and underlying construction permit.

Response from ADEC: ADEC agrees to delete the word “maximum” in Table B for the reason stated in this comment. This deletion does not affect the underlying context of the operational limits imposed.

12. Condition 18.5.a-c

APSC Request: Delete condition 18.5a – c.

Basis: The proposed language (after deletion) is consistent with the existing operating permit and underlying construction permit.

Response from ADEC: *ADEC agrees to remove the additional reporting elements that were tabulated in Conditions 18.5 a-c. Staff should use judgment and decide case-by-case whether a given excess emission or permit deviation event warrants APSC to submit supplemental support such as a root cause assessment and emission rate estimate in lieu of a carte blanche permit obligation to provide supplemental information for any event. .*

13. Conditions 19 and 20.5i

APSC Request: Delete conditions 19 and reference to condition 19 in condition 20.5i.

Basis: Alyeska no longer used the method described in condition 19 and does not seek the option of using it in the future. Please delete the method.

Response from ADEC: *ADEC agrees to remove the optional methodology for calculating the volume of tank bottoms to be processed, as described in draft Condition 19 and reference in draft Condition 20.5i (now 19.5i).*

14. Condition 20.9

APSC Request: Delete condition 20.9.

Basis: The proposed language is consistent with the existing operating permit and underlying construction permit.

Response from ADEC: *ADEC added draft Condition 20.9 (now 19.9) to ensure that EU IDs 24 – 27 retain their non-road status. The owner requested limits to avoid Prevention of Significant Deterioration (PSD) classification of the stationary source were based on the fact that EU IDs 24 – 27 are non-road engines. Hence, these units' potential emissions were not included in determining PSD classification and are exempt from the SIP standards and associated MR&R. If circumstances change, then ADEC and Alyeska would need to revisit the original assumptions against the new circumstances to see if the limits continue to meet their stated purpose. Therefore, ADEC retains this condition as written, except it removed the reporting obligation. Records will be available to the compliance officer upon request.*

15. Conditions 22.3 and 22.4

APSC Request: Update condition 22.3 and delete condition 22.4 per the marked-up draft permit.

Basis: The proposed language is consistent with the treatment of other EU for compliance with the SIP PM limit. Alyeska believes the same approach should be used for compliance with the BACT limit.

Response from ADEC:

Regarding deletion of Condition 21.4, the waste gas incinerators have not been tested for PM since 1998. Although this last test was one third of the limit, the Department has an obligation to consider periodic monitoring to ensure compliance with the PM BACT emission rate during the relevant timeframe of the permit. It is reasonable to retest these units.

Regarding changes to Condition 21.3, the Department opted to delete Condition 21.3 instead of editing that Condition because the Department does not have an assessment that correlates 10% opacity as equivalent to the lb/hr emission rate, the Department is requiring five-year testing instead of retaining the conditional testing.

16. Condition 24.2a

APSC Request: Revise condition 24.2a as indicated in the marked-up draft permit.

Basis: Alyeska requests an additional year to plan and execute the required stack test. The additional time will ensure that regardless of when the permit is issued, the test can be scheduled during the summer months when vapor generation rates and increased WGI usage provide representative test conditions

Response from ADEC: *Draft Condition 24.2a (now 23.2a) requires NO_x source testing on one of EU IDs 4 – 6 no later than five years from the date of the last source test, or within 1 year of the effective date of this permit. The latest NO_x source testing conducted on one of these units was done on June 6, 2006, which would be more than 5 years from effective date of this renewal permit. The requested revision to “within 2 years of the effective date of this permit” would put the next source testing schedule due date to at least seven years from the previous one. APSC may conduct the source test even before the permit’s issuance and would still be considered as compliance with the periodic testing required in the pending renewal permit. ADEC finds it reasonable that, at the latest, within one year from the permit’s effective date is sufficient to schedule a source test during summer months regardless of when the permit is issued. Therefore, ADEC retains this condition as written.*

17. Condition 24.3.e-f

APSC Request: Delete conditions 24.3e – f.

Basis: These parameters are either not directly measured by the test methods or not necessary to determine NO_x emissions.

***Response from ADEC:** ADEC does not agree to the deletions requested. The parameters listed in draft Condition 24.3e (now 23.3e; Combustion air flow) and Condition 24.3f (now 23.3f; Inlet and outlet VOC, if measurement required by 40 C.F.R. 63) are specifically required in Construction Permit No. 082CP05 issued September 25, 2003 (as part of the revisions made to Permit No. 9671-AA001), and therefore cannot be revised through a Title V (operating) permit action. Such revision may be requested and evaluated through a Title I (construction) permit action.*

18. Condition 26

APSC Request: Delete condition 26.

Basis: EU 8T is no longer located at the VMT.

***Response from ADEC:** ADEC agrees to delete draft Condition 26 as requested.*

19. Condition 28

APSC Request: Correct error in condition 28.

Basis: Corrected referencing error.

***Response from ADEC:** ADEC agrees with the correction pointed out in this comment. The referenced emission units now read "EU IDs ~~75-79~~ – 80".*

20. Condition 29

APSC Request: Update emission units in condition 29.

Basis: EU 9 has been removed. EU 8 is no longer in service and will be physically removed in the Summer of 2011. EU 8T has been removed

***Response from ADEC:** ADEC agrees to delete references to EU IDs 8 and 9 throughout the permit and Statement of Basis since these units are no longer in service.*

21. Condition 30.1

APSC Request: Delete condition 30.1.

Basis: The obligation under Condition 30.1 does not apply to any EU at VMT, and is therefore not a Title 5 applicable requirement. 40 C.F.R. 50.15(d) applies only at some hypothetical future date in the event an existing facility is reconstructed.

***Response from ADEC:** ADEC does not agree to the deletion of draft Condition 30.1 (now 28.1) as requested. However, ADEC has corrected draft Condition 30.1 to more accurately*

reflect the requirement of 40 C.F.R. 60.15(d), as follows: “any proposed replacement of components of an existing facility, for which the fixed capital cost of the new components exceeds....” EU IDs 8A and 9A are subject to NSPS Subpart IIII and 40 C.F.R. 60.15(d) is a general notification requirement applicable to Subpart IIII, as specified in Table 8 to 40 C.F.R. 60 Subpart IIII.

22. Condition 32

APSC Request: Update condition 32 as indicated in the marked-up draft permit.

Basis: EU 8T is no longer located at the VMT. Alyeska also simplified the condition language in the attached draft Permit.

Response from ADEC: ADEC agrees to delete references to EU ID 8T throughout the permit and statement of basis since this unit is no longer located at the VMT.

23. Condition 33.1

APSC Request: Update condition 33.1 as indicated in the marked-up draft permit.

Basis: In the attached draft Permit Alyeska has proposed language that is equivalent in meaning, but is worded to clarify the requirement and thus ensure compliance.

Response from ADEC: ADEC agrees to add ULSD fuel as compliance demonstration to the fuel requirements under Subpart IIII but retains the fuel specifications for accuracy. Draft Condition 33.1 (now 31.1) has been revised, as follows:

14.3 Comply with the applicable fuel requirements in 40 C.F.R. 60.4207 by burning only Ultra Low Sulfur Diesel (ULSD) as fuel. The fuel specifications shall meet the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, as follows:

~~a. Beginning October 1, 2010, for CHICE with a displacement of less than 30 liters per cylinder that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, as follows:~~

~~(i) a. Sulfur content of 15 ppm maximum per-gallon standards~~

~~(ii) b. Cetane index or aromatic content, as follows:~~

~~(A) (i) A minimum cetane index of 40; or~~

~~(B) (ii) A maximum aromatic content of 35 volume percent.~~

24. Condition 34

APSC Request: Update condition 34 as indicated in the marked-up draft permit.

Basis: The proposed language simplifies the condition and corrects typographical errors.

Response from ADEC: ADEC accepts the requested revision to draft Condition 34 (now 32). The condition now reads:

32 NSPS Subpart III Emission Standards. *The Permittee shall comply with the applicable emission standards in Table 1 to Subpart III for the 2007 – 2010 model year engines applicable to ~~for~~ EU IDs 8A, 8T, and 9A, as listed in Table C below.*”

For Emergency Engines

~~32.1 For EU IDs 8A, 8T, and 9A, the Permittee shall certify to the emission standards in Table 1 to Subpart III for the 2007–2010 model year engines, as shown in Table C below.~~

ADEC also accepted the corrections to typographical errors in Table C.

25. Conditions 35.2b and 36

APSC Request: Delete conditions 35.2b and 36.

Basis: The deleted language in these conditions in the draft permit is not from Subpart III. Also, Alyeska has already purchased certified engines.

Response from ADEC: ADEC does not agree with the requested deletions of draft Conditions 35.2b and 36 (now 33.2a and 34). These are relevant one-time requirements added by ADEC to gap-fill the recordkeeping and reporting requirements for NSPS Subpart III. Draft Condition 36 has been revised by adding the phrase “following issuance of this permit” to clarify that this is a one-time reporting requirement. ADEC agrees to the revisions requested for draft Conditions 35.2 and 35.2a (now 33.2) and merged both conditions. ADEC does also agree to delete a portion of the Condition 34 requirement to resubmit the EPA engine certificates that APSC previously submitted in August 2009 as part of the AQ0082MSS02 application.

26. Condition 37.2

APSC Request: Delete condition 37.2.

Basis: Subpart SS does not contain a table referencing Subpart A. Alyeska has deleted this reference in the attached draft permit.

Response from ADEC: Draft Condition 37.2 has been deleted from the permit. ADEC confirms that NESHAP Subpart SS does not contain a table referencing Subpart A.

27. Condition 38

APSC Request: Update condition 38 as indicated in the marked-up draft permit.

Basis: The language has been revised to simplify it consistent with the comments below, and to incorporate EU 10-16.

Response from ADEC: ADEC agrees to revise draft Condition 38 (now 36), as requested, in order to simplify and to incorporate EU IDs 10 – 16 in the condition. The condition now reads:

36 NESHAP Subpart ZZZZ Applicability and Requirements, EU IDs 8A, ~~8F~~, and 9A, and 10 – 16. For EU IDs 8A, ~~8F~~ and 9A listed in Table A, new or reconstructed emergency stationary reciprocating internal combustion engine (RICE) with a site rating of more than 500 brake HP (BHp) located at a major source of HAP emissions and for which construction commenced ~~construction~~ on or after December 19, 2002; and for EU IDs 10 - 16 listed in Table A, existing emergency stationary RICE with a site rating of more than 500 BHp located at a major source of HAP emissions and for which construction commenced before December 19, 2002, the Permittee does not have to meet the no requirements of Subpart ZZZZ and of Subpart A apply provided the units are operated according to Conditions 36.2 and 36.3 except for the initial notification requirements of 40 C.F.R. 63.6645(f).

28. Condition 38.1

APSC Request: Delete condition 38.1.

Basis: The deleted language in the draft permit is not from Subpart ZZZZ and as such should not be included.

Response from ADEC: ADEC does not agree to the requested deletion of draft Condition 38.1 (now 36.1), which requires the Subpart ZZZZ affected emergency RICE units to meet the applicable requirements for non-emergency units should they cease to meet the criteria for “emergency units” as described in 40 C.F.R. 63.6640(f). This change of status requirement is found in 40 C.F.R. 63.6640(f)(1) and (f)(2). ADEC has deleted the same language in draft Conditions 38.3(now 36.2) and 39 (now 36.3) to avoid redundancy (see Response to APSC Comment #30). ADEC has also corrected the referenced conditions pertaining to 40 63.6640(f)(1) in draft Condition 38.1 (now 36.1) and added the citation 40 C.F.R. 63.6640(f)(1) & (f)(2), Subpart ZZZZ.

29. Condition 38.2

APSC Request: Delete condition 38.2.

Basis: The initial notification has already been filed. See Alyeska Government Letter 21927 dated September 29, 2010. A copy was provided to ADEC Fairbanks.

Response from ADEC: ADEC has removed the initial notification requirement under draft Condition 38.2 because Alyeska asserts that this has already been fulfilled.

30. Condition 38.3

APSC Request: Update condition 38.3 as requested in the marked-up draft permit.

Basis: The deleted language in the attached draft permit is redundant with condition 38 as revised.

Response from ADEC: ADEC agrees to revise draft Condition 38.3 (now 36.2), as requested, to avoid redundancy. The condition now reads:

36.2 Requirements for New Emergency Stationary RICE. For EU IDs 8A, ~~8T,~~ and 9A, ~~stationary RICE that are new or reconstructed emergency stationary RICE each with a site rating of more than 500 BHP located at a major source of HAP emissions and installed on or after June 12, 2006, the Permittee shall operate the engine according to Conditions 36.2a through 36.2d below. If the Permittee does not operate the engine according to the requirements in Conditions 38.3b through 38.3d, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.~~

The same edits were made to draft Condition 39 (now 36.3). Also see Response to APSC Comment #28.

31. Condition 38.4

APSC Request: Update condition 38.4 as indicated in the marked-up draft permit.

Basis: The regulatory language from 63.6595(a)(5) restated in this condition addresses “emission limitations and operating limitations,” to which EU 8A and 9A are not subject because they are emergency RICE. Note also that condition is unnecessary because the criteria related to the classification of RICE as emergency RICE shown in Condition 38.3 have no exception for any operation beyond startup.

Response from ADEC: Draft Condition 38.4 states “The Permittee shall comply with the requirements under (draft) Condition 38.3 upon startup of EU IDs 8A and 9A.” For EU IDs 8A and 9A, the underlying citation for this condition is 40 C.F.R. 63.6595(a)(3) (which applies to new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004) and not 40 C.F.R. 63.6595(a)(5). ADEC agrees to delete this condition for the reasons provided in this comment. In addition, as provided in 40 C.F.R. 63.6590(b)(1)(i), a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of this Subpart ZZZZ and of Subpart A, except for the initial notification requirements of §63.6645(f) (which APSC has already fulfilled), per Comment #29).

ADEC has also agreed to incorporate draft Condition 39 (now Condition 36.3) as a sub-condition under Condition 36 and simplified the condition language.

32. Condition 40 and Table D

APSC Request: Delete “revised as of July 16, 2007” in condition 40.

Basis: Alyeska removed the “as of” Subpart Y date because the rule was updated April 21, 2011. We suggest the date be eliminated or ADEC should use the recent amendment date as of the time of the issuance of the final permit.

Response from ADEC: *ADEC agrees with the requested revision in the above comment and added a citation for the April 21 federal register.*

APSC Request: Revised text in Table D as indicated in the marked-up draft permit.

Basis: Alyeska also removed references to EU 1 - 3 because although the boilers are acceptable control devices under Subpart Y, the rule was drafted to cover specific marine loading activities. The VMT Source subcategory was specific to controlled and uncontrolled berths at the VMT. As the Department is aware most of the berth loading rules have sunsetted and are no longer applicable. In addition, Alyeska has removed both berths 1 and 3 from crude oil loading service. These berths are no longer capable of loading crude oil onto tankers. Therefore, controlled and uncontrolled loading is no longer viable at these berths. If, Alyeska were to plan in the future to load crude oil at these berth there would have to be significant physical changes to do so. The existing berths subject to loading and Subpart Y are berths 4 and 5 (sources 49 and 50). Subpart Y, like the HON and many other MACT standards provides that gases collected under the MACT standard may be routed to combustion devices, including boilers, which in turn are not subject to MACT emission limits, monitoring and recordkeeping. EPA did not subject these combustion devices to the numerical destruction standard and associated testing, performance and monitoring requirements due to their inherently high efficiency and to promote the use of gases or vapors as fuel, rather than just require their destruction and the associated environmental impacts from that action. The rulemaking history on this policy has been well established by EPA. The VMT boilers are combustion devices approved by Subpart Y but are not subject to any Subpart Y applicable requirements. Perhaps ADEC can simply explain this in the statement of basis rather than list these boilers under Subpart Y as if there were corresponding applicable requirements.

Alyeska also removed gap-filling MR&R. All post 1990 Clean Air Act Amendment rulemakings satisfy periodic monitoring under Part 70 and Part 71. EPA has been clear on this policy since shortly after the 1990 amendments. Subpart Y is a rulemaking mandated by the 1990 amendments. It presumptively satisfies all CAA monitoring. ADEC is exceeding Part 70 and Part 71 requirements by attempting to impose additional monitoring to a MACT standard developed and issued by EPA under the amendments of 1990.

Response from ADEC: *ADEC agrees to the requested deletion of EU IDs 1 – 3 in Table D*

on page 38 and the gap-fill recordkeeping requirement for 63.562(d)(2) on page 37. However, footnote 29 is retained to explain the units' role as pollution control devices and exemption from initial performance testing and continuous monitoring in Subpart Y. For clarification, the footnote has been revised as follows: "Per 40 C.F.R. 63.563(b)(2)(ii), a boiler with design heat input capacity of 44 Megawatts (150 MMBtu/hr) or greater used to comply with 63.562(d)(2) EU IDs 1–3 are-is exempt from the initial performance test required in 63.563(b)(2)(i) and in 63.565(d) and the continuous monitoring in 63.564(e). EU IDs 1 – 3 (power boilers with design heat input capacity of 242 MMBtu/hr each) are used as pollution control devices under Subpart Y but meet the exemption criteria under 40 C.F.R. 63.563(b)(2)(ii)."

ADEC does not agree to the deletion of referenced EU IDs 1 – 3 on page 39 under "Affected EUs" column for 63.562(e) – Operation and maintenance requirements for air pollution control equipment and monitoring equipment for affected sources – because EU IDs 1 – 3 are pollution control devices under Subpart Y. ADEC has also added in Table D the new provisions for affirmative defense (63.562(e)(7) and reporting requirements (63.567(m) and (n)) added in the April 23, 2011 revisions to Subpart Y, 76 FR 22595.

ADEC accepted the deletion of "for a maximum of 40 calendar days per year use of loading berths not equipped with a VCS" on page 38 under 63.526(d)(2)(ii)(A)(5) since the 40-day allowance is explained in more detail under 63.562(d)(2)(ii)(B).

ADEC does not agree to the requested deletion of the gap-fill monitoring and recordkeeping requirements for 63.562(d)(2)(ii)(B) on page 38. These requirements are not onerous and are relevant to support and fulfill the monitoring and recordkeeping requirements called for in a Title V permit where such requirements are not explicitly provided in the federal rule, such as in the case of 63.562(d)(2)(ii)(B).

33. Condition 41

APSC Request: Change referenced EU IDs 1 – 6 to EU IDs 4 – 6. Delete "and affected organic liquid transfer pipelines" in condition 41.

Basis: The language was deleted in the attached draft permit because "organic liquid transfer pipelines" are not part of the affected source at VMT because they are not "in organic liquids service" as defined in subpart EEEE. The deletion does not change the applicability of the rule or any other condition.

We also deleted a redundant footnote.

Response from ADEC: ADEC accepts the deletion of "and affected organic transfer pipelines" based on the reasons stated in this comment, which is that the affected source at VMT is not "in organic liquids service" as defined in subpart EEEE.

34. Conditions 41.1 and 41.2

APSC Request: Change “or, upon approval, TOC” to “or, as approved, TOC” in condition 41.1, delete “EU IDs 1 – 3” in condition 41.2, and merge conditions 41.2 with condition 41.1.

Basis: Alyeska has already documented that TOC is an appropriate surrogate for HAP. Alyeska believes the restructuring of conditions 41.1 and 41.2 into a single condition is appropriate because the Permittee has the option of complying with either requirement (closed vent system/control device, or fuel gas system). References to EU 1-3 were deleted because boilers are combustion devices, and are not part of the fuel gas system as defined in 40 C.F.R. 63.981. The fuel gas system is only the piping and flow pressure and control system that routes vapors to the combustion device.

Response from ADEC: *ADEC agrees with APSC on this comment and has revised the conditions as requested. In addition, for clarification and as stated in the renewal application, ADEC added a footnote in draft Condition 41.1 (now 38.1) that states, “VMT crude oil storage tanks (EU IDs 29 – 46) use both compliance options provided in (now) Conditions 38.1a and 38.1b”. See also Response to APSC Comment #53.*

35. Condition 42

APSC Request: Merge condition 42.2 with condition 42.1.

Basis: Alyeska believes the reordering of the condition as we have done in the attached draft permit clarifies the intent and simplifies the permit language. This in turn ensures clarity of compliance for the Permittee, Department staff and the public.

Response from ADEC: *ADEC agrees with APSC on this comment and has revised the conditions as requested.*

36. Condition 43.4

APSC Request: Delete condition 43.4.

Basis: On August 20, 2007 Alyeska submitted the required monitoring plan as part of the Notification of Compliance Status (Government Letter 13266). A copy was provided to M. Coss of ADEC.

Response from ADEC: *ADEC agrees with the deletion of draft Condition 43.4 since this requirement has already been fulfilled. The Statement of Basis has been updated to reflect this revision.*

37. Conditions 46 and 46.1

APSC Request: Revise subhead title to “EU IDs ~~14~~ – 6 and 29 – 46”; delete “comply with the following” in condition 46; and revise condition 46.1, as follows: “Meet the

requirements in Condition 47 for closed vent systems, the requirements in Condition 48 for fuel gas systems (EU IDs 1 – 3),...”

Basis: Alyeska believes the rewording and consolidation of the conditions as we have done in the attached draft permit clarifies the intent and simplifies the permit language. This in turn ensures clarity of compliance for the Permittee, Department staff and the public.

Response from ADEC: ADEC agrees with APSC on this comment and has revised the conditions as requested.

38. Conditions 47 and 47.1

APSC Request: Revise as follows:

47 NESHAP Subpart SS Requirements for Closed Vent Systems. For storage tanks (EU 29-46) venting through a closed vent system to a non-flare control device ~~closed vent systems, the Permittee shall meet the following requirements: meet the requirements for storage tanks in Condition 46 and the following requirements:~~

47.1 Closed Vent System Equipment and Operating Requirements. Except for closed vent systems operated and maintained under negative pressure, ~~the Permittee shall comply with the following~~ each closed vent system shall be designed and operated to collect the regulated material vapors from EU 29-46, and to route the collected vapors to a control device (EU IDs 4 – 6); and shall be operated at all times when emissions are vented to, or collected by them.

a ~~**Collection of Emissions.** Each closed vent system shall be designed and operated to collect the regulated material vapors from the emission point, and to route the collected vapors to a control device (EU IDs 4 – 6).~~

[40 C.F.R. 63.983(a)(1) and (a)(2), 7/12/02]

b. ~~**Period of Operation.** Closed vent systems used to comply with the provisions of this subpart shall be operated at all times when emissions are vented to, or collected by, them.~~

[40 C.F.R. 63.983(a)(2), 7/12/02]

Basis: Alyeska believes the rewording and consolidation of the condition as we have done in the attached draft permit clarifies the intent and simplifies the permit language. This in turn ensures clarity of compliance for the Permittee, Department staff and the public.

Response from ADEC: ADEC agrees with APSC on this comment and has revised the conditions as requested.

39. Condition 47.2

APSC Request: Replace “as follows” with “annually for visible, audible, or olfactory indications of leaks” in condition 47.2a and delete conditions 47.2a(i) and (ii).

Basis: Alyeska believes the rewording and consolidation of the condition clarifies the intent and simplifies the permit language.

Regarding condition 47.2.a(i)(A), the initial inspection has already been conducted. Regarding condition 47.2.a(ii), the VMT closed vent system consists solely of hard piping. No duct work is present or used at the VMT, therefore the requirements do not apply. Alyeska has deleted the text in the attached draft permit.

Response from ADEC: *ADEC agrees with APSC on this comment and has revised the conditions as requested in (now) Condition 44.2(a).*

40. Condition 47.3

APSC Request: Delete condition 47.3; reference the underlying regulatory citation (40 C.F.R. 63.983(c)(1)-(3)).in condition 47.4(a)(ii).

Basis: The requirements under 63.983(c)(1)-(c)(3) apply to closed vent systems consisting of hard piping during the initial inspection, but not during the annual inspections. Alyeska has already conducted the initial inspection. See 63.983(b)(1)(i).

The requirements under 63.983(c)(1)-(c)(3) can apply to hard piping if a leak is discovered as indicated in Condition 47.4(a)(ii).

Response from ADEC: *ADEC agrees with APSC on this comment and has deleted the condition (now sub-conditions of Condition 44) as requested.*

41. Condition 48

APSC Request: Delete reference to EU IDs 1 – 3 in condition 48.

Basis: As discussed above EU 1-3 are not part of the closed vent system.

Response from ADEC: *Draft Condition 48 (now 45) involves requirements for fuel gas system. ADEC agrees to delete reference to EU IDs 1 – 3 in draft Condition 48 as they are not part of the fuel gas system.*

42. Condition 48.1

APSC Request: Delete condition 48.1.

Basis: 63.984(a)(1) does not apply because 40 C.F.R. 63.2378(a) and Table 10 indicate that only 63.984(b) applies.

Response from ADEC: ADEC does not agree to the deletion of draft Condition 48.1 (now 45.1), as requested. The underlying regulatory citation for the condition is 40 C.F.R. 63.984(a). This condition requires that the fuel gas systems be operated at all times when regulated material emissions are routed to it, except during periods of start-up, shutdown and malfunction. Although item 6 of Table 10 references only 40 C.F.R. 63.984(b) as means continuous compliance demonstration for affected storage tanks at an existing source that route emissions to a fuel gas system, it does not necessarily mean that 40 C.F.R. 63.984(a) does not apply. 40 C.F.R. 63.984(a) is a general monitoring requirement applicable to fuel gas systems, referenced in 63.982(d) (draft Condition 48, now 45). However, references to EU IDs 1 – 3 in Condition 48.1 have been deleted, consistent with Response to APSC Comment #41.

43. Condition 48.3

APSC Request: Delete condition 48.3.

Basis: Requirements for fuel gas systems are indicated in 63.982(d), which states "Owners or operators that route emissions to a fuel gas system or to a process shall meet the requirements in §63.984, the monitoring, recordkeeping, and reporting requirements referenced therein, and the applicable recordkeeping and reporting requirements of §§63.998 and 63.999. No other provisions of this subpart apply to emissions being routed to a fuel gas system or process." Based on this regulatory language no requirements of 63.988 apply.

Response from ADEC: ADEC agrees with APSC on this comment and has deleted draft Condition 48.3, as requested.

44. Condition 49.1

APSC Request: Delete Condition 49.1a, c, & d. For condition 49.1b, replace reference to condition 49.1c with Table D and delete "in the Notification of Compliance Status".

Basis: Regarding Condition 49.1.b and c, Alyeska requests the rewording and consolidation of the condition which clarifies the intent and simplifies the permit language. Regarding Condition 49.1.a and d, requirements for closed vent systems routing to a nonflare control device are indicated in 63.982(c), which states:

"Owners or operators who control emissions through a closed vent system to a nonflare control device shall meet the requirements in §63.983 for closed vent systems, the applicable recordkeeping and reporting requirements of §§63.998 and 63.999, and the applicable requirements listed in paragraphs (c)(1) through (3) of this section.

(1) For storage vessels and low throughput transfer racks, the owner or operator shall meet the requirements in §63.985 for nonflare control devices and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of this subpart apply to low throughput transfer rack emissions or storage vessel emissions vented through a closed

vent system to a nonflare control device unless specifically required in the monitoring plan submitted under §63.985(c).

(2) For process vents and high throughput transfer racks, the owner or operator shall meet the requirements applicable to the control devices being used in §63.988, §63.990 or §63.995; the applicable general monitoring requirements of §63.996 and the applicable performance test requirements and procedures of §63.997; and the monitoring, recordkeeping and reporting requirements referenced therein. Owners or operators subject to halogen reduction device requirements under a referencing subpart must also comply with §63.994 and the monitoring, recordkeeping, and reporting requirements referenced therein. The requirements of §§63.984 through 63.986 do not apply to process vents or high throughput transfer racks.

(3) For equipment leaks, owners or operators shall meet the requirements in §63.986 for nonflare control devices used for equipment leak emissions and the monitoring, recordkeeping, and reporting requirements referenced therein. No other provisions of this subpart apply to equipment leak emissions vented through a closed vent system to a nonflare control device."

Based on this regulatory language no requirements of 63.988 apply to storage tanks routing vapors to a nonflare control device under 63.982(c)(1). 63.988 only applies to process vents under 63.982(c)(2).

Response from ADEC: ADEC agrees that 40 C.F.R. 63.988 does not apply to VMT since it is subject only to 63.982(c)(1) [storage vessels and low throughput transfer racks]. Therefore, draft Conditions 49.1(a) and (d) have been deleted, as requested. ADEC also agrees with the consolidation of draft Conditions 49.1(b) and (c) (now Condition 46.1(a) and (b)) with some modifications from the request for clarification, as follows:

46.1 Operating and Monitoring Requirements. The Permittee shall ~~comply with the following:~~

- a. Operate and maintain EU IDs 4 – 6 so that the monitored parameters defined as stated in Table D⁴ Condition 1.1-b remain within the ranges specified in the Notification of Compliance Status monitoring plan⁵ required under 40 C.F.R. 63.985(c)(1) whenever emissions of regulated material are routed to EU IDs 4 – 6 except during periods of start-up, shutdown, and malfunction as specified in 40 C.F.R. 63 Subpart EEEE (Condition 40.5(b)).

[40 C.F.R. 63.985(a), 6/29/99]

⁴ Table D includes NESHAP Subpart Y 40 C.F.R. 63.563(b)(4)(ii) requirements, which specifies the same monitored parameters referred to in the monitoring plan required under NESHAP Subpart EEEE 40 C.F.R. 985(c)(1). 40 C.F.R. 63.563(b)(4)(ii) requires the Permittee to operate EU IDs 4-6 with the block average temperature as determined in 40 C.F.R. 63.564(e)(2) to no more than 28 °C (50 °F) below the baseline temperature. Waste gas incinerators (EU IDs 4 – 6) VOC destruction testing was conducted on June 21, 2007 (Reference APSC's Letter No. 13266, Initial Notice of Compliance Status dated 8/20/2007). The performance test demonstrated >98 percent VOC destruction efficiency and the baseline temperatures established for 98 percent VOC destruction efficiency at lower combustion chamber are 1,074 °F when only one incinerator is in operation, and 1,078 °F when two incinerators are in operation.

⁵ The monitoring plan for the incinerators, EU IDs 4 – 6, required under 40 C.F.R. 63.985(c)(1), Subpart SS has been submitted on 8/20/2007 (Alyeska Letter No. 13266) as part of the Notice of Initial Compliance required under 40 C.F.R. 63.2386(c), Subpart EEEE.

- b. ~~Per the monitoring plan submitted under 40 C.F.R. 63.985(c), monitor the incinerators (EU IDs 4 – 6) lower combustion chamber temperatures at 1078 °F (50 °F maximum) for two unit operation and 1074 °F (50 °F maximum) for single unit operation~~⁶. Records shall be generated as specified in Condition 48.7a.

[40 C.F.R. 63.985(c)(2), 6/29/99]

45. Condition 50

APSC Request: Delete the condition and all its subconditions.

Basis: No requirements of 63.996 apply to storage tanks routing vapors to a nonflare control device under 63.982(c)(1) or fuel gas systems under 63.982(d). As such Alyeska has deleted condition in the attached draft permit.

Response from ADEC: ADEC agrees with APSC on this comment and has deleted draft Condition 50 and all its subconditions, as requested.

46. Condition 51.1

APSC Request: Delete conditions 51.1a and 51.1b and add citation references in condition 51.1

Basis: The proposed changes simplify the condition by referencing the required test records, and also correct a typographical error (the citation is (B)(1) and (B)(4), not (B)(2) and (B)(4)).

Regarding Condition 51.1.c, Alyeska submitted the required information in the notification of compliance status filed under Alyeska Letter 13266, dated 8/20/07.

Response from ADEC: ADEC agrees with APSC on this comment and has revised the conditions as requested. ADEC has also added “and 63.998(a)(2)(ii)(B)(1) & (4)” in the citation under draft Condition 51.1 (now 47.1) for accuracy.

47. Condition 51.2

APSC Request: Add “operating temperature” after “values measured” in Condition 51.2.

Basis: The proposed change in the attached draft permit clarifies the value being monitored.

Response from ADEC: ADEC agrees with APSC on this comment and has revised the condition as requested, except that the requested change and red-line strikeout differed in actual edit location to before the text “values measured”.

⁶ Incinerators (EU IDs 4 – 6) VOC destruction testing was conducted on June 21, 2007 (Reference APSC’s Letter No. 13266, Initial Notice of Compliance Status dated 8/20/2007). The performance test demonstrated >98 percent VOC destruction efficiency.

48. Condition 51.3.b

APSC Request: Change the referenced Condition 51.2b(i) to Condition 51.2b.

Basis: The proposed change clarifies that the records may take the form of those required under either condition 51.2(b)(i) or 51.2(b)(ii).

Response from ADEC: ADEC agrees with APSC on this comment and has revised the condition as requested.

49. Condition 54

APSC Request: Delete condition 54.

Basis: No requirements of Subpart GGGGG are currently applicable at the VMT. Alyeska has deleted this condition in the attached draft permit.

Response from ADEC: On February 6, 2004, the Permittee submitted to EPA pursuant to 40 C.F.R. 63.9(b)(2) the initial notification that the stationary source's soil vapor extraction system (SVE, EU ID 17), as an existing source, would be subject to the NESHAP for Site Remediation (40 C.F.R. 63, Subpart GGGGG) on the compliance date of the rule (October 9, 2006). On December 5, 2006, the ADEC received a copy of a notification from APSC to EPA indicating that the SVE system was rendered inoperable as of September 27, 2006 and has been permanently shutdown, and therefore no longer subject to Subpart GGGGG. APSC requested in its 2008 Title V renewal application to include a condition that addresses the NESHAP Subpart GGGGG requirements for potential site remediation activities at the VMT; hence, the inclusion of draft Condition 54 in the public noticed draft permit. However, APSC now affirms that no requirements of Subpart GGGGG are currently applicable at the VMT. Therefore, ADEC agrees to remove draft Condition 54 based on this comment.

50. Condition 61

APSC Request: Update emission units in condition 61 to delete EU ID 8 – 16, and change EU IDs 19 – 28 to 19 - 23.

Basis: 18 AAC 50.035 does not apply to the deleted EU because EU 8 - 16 are affected sources under Part 63 Subpart ZZZZ, EU 24 - 27 are NRE, and EU 28 is a control device.

Response from ADEC: In Condition 61 (now Condition 56) ADEC agrees to deletion of reference EU IDs 24 – 28 but retains EU IDs 10 – 16, because these units, although subject to NESHAP Subpart ZZZZ emergency RICE provisions, are not subject to the NESHAP good air pollution control practices requirements. ADEC removed EU IDs 8 and 9, since these units are no longer included in the proposed draft permit

51. Condition 69

APSC Request: Revised condition 69 as indicated in the marked-up draft permit.

Basis: NESHAP applicability records are only required for stationary sources that are area sources due to a limitation. Records are not required for major sources. Although not totally clear from the final Subpart A language, in noting a change in language between the proposed rule and the final rule EPA stated in the final rule preamble "... a recordkeeping requirement has been added (in 63.10(b)(3)) for owners and operators of area sources to maintain a record of the determination of their area source status when this determination is necessary to demonstrate that a relevant standard for major sources does not apply to them." [59 FR 12410, March 16, 1994].

Response from ADEC: *The marked-up draft permit version does not show APSC's proposed revision to draft Condition 69 (now 64). However, the comment indicates APSC wants to delete reference to 40 C.F.R. 63.10(b)(3) from the draft condition to which ADEC agrees because that unit is not an area source. ADEC has deleted reference to 40 C.F.R. 63.10(b)(3) from draft Condition 69 (now 64).*

52. Conditions 91 and 92

APSC Request: Delete conditions 91 and 92.

Basis: As indicated in Table 1 of Appendix A, Subpart 51, the thresholds defining annual and triennial reporting are based on actual emissions, not potential emissions as stated in Standard Condition XV.

Based on VMT actual emissions, Alyeska is subject to the triennial reporting schedule. In addition, the reporting requirements are not Title 5 applicable requirements and are not applicable to this stationary source. 40 C.F.R. 51.1 states:

§ 51.1 Who is responsible for actions described in this subpart?

States must inventory emission sources located on nontribal lands and report this information to EPA.

Response from ADEC: *ADEC does not accept APSC's proposed deletion of draft Conditions 91 and 92 (now 86 and 86.1). These conditions have been adopted as Standard Permit Condition XV under 50.346(b)(8), to increase governmental efficiency and reduce costs associated with routine information requests in order to satisfy the requirements of Subpart A of 40 C.F.R. 51. Table 1 of Appendix A, Subpart 51 does indicate "tons per year of actual emissions" but only for emission thresholds for treatment of point sources as Type A under 40 C.F.R. 51.30. "Point Source" definition under 40 C.F.R. 51.50 provides the minimum point source reporting thresholds in tons per year as measured in potential to emit to determine annual or triennial reporting.*

53. Table E – Permit Shields Granted

APSC Request: Update shields in Table E.

Basis: Added further basis for 40 C.F.R. 68.

Response from ADEC: *ADEC agrees to add to the permit shield basis for 40 C.F.R. 68 (Accidental Release: Risk Management Plan (RMP)) the sentence “Additionally, flammable substances used as fuel are excluded pursuant to 40 C.F.R. 68.126” but also added “as listed in Tables 3 and 4 of 40 C.F.R. 68.130,” as specified in 40 C.F.R. 68.126, to be more accurate.*

Additionally, the permit shield request for 40 C.F.R. 63.998(a)(2)(ii)(B)(5) Subpart SS (recordkeeping requirement for a boiler or process heater, EU IDs 1 – 3) previously denied in the public noticed draft permit is now added to Table E in the permit and deleted from Table L in the SOB. This requirement applies to owners electing to demonstrate compliance with a percent VOC reduction requirement or a parts per million by volume requirement using a nonflare combustion device. VMT complies with this requirement by venting emissions through a closed vent system and using EU IDs 4 – 6 (not EU IDs 1 – 3) as control devices which combust the waste gas vapors from the crude oil. Therefore, 40 C.F.R. 63.998(a)(2)(ii)(B)(5) Subpart SS does not apply to EU IDs 1 – 3. VMT demonstrated compliance with the Subpart EEEE required 95 % VOC reduction efficiency through emissions testing on June 21, 2007 performed on EU IDs 4 – 6. See related Response to APSC Comment #34.

54. Statement of Basis

APSC Request: Update the statement of basis.

From APSC: Although we have not proposed changes to the statement of basis in support of all our requests, Alyeska understands that ADEC will revise it as appropriate, consistent with all changes to the draft permit that are finalized in the final issued permit.

Response from ADEC: *ADEC has made the necessary edits for the changes indicated in the responses above that the ADEC has accepted.*

From Prince William Sound Regional Citizen's Advisory Council (PWSRCAC):

1. Tank Venting

PWSRCAC Comment: The existing VMT Title V Permit (Condition 10) prohibits the crude oil tanks (EU⁷ IDs 29-46) from venting to atmosphere; yet, these tanks were vented to atmosphere at least 41 times between 2003 and 2010, triggering ADEC to issue three Failure to Comply notifications.⁸

In 2005, there were two significant excess emission events where tank venting was caused by a power outage.⁹ On October 17, 2005, VMT crude oil tanks 3, 8, 9, 10, 11, 13 and 14 vented Volatile Organic Compounds (VOCs) containing Hazardous Air Pollutants (HAPs) for over four hours. On December 28, 2005, VMT crude oil tanks 1, 3, 4, 5, 7, 9, 10, 11, 12 and 14 vented VOCs which contained HAPs for over five hours. APSC reported these excess emission events as "unavoidable." Yet, it is not clear why the vapor control system is not designed and operated to control emissions during power outages (e.g., backup power systems in place). PWSRCAC recommends that ADEC work with APSC on system design improvements to prevent tank venting during power outages.

On October 2, 2008, ADEC issued another Failure to Comply notification to APSC.¹⁰ ADEC's second FCE found that APSC had an additional 15 excess emission events since the December 11, 2006 FCE, totaling 32 excess emission events due to tank venting since 2003. According to APSC, venting causes included those listed above and problems with the tank pressure control systems, operator error, and power failure. In some cases, no cause was provided.

To remedy the continued tank venting problem, ADEC requested that APSC revise its Best Operational Management Plan (BOMP) to detail the coordination procedures between the Operational Control Center (OCC) Controller and the Power/Vapor Control Room Operator to prevent future venting incidents due to miscommunication. ADEC required APSC to obtain its approval for the revised BOMP.

On October 20, 2010, ADEC issued a third Failure to Comply notification to APSC.¹¹ ADEC's third FCE found that APSC had an additional seven excess emission events since the December 11, 2006 FCE. At that point, there were 41 excess emission events due to tank

⁷ EU= Emission Unit

⁸ ADEC Compliance Letter to APSC, Failure to Comply Air Quality Compliance Evaluation Report for the Alyeska Pipeline Service Company, Valdez Marine Terminal, Permit No. AQ0082TVP01, File No. 2264.16.001 Enforcement Tracking No. 06-0829-37-5881, December 11, 2006, October 2, 2008, and October 20, 2010.

⁹ ADEC Compliance Letter to APSC, Failure to Comply Air Quality Compliance Evaluation Report for the Alyeska Pipeline Service Company, Valdez Marine Terminal, Permit No. AQ0082TVP01, File No. 2264.16.001 Enforcement Tracking No. 06-0829-37-5881, December 11, 2006.

¹⁰ ADEC Compliance Letter to APSC, Failure to Comply Air Quality Compliance Evaluation Report for the Alyeska Pipeline Service Company, Valdez Marine Terminal, Permit No. AQ0082TVP01, File No. 2264.16.001 Enforcement Tracking No. 08-0734-37-7164, October 2, 2008.

¹¹ ADEC Compliance Letter to APSC, Failure to Comply Air Quality Compliance Evaluation Report for the Alyeska Pipeline Service Company, Valdez Marine Terminal, Permit No. AQ0082TVP01 Rev. 3, File No. 2264.16.001, October 20, 2010.

venting since 2003. Venting causes varied, but generally occurred due to system design issues, equipment malfunction and lack of maintenance.

PWSRCAC commends ADEC for its excellent work in monitoring and enforcing compliance with Condition 10 of the VMT air permit through three major FCEs at the VMT. In the past eight years, APSC appears to have vented VOCs containing HAPs to the atmosphere at the rate of five times per year. Venting of VOCs from the crude oil storage tanks appears to be a recurring issue.

Condition 18 of the Proposed 2011 VMT Title V Permit (which was previously Condition 10) continues to prohibit tank venting. ADEC improvements to Condition 18 include requiring APSC to calculate the amount of VOC and HAP emissions that occur during violations. The proposed permit also requires a more detailed explanation of the cause of the venting and measures that could be taken to prevent these venting incidents. While these changes result in improvements to the permit, Condition 18 does not require APSC to take specific actions to resolve existing design issues, operational practices, and maintenance issues that are causing tank venting incidents.

PWSRCAC requests that permit revisions be made that would require APSC to address its facility design, operational practices, and maintenance issues associated with venting incidents to identify and address the causes of tank venting. Known repeated problems include: pressure header valve malfunction, vent valve actuator failure, actuator hydraulic pump motor shaft failure, vent valve failure due to low actuator oil, problems with the tank pressure control systems, operator error, and power failure. PWSRCAC recommends that prevention of venting VOCs from crude oil storage tanks be considered a priority issue for resolution. VOCs contain HAPs that are known to be harmful to human health and the ecosystem. As Valdez is surrounded by a ring of mountains and subject to temperature inversions, pollutants may be trapped or persist in the Valdez area for extended periods of time.

PWSRCAC acknowledges that in 2008 ADEC required a revised BOMP aimed at the prevention of venting incidents. However, tank venting incidents persisted after 2008 despite the revised BOMP.¹² PWSRCAC requests that the proposed permit be revised to require ASPC to change the BOMP to address the causes of recent tank venting incidents.

Response from ADEC: *In response to ADEC's December 28, 2010 request for additional information regarding tank venting excess emissions, the Permittee submitted an analysis of tank venting emissions, including CY 2008 and 2009. The updated analysis, which used a revised, more rigorous and, thus, more accurate emissions calculation methodology, provided the following:*

*2009 total tank venting VOC emissions of 0.86 tpy;
2010 total tank venting VOC emissions of 0.03 tpy; and
2009 and 2010 vapor recovery system collection efficiency of greater than 99.99%*

¹² ADEC Compliance Letter to APSC, Failure to Comply Air Quality Compliance Evaluation Report for the Alyeska Pipeline Service Company, Valdez Marine Terminal, Permit No. AQ0082TVP01 Rev. 3, File No. 2264.16.001, October 20, 2010.

To illustrate the magnitude of these volumes, the total tank venting emissions for 2009 and 2010, individually and in total, are well below the levels defined as “insignificant” (2 tpy VOC; 18 AAC 50.326(e)(4)). Further, the vapor recovery system has a VOC collection efficiency of 99.99%, which is a level of collection or control superior to all federal NESHAP control requirements.

ADEC recognizes PWSRCAC recommendations to revise the permit as prudent compliance activities. However ADEC believes the investigation of unavoidable claims be handled through compliance investigation rather than conjectured as a permit term.

2. Source Inventory

PWSRCAC Comment: The Proposed VMT Title V Permit, Table A, includes an Emission Unit Inventory. PWSRCAC notes that some of the sources listed are no longer in service. For example, Tanks 15, 17, and 18 have been taken out of service, and Berths 1 and 3 (docking use only) are no longer in vapor recovery service. Berths 4 and 5 are equipped with vapor recovery systems and handle all the current loading. APSC has installed vapor recovery systems on Dissolved Air Flootation (DAF) cells 5 and 6, and plans to decommission DAF cells 1 through 4. Tanks 80 and 92 have been taken out of service, and Tanks 93 and 94 have been equipped with vapor recovery. Additionally, one of two biological treatment tanks has been taken out of service.

PWSRCAC recommends that the proposed permit be revised so the Emission Unit Inventory accurately represents the list of equipment in service and associated emission controls. PWSRCAC also recommends that “out-of-service” equipment be included in the proposed permit only if APSC indicates that such equipment might reasonably be needed for future operations, and that the proposed permit be revised to indicate an appropriate maintenance schedule for such equipment and specific requirements be met before again placing the equipment back in service. All equipment that is out of service should be clearly denoted on the permit.

Response from ADEC: *The Permittee has not requested that these emission units be removed from the permit. In addition, ADEC understands that these units have not been permanently removed from service and may be needed for future operations. Associated operational limitations and MR&R requirements are still included in the draft renewal permit should these units continue to operate. Given this information, these emission units are appropriately listed in the permit.*

3. Marine Vessel Visible Emissions

PWSRCAC Comment: The 2008 and 2010 ADEC FCEs identified failures to comply with marine vessel visible emissions standards. PWSRCAC notes that the proposed VMT Title V Permit Condition 5 includes requirements for marine vessel visible emissions monitoring using Method 9 when visible emissions exceed 15% opacity. The proposed permit does not require Method 9 observation if the visible emissions are less than 10% opacity, and there is

no requirement for opacity readings between 10-15%. Therefore, there is a gap between 10-15% opacity that needs to be addressed.

Proposed Permit Condition 5 allows APSC to monitor for compliance with the marine vessel visible emissions monitoring standard with a “trained observer” instead of monitoring for compliance by a U.S. EPA-Certified Method 9 Observer. The Statement of Basis does not explain how a “trained observer” will be able to identify when the 10% or 15% threshold is met without Method 9 Training and Certification. PWSRCAC requests that marine vessel visible emissions monitoring be conducted by EPA Certified Method 9 Observers.

The proposed permit requires a written training plan for training observers but does not specify training frequency. PWSRCAC recommends that the proposed permit be revised to require Method 9 marine vessel visible emissions monitoring when opacity exceeds 10%, and to require at a minimum annual Method 9 training for observers.

***Response from ADEC:** The permit condition is based upon 18 AAC 50.070. The monitoring is designed to ensure compliance with this underlying regulatory limit. The Permittee is required to have a Method 9 trained observer at the Terminal in the event a Method 9 observation is required. Otherwise, the Permittee may use non-Method 9 trained personnel who are trained to identify whether smoke is significant. Per footnote 5 of the draft permit, a “trained observer” is someone who is familiar with Method 9 observations and can reasonably recognize whether opacity is at or below the applicable threshold. ADEC believes greater than 10% is an appropriate threshold to mobilize a certified reader and conduct a determination of if a vessel is emitting in excess of 20% opacity. This threshold strikes a balance for events that warrant a Method 9 reading. Given the required opacity recognition training to the assigned personnel, they should be able to identify at which point they need to request a certified Method 9 observer. APSC maintains a set of trained observers as described in the VMT training plan. Thus ADEC did not change the Method 9 threshold.*

4. VMT is a Major Source of Hazardous Air Pollutants

PWSRCAC Comment: The Proposed VMT Title V Permit includes a 35 ton per year (tpy) HAP emission estimate. This exceeds the EPA’s major source threshold of 10 tpy for any single HAP and 25 tons for all HAPs in aggregate. PWSRCAC notes that the Statement of Basis did not include a technical basis for the HAPs estimate.

Since its inception, PWSRCAC has advocated for best available emission control technology (BACT) and best management practices (BMP) to reduce VMT air pollution to the lowest level possible. In response to PWSRCAC’s urging, APSC has installed emission controls as a part of the renovations at its Ballast Water Treatment Facility (BWTF). Prior to the renovations, emissions from processes at the BWTF greatly exceeded the EPA’s major threshold by an order of magnitude. PWSRCAC greatly appreciates APSC investment in HAPs emission control at the BWTF and acknowledges a significant reduction in hazardous air pollution has been achieved. However, to our knowledge, it does not appear that APSC has completed source testing or a revised air pollution model to develop a more accurate, current HAPs estimate. PWSRCAC notes that the Statement of Basis does not explain how

the 35 tpy estimate was developed. PWSRCAC requests that the Statement of Basis be revised to include the basis for the 35 tpy HAPs estimate, and that source testing data or specifics of the air pollution model that was used to develop this estimate be provided to ADEC.

PWSRCAC and APSC's joint work to reduce HAPs emissions at the VMT had a goal of reducing HAP emissions to below the major source threshold, less than 10 tpy of any single HAP and less than 25 tpy of all HAPs in aggregate. We are hopeful that additional technical analysis and testing can identify the areas where HAPs are either lower than currently estimated, or can identify additional areas for emission control improvement.

PWSRCAC recommends that the proposed permit be revised to require an accurate fugitive emission and HAP emission estimate prior to issuance of the Title V permit.

***Response from ADEC:** The VMT is classified as a Major Source of HAPs for the purpose of establishing 40 CFR Part 63 applicability with the maximum achievable control technology (MACT) standards under Part 63. The Permittee provided HAP emission estimates as part of the operating permit renewal application.*

On August 11, 2011, APSC supplemented their application with revised emission rates which do show a reduction of HAP emissions. However, hexane emissions still exceed 10 tons per year. The appropriate place to discuss emission methods and methodologies is the supporting statement of basis. ADEC updated Table F of this Statement of Basis and emissions text based upon the updated emission test data. The August 11, 2011 revised emission rate analysis is available to members of the public including PWSRCAC upon request.

5. Particulate Matter Monitoring

PWSRCAC Comment: PWSRCAC notes that the proposed VMT Title V Permit Condition 11.1.a requires corrective maintenance to reduce visible emissions and a follow-up test to verify emissions are corrected. However, Condition 11.1.a does not set a timeframe for conducting the required maintenance.

PWSRCAC recommends that Condition 11.1.a in the proposed permit be revised to specify that the maintenance required to produce emissions compliant with the visible emission standards be performed within 24 hours, or that the unit be shut-down until such maintenance can be completed.

We note that the proposed VMT Title V Permit, Condition 11.1.b requires a particulate matter (PM) source test be completed within 90 days of the time that corrective maintenance fails to reduce visible emissions below the required permit threshold. As written, the power boilers and incinerators (EU IDs 1-6) could potentially be allowed to operate out of compliance for up to 90 days, potentially exceeding the National Ambient Air Quality Standards (NAAQS) for PM. Such operation has the potential to aggravate the medical condition of those afflicted with heart and lung disease or other respiratory ailments.

PWSRCAC requests that Condition 11.1.b be revised to specify a shorter source testing timeframe, and to require the unit be shut-down until compliance with Condition 11.1.b is demonstrated.

Response from ADEC: *As a general rule and as required under draft Condition 65.1b (now 61.1b, Air Pollution Prohibited), the Permittee is required to initiate and complete corrective action necessary as soon as practicable to eliminate any air quality violation. The MR&R (and corrective actions) under Condition 11 are based upon an ADEC standard permit condition adopted into regulation, and generally applicable to all fuel burning equipment at all Title V permitted facilities. The permit condition includes triggers for when actions must be taken and what those actions are. This permitting action is not the forum to reconsider the Standard Permit Condition rulemaking. Consequently, ADEC does not agree that there is an obvious basis to require a facility specific PM source testing condition for EU IDs 1 – 6 compliance with 18 AAC 50.055(b) as suggested. Please note, however, for Units 4-6, ADEC does require testing to show compliance with the particulate matter best available control technology limitation within one year of the permit issue date. This test data will also show the compliance margin with the State Particulate Emission standard in 18 AAC 50.055. See Condition 21.*

6. Sulfur Emissions from Tankers

PWSRCAC Comment: PWSRCAC notes that updated sulfur emission modeling to support this permit renewal was not a part of the renewal application. ADEC reports that the most recent modeling was completed by APSC in 1996.¹³ The 1996 modeling contains a worst case scenario describing cumulative predicted impacts approaching 91% of the limits of the three-hour sulfur dioxide (SO₂) standard. The renewal application for the proposed permit states that the margin of compliance associated with the short term sulfur dioxide standard is much greater now, but does not provide any updated modeling to support that position.

APSC asked ADEC to remove the requirement to test each tanker's fuel oil for sulfur content because APSC believes the sulfur emissions are now lower. APSC believes the VMT and tanker emissions, when combined, do not pose a risk of violating the NAAQS, and therefore APSC requested relief from tanker fuel sulfur monitoring.

We note that the proposed permit continues to include the requirements for the testing of tanker fuel for sulfur content because APSC did not provide the modeling to support the claim of lower sulfur emissions. PWSRCAC agrees with the requirement in the proposed permit for continued fuel sulfur testing in the absence of modeling work to support lower short-term sulfur emission impacts.

However, PWSRCAC requests that updated air pollution impact modeling be provided to ADEC prior to issuance of the proposed permit as part of this renewal. There have been numerous changes at the VMT in the past 15 years since the last air pollution modeling was completed. Updated modeling showing a larger margin of compliance with the NAAQS for sulfur and other pollutants will provide regulators and the public alike with increased

¹³ ADEC Statement of Basis of the terms and conditions for Permit No. AQ0082TVP02, March 23, 2011, p. 22.

confidence that minor exceedences of the sulfur permit limits would not likely be a potential NAAQS violation or a cause for concern.

PWSRCAC has long been concerned that the terminal and tanker emissions, combined, could potential violate the SO₂ standard. SO₂ emissions are linked with a number of adverse effects on the respiratory system.¹⁴ Because APSC's modeling shows that the VMT is at 91 percent of the 3-hour SO₂ standard, it may be possible for the SO₂ standard to be exceeded during an excess emission event. However, if APSC's more updated modeling shows a large margin of compliance that would reduce the risk of an excess emission event triggering a NAAQS violation. Therefore, PWSRCAC agrees with the requirements of the proposed permit that updated modeling that demonstrates a much larger margin for compliance with the three-hour SO₂ standard should be provided.

Absent updated modeling, PWSRCAC requests that APSC be required to demonstrate that it will not exceed the SO₂ NAAQS in the event excess sulfur emissions occur from any individual or combination of permitted units.

As proposed, Condition 14 requires excess sulfur emission reporting but no corrective action to abate any exceedances. Because no corrective action is required to abate exceedances and the compliance margin with the three-hour SO₂ standard is a mere 9%, a significant potential for repeated exceedances triggering a NAAQS violation exists. For example, the proposed VMT Air Permit, Condition 14.3 requires reporting of power boiler and incinerator excess sulfur emissions when they occur, but the proposed permit does not require verification that sulfur emissions from units at the VMT and/or from tankers will not exceed the NAAQS. The condition does not require offending units be temporarily shutdown until requirements of the proposed permit and NAAQS are satisfied.

Similarly, proposed Conditions 14.4 and 14.6 require sulfur testing of liquid fuels and reporting of excess emissions. However, the proposed permit does not require any verification that total sulfur emissions are in compliance with the limits of NAAQS. Additionally, the permit conditions as proposed do not prohibit burning of fuel known to have a sulfur content that could cause the permit limit to be exceeded.

Therefore, PWSRCAC recommends the proposed permit require updated modeling to demonstrate that the much larger compliance margin referenced in the permit application for the three-hour SO₂ standard exists, or require demonstration that excess sulfur emissions do not exceed the NAAQS at the time they occur.

Additionally, PWSRCAC recommends that proposed Condition 14 be revised to prohibit burning, in VMT combustion equipment, fuel (provided by a fuel supplier) that does not meet permit limits. As written, the proposed Condition 14 requires fuel sulfur testing and excess emission reporting, but does not actually prohibit combustion fuel that fails to be in compliance with permit limits. Fuel that fails to be in compliance with permit limits should not be intentionally combusted; rather, such fuel should be returned to the its supplier and exchanged for fuel that is in compliance with permit limits.

¹⁴ <http://www.epa.gov/air/sulfurdioxide/>

Response from ADEC: *While ambient protection is a critically important ADEC mission, an ambient air quality demonstration is not a Title V application or operating permit requirement for source classification under 40 CFR Part 70 (or Part 71) or 18 AAC 50, and therefore, is not required as a part of the renewal of an operating permit. The State standard for sulfur compound emissions in Condition 14 and the Title I permit requirements carried over to this renewal Title V permit are supplementary measures to protect SO₂ National Ambient Air Quality standards (NAAQS). Overall, SO₂ emissions from the facility have gone down and the reduction is expected to continue as a result of oil throughput decline, reduced tanker vessel visits, lower Power Boiler and SWI utilization, and the phase-in of the new ultra low sulfur (ULSD) diesel requirements for engines used in highway, mobile/portable, and marine applications. ULSD requirements also apply to stationary engine units including EU IDs 8A and 9A.*

With regards to the comment on excess emissions reporting and not requiring corrective actions, the Excess Emissions/Permit Deviation (EPPD) report does require the Permittee to provide corrective actions. See draft permit Condition 87.1c(ii) (now 82.1c(ii)), and the report form in Section 12. In addition, corrective action is also explicitly required under the standard condition "Air Pollution Prohibited", which requires reporting under EPPD.

7. Incinerator Particulate Matter (PM) Emission Testing

PWSRCAC Comment: PWSRCAC notes that the proposed VMT Title V Permit Condition 22.4.a requires a PM test on one of the waste gas incinerators (EU IDs 4-6) be performed within five years from the date of the last source test or within one year of the effective date of this permit. The last source test to verify waste gas incinerator PM limits was completed 1998, over 13 years ago.

PWSRCAC notes that PM source testing is required once every five years. Originally implemented as a gap-filling measure (40 C.F.R. 71.6), the proposed permit application neither cited nor referenced any evidence that a PM source test has been conducted in the past 13 years.¹⁵

PWSRCAC recommends that APSC provide the results of any PM tests conducted on the waste gas incinerators since 1998 to verify whether these units have been operating in compliance prior to issuance of the proposed permit. This is important as ADEC's 2008 and 2010 FCEs documented incinerator exceedances of the PM standard.

As proposed, Condition 22.4.a requires the next source test within five years of the last test. Unless APSC provides test data to show that it has, in fact, source tested the incinerators in the past 13 years, this five year test date has already passed. Alternatively, Condition 22.4.1 proposes the source test be completed within one year of permit issuance which could postpone the test until 2012. Because there appears to be a considerable lapse of time since PM tests have been performed, PWSRCAC recommends that Condition 22.4.a require the incinerator PM test to be completed no later than July 1, 2011, or within 30 days of permit

¹⁵ ADEC Statement of Basis of the terms and conditions for Permit No. AQ0082TVP02, March 23, 2011, p. 24.

approval, whichever is earlier. PWSRCAC also requests that ADEC require at least two of the three incinerators be tested, since it appears none of the incinerators have been tested for PM since 1998.

If testing of any two of the three incinerators shows a PM limit violation, then PWSRCAC recommends the third unit also be tested. PWSRCAC suggests the permit also specify that any test showing an exceedance of the PM limit requires repair and retesting of the incinerator until the PM requirement is met.

***Response from ADEC:** In addition to the five year testing frequency proposed, the Department can use its discretion to require testing of additional units for such reasons such as if PM test results or high opacity indicate that additional testing is warranted. The Department has revised the waste gas incinerator PM testing requirement in our response to Comment #15. Regarding the timing of the initial test, note that emission source testing takes time to select and schedule an available contractor and to prepare for testing. Also, budgeting dictates that a client has sufficient time for planned follow-up.*

8. Incinerator Nitrogen Oxide (NO_x) Emission Testing

PWSRCAC Comment: Proposed VMT Title V Permit Condition 24.2.a requires a Nitrogen Oxide (NO_x) test on one of the waste gas incinerators (EU IDs 4-6) within five years from the date of the last source test or within one year of the effective date of this permit. The last NO_x source test was completed on June 6, 2006 on waste gas incinerator unit 53-IN-1B (EU ID 5). This unit met the NO_x limit in 2006.

Incinerator units 53-IN-1A (EU ID 4) and 53-IN-1C (EU ID 6) have not been tested for over a decade.

As proposed, Condition 24.2.a requires the next test on June 6, 2011 or within one year of permit issuance which could postpone the test until 2012.

PWSRCAC recommends that Condition 24.2.a require the incinerator NO_x test be completed no later than July 1, 2011, or within 30 days of permit approval, whichever is earlier. PWSRCAC also recommends that ADEC require incinerator units 53-IN-1A (EU ID 4) and 53-IN-1C (EU ID 6) be tested to verify NO_x requirements, since it appears that they have not been tested in over a decade. If testing of either of the two incinerators shows a NO_x limit exceedance, then PWSRCAC recommends the third unit also be tested. PWSRCAC recommends the permit specify that an incinerator subject to any test showing a violation of the NO_x limit must be repaired and retested until it complies with the proposed permit.

***Response from ADEC:** The new NO_x stack test requirement is being imposed by ADEC in the renewal permit to fulfill the periodic compliance monitoring requirement with the NO_x BACT limit. The condition allows an option to perform the source testing either no later than five years from the date of the last source test (in this case, would be June 6, 2011), or within 1 year of the effective date of this permit. The time allowed for the test is based on ADEC's monitoring regime for Subpart GG turbines, which allows the Permittee the time*

necessary to plan the test on continuously operated units. PWSRCAC's proposed deadline of July 1, 2011 falls before the permit will be issued, and no obvious basis exists for requiring the test within 30 days of permit issue, which would be unrealistic for the Permittee to fulfill and significantly more stringent than that imposed on other stationary sources in Alaska. See related Response to APSC Comment #16. Therefore, ADEC revised the requirement to conduct the test within one year after the effective date of the permit.

Regarding tests of multiple units and retesting of units, permit Section 6 allows additional testing at the discretion of ADEC in the event the test results of the representative unit approaches or exceeds the standard.

9. Incinerator VOC Emission Testing

PWSRCAC Comment: Proposed VMT Title V Permit Condition 49 states that all three waste gas incinerators (EU IDs 4-6) were tested on June 21, 2007 to verify a 98% or greater VOC destruction efficiency could be achieved. We note, however, that the permit does not require any VOC testing during the next permit period (2011-2016) to verify that VOC limits will be met in future years.

PWSRCAC recommends that at least one of the waste gas incinerators (e.g., the incinerator having the highest number of operating hours) be tested by no later than June 21, 2012 (five years from the last source test). If testing of one of the incinerators shows a VOC limit exceedance, PWSRCAC suggests the other units be tested. PWSRCAC also recommends that the permit be revised to require that any incinerator failing a test of VOC limit be repaired and retested until it does meet the requirements of the standard, 18 AAC 50.220(a) & 50.345(a) & (k).

Response from ADEC: *This condition states the requirements for operating these emissions units. This condition is based upon a federal MACT standard that requires a continuous indicator monitoring system to demonstrate ongoing compliance with the underlying destruction efficiency requirements. The 98% VOC destruction efficiency at lower combustion chamber temperatures was established at baseline temperatures of 1,074 °F when only one incinerator is in operation, and 1,078 °F when two incinerators are in operation. Per 40 C.F.R. 63.563(b)(4)(ii), VMT may operate EU IDs 4-6 with the block average temperature as determined in temperature data acquisition system no more than 28 °C (50 °F) below the baseline temperature. That surrogate monitoring ensures that combustion efficiency meets the underlying regulatory requirement. The two source tests of these units have shown a consistent level of destruction efficiency (greater than 99.7% during the source test conducted June 21, 2007) superior to the underlying applicable requirement. No gap-filling term is necessary to ensure the long term destruction efficiency of these sources.*

10. NESHAP Subpart DDDDD Requirements

PWSRCAC Comment: The Proposed VMT Title V Permit Condition 53 reserves a placeholder to insert the final requirements of the NESHAP Subpart DDDDD rule for major

sources of HAP from Industrial, Commercial and Institutional Boilers and Process Heaters. The VMT power boilers are included in this rule.

On March 21, 2011, the EPA issued the final NESHAP Subpart DDDDD rule in the Federal Register for major sources (76 FR 15608).¹⁶ A portion of these rules was held in abeyance pending reconsideration of the portion and described in a separate public notice also on March 21, 2011 (76 FR 15249). However, it is PWSRCAC's understanding that most of the NESHAP Subpart DDDDD was made final and would apply to the VMT.

Because the final rule was issued on March 21, 2011 and the Proposed Title V Permit was posted for public review on March 23, 2011, we understand that ADEC did not have time to incorporate the final NESHAP Subpart DDDDD requirements in the draft permit. PWSRCAC requests that the final NESHAP Subpart DDDDD requirements be included prior to finalizing the permit.

PWSRCAC acknowledges that the portion of the rule under reconsideration cannot be included in the permit until resolved, but recommends that the requirements of the final signed rule that are not under reconsideration be included in the permit. PWSRCAC is concerned that citizens will not receive in a timely fashion the air quality benefits to which they are entitled under the final rule once the permit is finalized unless the permit provides provision for inclusion of those requirements that are resolved during reconsideration of the rule. PWSRCAC requests that the proposed permit specify inclusion of the requirements now under reconsideration once they become final.

***Response from ADEC:** Following the notice of reconsideration published on March 21, 2011, the effective dates of the rule were officially delayed by EPA pending reconsideration and judicial review (76 FR 28663, May 18, 2011). Based upon the effective stay of the rule, pending litigation, and extensive industry and public reconsideration requests, the entire rule is open for subsequent review and revision, and therefore permit terms cannot be crafted at this time. Draft Condition 53.1 (now 49.1) has been revised to state: "Reserved. Effective dates of rule delayed pending reconsideration and judicial review (76 FR 28663, May 18, 2011)."*

11. East Metering Fugitive Emissions

PWSRCAC Comment: Several members of PWSRCAC have had a long-standing concern about the release of VOC containing HAPS from the East Metering facility during pig removal operations. PWSRCAC is concerned not only about the potential explosion hazard posed at this enclosed facility, but also with the amount of VOCs/HAPs that are emitted and not accounted for in the VMT emission estimates. PWSRCAC recommends a regulatory review of this issue and referral as appropriate to agencies having regulatory cognizance for the issue.

¹⁶ 40 C.F.R. Part 63, National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, Federal Register/Vol.76, No. 54/Monday, March 21, 2011.

Response from ADEC: Pipeline maintenance pigging activities are listed under 18 AAC 50.326(f)(97) as insignificant and are not required to be listed in the permit application as described by 18 AAC 50.326(d). Any applicable requirements for these activities would be contained under draft Condition 29 (now 27; Insignificant Emission Units). According to APSC, the VOC emissions from this activity are low due to the cold temperature (approx. 51 deg F average) of the VMT incoming crude stream, and the frequency of the pigging (weekly). These emissions are also not regulated under any applicable state or federal air quality control standard. Flammability, explosive, and worker exposure or safety issues are regulated by other federal and state agencies (such as federal PHMSA and OSHA).

12. ADEC Required Source Testing

PWSRCAC Comment: PWSRCAC notes that 18 AAC 50.220(a) & 50.345(a) & (k) provides ADEC the authority to request source tests in addition to any source testing explicitly required by the proposed permit, and that proposed Condition 73 exercises this authority.

PWSRCAC recommends that the Statement of Basis be revised to include a table listing the source test history for each piece of equipment listed in Table A of the proposed permit. We recommend that this table include EU Identification, Emission Unit Name, Unit Description, Date of Source Test(s), Test Method, Emission Limit, and Test Result. Inclusion of this table will provide a useful chronology for ADEC and APSC, and will facilitate a better understanding by all interested parties of the history of source testing at the VMT.

PWSRCAC makes this recommendation as it is our understanding that, with the exception of the incinerators, many large sources of emissions at the VMT have not been subject to actual source tests and have relied on emission estimating techniques that may or may not have been representative of their actual emissions.

PWSRCAC believes it is reasonable to have accurate air pollutant emission estimates in APSC's Title V permit because the VMT is one of the largest crude oil loading facilities in the nation and potentially one of the largest sources of emissions in Alaska.

Response from ADEC: EU IDs 1 - 6 are the largest emission units at the VMT. The equipment have been tested, retested, and/or will be tested within the permit term. In addition, EU IDs 4 - 6 are equipped with a continuous monitoring system (CMS) as specified by 40 C.F.R. Part 63 Subpart Y. Other equipment at VMT (backup diesel-fired generators) do not operate on a routine basis, and have actual emissions near or below insignificance thresholds. Emission estimates for equipment without source tests are based upon EPA emission factors, which are routinely used in Alaska and throughout the US, particularly for units that are not subject to a numerical emission standard.

It is presently not the practice of the ADEC to include a source testing history table in a Title V permit statement of basis. Further, the Statement of Basis Table F listing Potential to Emit does display the estimated maximum air pollution emission estimates for each stationary source already. (For a source that has been in continuous operation since the 1970's, many

test records exceed ADECs regulatory-mandated record retention schedule and may no longer exist in ADEC records).

PWSRCAC Comment: A stated purpose of Title V is to establish periodic monitoring requirements to demonstrate compliance with emission limits. Combustion sources age and become less efficient over time, potentially resulting in increased emissions. Emission sources require periodic monitoring to determine compliance with their air quality permits. To assure continued compliance, PWSRCAC suggests the permit require the source to operate the control system in the same manner as it was operated during compliance testing. To demonstrate continued compliance, periodically monitoring appropriate operating parameters of control equipment is recommended.

Response from ADEC: *Source testing requirements include conducting the tests under normal operating conditions. Periodic maintenance and monitoring of operating parameters are part of good air pollution control practices (GAPCP) required for significant emission units in all Title V permits. For this renewal permit, such requirements are stipulated under draft Condition 32.1 (now 30.1; for units subject to NSPS Subpart III), draft Condition 37 (now 35; NESHAP Subpart A), Table D under 63.562(e) for units subject to NESHAP Subpart Y, draft Conditions 43.1 and 43.2 (now 40.1 and 40.2) for units subject to NESHAP Subpart EEEE) and draft Condition 61 (now 56) for all other significant units.*

EU 4 – 6 are control devices, and subject to GAPCP under NESHAP Subpart Y. In addition, Subpart Y also requires the equipment to be operated within the temperature range demonstrated to ensure compliance with the Subpart Y emission standard during the performance test.

PWSRCAC Comment: Emission factors are generally not appropriate for determining compliance with an applicable requirement unless the factor has been developed directly from the emission unit in question. This is a problem for most of the operating sources at the VMT which rely heavily on the use of emission estimates and rules-of-thumb for determining compliance, rather than on actual stack testing, source testing, or rigorous periodic monitoring programs.

Response from ADEC: *Some of the equipment at VMT (such as the ballast water treatment tanks and some fuel-burning engines whose actual emissions do not exceed the significant emissions thresholds in 18 AAC 50.326(e)) are not subject to a specific emission standard for which compliance must be demonstrated. These equipment are subject to applicable State Implementation Plan (SIP) standards and the ADEC has developed standard monitoring to ensure continuous compliance. Further, the equipment for which numerical emission standards (such as the power boilers and waste gas combustors, EU IDs 1 – 6) apply have been tested and/or will be tested during the permit term, or is already subject to continuous monitoring. APSC has recently submitted an amendment to the renewal permit application revising the stationary source-wide potential-to-emit (PTE) values reported based on the recent stack source testing results for EU IDs 1 – 6. See related Response to PWSRCAC Comment #4.*

PWSRCAC Comment: As the equipment at this facility continues to age, it is more likely to malfunction or be less efficient. It would be useful to develop more continuous methods to verify compliance. Parametric monitoring may be appropriate for some sources at this facility, although the actual source testing must be conducted to develop those correlations. Development of an appropriate periodic monitoring program for the major sources of critical air pollutant emissions and major sources of air toxic emissions at the VMT represents the real value gained from a Title V operating permit. PWSRCAC proposes this be a priority when developing a monitoring program to protect public health and the environment in the Valdez area.

As noted above in our comments on Incinerator testing, PWSRCAC is concerned that in cases where testing is explicitly required by the permit, tests have only been done on one of the units, not all, and may not be representative of the emission levels for each unit. Another concern is that the frequency of testing does not meet the recommended five year intervals for some significant pollutant sources. Where there are several similar units, PWSRCAC encourages source tests be conducted on a rotating basis so that over time all units are tested.

***Response from ADEC:** Where an emissions standard applies, tests have already been conducted and/or will be conducted, or the equipment is equipped with continuous monitoring. Conditions requiring source testing of similar units allow testing on only one unit as a representative for the other similar units. Standard monitoring for SIP limit ensures continuous compliance and ADEC reviews combined with inspections ensure that it is effective. ADEC agrees with the comment that it is prudent to rotate emission units that undergo testing in order to ensure that, over time, all units are being tested periodically. ADEC has adopted this regime in many recently issued permits.*

PWSRCAC Comment: PWSRCAC recommends that proposed Condition 78 be revised to require a public notice of any test deadline extension. We recommend that a public review of test deadline extensions be conducted at ADEC's discretion for extensions having the potential to significantly adversely affect the air shed in the vicinity of the VMT. We also suggest that in any internal or public review of test deadline extensions, the applicant be required to defend a request for an extension including the specifics of the circumstances that make the extension unavoidable. As proposed, Condition 78 would allow ADEC to grant a test deadline extension without public review and input, and there are no criteria included for determining what constitutes an acceptable basis for an extension.

PWSRCAC's concern is that emission tests, or other compliance verification tests, not be delayed for reasons of operational convenience or to defer operating costs. There may be times where an operator will run into situations where a deferral is unavoidable due to an emergency situation, but these situations are rare and can be avoided by proper planning and resource allocation.

***Response from ADEC:** As of this time, there is no regulatory basis to require public notice of test deadline extensions. Condition 78 (now Condition 75) is a standard permit condition incorporated into 18 AAC 50.345. Considering the costs associated with publication and challenging logistics to conduct timely testing within the State, ADEC may or may not allow*

test deadline extensions based on reasonable circumstances or the need for urgency, and as allowed by current applicable regulations in 18 AAC 50.345(l).

13. Excess Emissions Reporting and Impact Assessment

PWSRCAC Comment: Both the existing and proposed VMT Title V Permits include requirements to report excess emissions that occur (e.g., Conditions 87 and 88). However, the proposed permit does not require APSC to quantify the amount of air pollution generated during the excess emission event, and to verify whether the NAAQS were actually exceeded.

PWSRCAC greatly appreciates the work that ADEC completed on the 2006, 2008 and 2010 FCEs at the VMT. These FCEs documented numerous excess emission incidents during the period of the existing VMT Title V permit (2003-current). However, no estimates of the amount of excess air pollution that was actually generated were made, nor was it confirmed if a public health standard violation actually occurred. PWSRCAC recommends that the Statement of Basis be re-examined for any impact due to excess emission events and to verify whether a public health standard was violated since 2003.

Condition 65 of the proposed permit prohibits air pollution and requires APSC to report emissions that present a potential threat to human health or safety. It does not require APSC to quantify the amount of air pollution generated during the excess emission event, nor to verify whether the NAAQS were exceeded. As proposed, it appears that Condition 65 places a considerable burden on the public to file a complaint in order to trigger corrective action. However, many harmful air pollutants are odorless and colorless. The public may be exposed to pollutant levels that exceed state and federal emission limits, but typically has no way to know that harmful emissions may be occurring. Only operators and regulators are in positions to observe and correct excess emissions and to determine whether pollutant levels may be exceeding public health standards. The responsibility should be more squarely placed on the operator to identify excess emissions and to immediately attempt to mitigate excess emissions. If emissions are unavoidable, the operator should immediately quantify the actual amount of air pollution and notify regulating agencies and the public of any potential public health violation.

Therefore, PWSRCAC recommends that the proposed VMT Title V Permit be revised to include a requirement to quantify the amount of excess emissions at the time of or shortly after the event and to notify state and local authorities of potential or actual public health violations so that local communities can inform residents and steps may be taken to protect public health.

Response from ADEC: *The excess emissions and permit deviations (EPPD) reporting requirements in the permit are standard permit conditions adopted into regulation and applicable to all Title V sources. These conditions ensure the Permittee will notify the ADEC if public health is threatened. More specifically, draft Condition 87.1a(i) (now 83.1a(i)) requires the Permittee to report, as soon as possible after the event commenced or is discovered, emissions that present a potential threat to human health or safety. In addition, Section 2, items c and d of the EPPD report form (see Section 12, ADEC Notification form,*

of the draft permit) requires detailed information on excess emissions, including emission units involved, parameters/operating conditions exceeded, limits, monitoring data and exceedance. In addition for tank venting, ADEC has required APSC to quantify emission rates. Compliance with ambient standards is more challenging for excess emissions unless another system exists to quantify effects of releases. Depending on the type and magnitude of a given event, ADEC may use it's authority to request such information. However writing permit terms for such a scenario is not a normal procedure.

14. Waivers

PWSRCAC Comment: Proposed VMT Title V Permit Condition 90.2 (now Condition 85.2) includes a requirement to provide to ADEC, upon request, a copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule, or waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirement. PWSRCAC recommends that the proposed permit be revised to include a summary of any EPA granted waivers and that any effects of these waivers be included in the Statement of Basis analysis.

Response from ADEC: *Draft Condition 90.2 (now 85.2) is a standard operating permit term used in all ADEC issued Title V permits. The Statement of Basis provides the legal and factual basis for the applicability of a Title V permit term or condition to a stationary source and inclusion of those currently applicable requirements. It is not intended to be used as a document to store a stationary source's entire operating history. Any currently applicable formal document, waiver or letter used as the basis for a monitoring, recordkeeping or reporting requirement is either used as a permit citation to that requirement or is noted in the permit footnotes.*

15. Actual Emissions Reporting

PWSRCAC Comment: The Proposed VMT Title V Permit Condition 91 includes a requirement to annually provide estimates of actual emission quantities for each emissions unit for comparison with permit limits.

The Statement of Basis states that under the existing permit, ADEC has made requests for actual emission calculations. PWSRCAC requests that the Statement of Basis provide information comparing the actual emission calculations for each VMT emissions unit compared to the permit limits for the period of 2003 to 2010. This information will provide the public with the data needed to verify that emission units have met the permit limits during 2003-2010.

Response from ADEC: *As set out in 40 C.F.R. 51.1, EPA requires the State to inventory emission sources located on nontribal lands and report this information to EPA. As explained in the Statement of Basis, in order to increase governmental efficiency and reduce costs associated with routine information requests in satisfying the requirements of Subpart A of 40 C.F.R. 51, draft Conditions 91 and 92 (now 87 and 87.1) have been adopted as Standard Permit Condition XV under 50.346(b)(8). The purpose is not to compare actual*

emissions to permit limits, but as a tool to facilitate the state-required emissions inventory and reporting requirements. In addition, the Statement of Basis is not intended to be an enforcement tool. The ADEC reviews emissions performance when it conducts reviews and inspections of Title V sources to ensure permit limits are consistently met. See related Response to APSC Comment #52.

16. Regulatory Effects on Renewal Timing

PWSRCAC Comment: PWSRCAC is aware that delays in renewing air quality rules depend on a variety of constraining factors. Nevertheless, PWSRCAC is concerned that delays in renewing permits may deprive members of the public from receiving the air quality benefits to which they are entitled by virtue of new and revised rules. PWSRCAC recommends that all reasonable efforts be made to process renewal of air quality permits in a timely fashion.

Response from ADEC: *New and revised rules, both federal and state, are required to be complied with according to their regulatory timelines independent of Title V renewal timeframes. A Title V permit renewal never delays the implementation of compliance with a new or revised applicable requirement at the VMT source or any Title V stationary source. The revised permit will simply list currently applicable requirements on the issue date with the monitoring, recordkeeping and reporting for each requirement.*

Although we do not see that a delay in a permitting decision is a delay for new rule implementation, ADEC is required to renew air quality control operating permits within one year after the application date. Since this permit decision is already greater than 12 months old, ADEC will continue its effort to expedite a final decision.

17. PWSRCAC Substantive Changes and Public Process

PWSRCAC Comment: Should ADEC decide that substantive changes to the permit are warranted, PWSRCAC requests that the public again be notified and given an opportunity to comment on such changes.

ADEC has made several changes to the draft final decision, including changes to the Statement of Basis. However, in total, the permit changes are not substantive. Therefore, ADEC has elected not to republish a revised preliminary decision.

Additional Changes: *ADEC made the following additional changes not discussed in the comments above and excluding typographical, spelling, formatting, and grammatical corrections found throughout the draft permit and Statement of Basis (SOB):*

- *Added the acronyms “NA” and “ULSD” under the List of Acronyms Used in this Permit.*

- Changed “Monitoring shall consist of an annual statement of compliance under Conditions 29 and 89 with the visible emissions (particulate matter) standard in accordance with Condition 29.4” to “Monitoring shall consist of an annual compliance certification under Condition 84 with the visible emissions standard (particulate matter) in accordance with Condition 27.4” in Conditions 1.3 (VE) and 8.3(PM).
- Changed the subheading before Condition 20 from Waste Gas Incinerator Best Available Control Technology (BACT) Limits to “Air Pollution Control Devices (EU IDs 4 – 6) Best Available Control Technology (BACT) Limits” consistent with response to APSC Comment #2.
- Added Condition 25.10 to gap-fill the operating report requirement under Condition 25. Added the citation 40 C.F.R. 71.6(a) & (c)(6).
- Consistent with response to APSC Comment # 29 and for clarity, ADEC revised Footnote 23 (in Condition 35.3) as follows:

EU IDs ~~8A, 8T,~~ and 9A and EU IDs ~~8-10~~ – 16, emergency RICE units, are not subject to the requirements of NESHAP 40 C.F.R. 63 Subpart A, except NESHAP 40 C.F.R. 63 Subpart A applies for the initial notification requirements of 40 C.F.R. 63.9(b)(2)(i) – (v) for EU IDs 8A and 9A, as listed in Conditions 38.2(i) through 38.2(v) if the units no longer meet the “emergency unit” criteria in 40.6640(f) (see Conditions 36.2 and 36.3) and have switched operational status to “non-emergency”.
- Corrected citation under Condition 36.3 by deleting reference to 40 C.F.R. 63.6590 (b)(3)(iii), for accuracy.
- Added “listed in Table A” in Condition 38, for quick cross-reference.
- Corrected the referenced citation in SOB for Condition 87 from 40 C.F.R. 51.20 to 40 C.F.R. 51.50.
- Updated the regulatory basis on the cover page of the permit to reflect the most recent rules promulgated to April 13, 2011, Register 198.
- Ex Parte Communications: December 12, 2011, APSC advised ADEC that the terminal responsible official is now Scott Hicks, not Joe Kuchin. ADEC accepted the edits.
- Ex Parte Communications December 12, 2011. For Condition 15.3(c) and (d), quarterly calibration of the in-line GC for C6-C10 apportionment in waste gas is excessive. ADEC asserts that this issue was brought up after the close of the public comment period. Also, the calibration is not related to reliability and precision of the GC instrument, but variability of waste gas C6 through C10 apportionment. Therefore the Department did not remove the quarterly waste gas testing and GC adjustments. If waste gas C6 through C10 will be shown as not variable over four consecutive samples, ADEC will allow APSC to sample once per calendar year.

- *Ex Parte Communications: December 12, 2011, APSC advised ADEC that Condition 18.4 was unclear. The monitoring plan referenced appeared to be required by the subpart or by the BOMP. ADEC staff confirmed the prior operating permit referred to the BOMP monitoring plan and edited condition 18.4 consistent with the prior operating permit.*
- *Ex Parte Communications: December 12, 2011. APSC advised ADEC that compliance staff should consider the event before requiring an emission rate estimate and root cause analysis for an event. Also, the permit deviation excess emission notification scheduling required for notices under this term make the additional information obligation unwieldy. ADEC staff agree that information requests should be conditioned by the ADEC compliance inspector upon review of the initial notice. Therefore, the draft final permit now reflects the text from Condition 10.5 of the expiring operating permit.*
- *Ex Parte Communications: December 12, 2011—APSC requested that ADEC use the latest emission estimates provided in August 2011 in response to an ex parte conference of August 3, 2011.*

During the meeting, ADEC questioned use of 2010 emission source test data to develop new emissions factors as the basis for potential to emit calculations and assessable emissions calculations since APSC did not submit a plan or schedule to allow ADEC staff to witness the emissions tests, and that fuel burning equipment was not at full-load at the time of the test. ADEC asked that APSC compile historical equipment tests and to use the greatest emission source test derived factor for calculating potential and actual emissions. After the meeting, APSC provided the August 2011 spreadsheet in response to ADEC's concerns. APSC also provided documentation that emission factors derived from the 2010 test data were previously accepted in Spring 2011 for assessable emissions purposes.

Since these changed estimates do not change underlying applicable Air Quality Control requirements and permit applicability assertions, but only affect permit fees, ADEC accepted use of the updated emission estimates in the Statement of basis for this operating permit decision.

Further, upon completion of EPA's 45-Day review, the Department made the following typographical corrections based on comments submitted by the Permittee during EPA review. None of these were considered significant:

- *Condition 15.3(c) - (e): deleted as the calibration procedure is not possible nor recommended by the instrument manufacturer.*
- *Condition 26 – Should reference EU 79-80. ADEC agreed to make change, so lack of change appears to be typo.*
- *Condition 36.3 – References EU 8-16. Should be EU 10-16. Similar to above, appears to be typo.*
- *Table D – Monitoring under 63.563(b)(4)(ii) incorrectly still states old temperature limits rather than just new temperature limits. APSC requested removal of the old limits.*

ADEC did not comment. The 2nd reference to this citation for monitoring uses different language, so the text was adjusted to make each reference the same as taken from the actual rule.

- *Condition 18.4: typographical correction. The Department corrected the word “cruise” to “crude”.*
 - *Footnote 3 to Table A: removed redundant text regarding EU ID 8A, 9A and 8T installations.*
 - *Added a new footnote #22 to Condition 33.1 that notes that these Conditions 33.1 and 34 duplicate requirements in Conditions 24.2 and 24.3 which are State-only requirements. The conditions originally developed from an earlier version of the NSPS Subpart IIII that was revised during permit development.*
-