Comments on and Recommendations for Revisions for the Alyeska Pipeline Service Company Title V Air Quality Operating Permit for the Valdez Marine Terminal Permit No. AQ0082TVP02

Submitted By

PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL

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Introduction

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) provides these comments and suggestions for revisions to assist the Alaska Department of Environmental Conservation (ADEC) in its development of the proposed Valdez Marine Terminal (VMT) Title V operating permit (Proposed VMT Title V Permit). Alyeska Pipeline Service Company (APSC) operates the VMT for the owner companies of the Trans-Alaska Pipeline System (TAPS).

PWSRCAC represents coastal communities that share the airshed with the VMT. Air quality control is very important to these coastal communities as clean air is vital to community and ecosystem health. PWSRCAC appreciates ADEC's efforts to permit, monitor, and enforce the requirements of air quality permits that maintain, as close as possible, a pristine air shed, and one that meets or exceeds National Ambient Air Quality Standards (NAAQS) and other state and federal air quality standards.

PWSRCAC commends ADEC's work (and the work of ADEC's consultant, Cardno ENTRIX) to prepare a greatly improved Proposed VMT Title V Permit. The draft permit and associated Statement of Basis reflect a detailed technical and regulatory assessment for most aspects of the permit. The permit clearly identifies each requirement that applies to the VMT, and describes how the facility is required to comply with specific monitoring, testing, record keeping, and reporting instructions. It is clear that ADEC and its consultant dedicated significant time and expertise to diligently prepare a proposed permit with a goal of public and ecosystem protection.

PWRCAC also commends ADEC's inspection and enforcement efforts over the past several years. Since the VMT Title V Permit was renewed in 2003, ADEC completed three Full Compliance Evaluations (FCEs) in 2006, 2008, and 2010. ADEC's FCEs found a number of compliance violations and areas for improvement, and ADEC pursued enforcement actions to remedy violations during this time. PWSRCAC also commends ADEC for increasing the number of inspections, broadening the scope of the inspections, and following through to remedy non-compliance issues.

Overall, PWSRCAC is pleased with and supportive of the technical and regulatory work that has been completed to prepare this Proposed VMT Title V Permit for renewal. However, PWSRCAC has identified for ADEC consideration some additional areas that have the potential to yield an improvement in air quality, and has identified areas where additional information will enhance public understanding of the air quality issues associated with operations at the VMT.

PWSRCAC requests that ADEC consider the comments and recommendations contained herein on their technical merit and revise the Statement of Basis and permit accordingly. PWSRCAC stands ready, willing, and able to provide additional information or to assist ADEC personnel in any additional research needed in the development of the final permit. PWSRCAC would welcome an opportunity to participate in another public comment period should ADEC decide one is needed.

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

Background

Title V Air Quality Operating Permit Program

The Title V Air Quality Operating Permit Program combines all the existing air quality permit requirements for a facility into a single, comprehensive operating permit that covers all aspects of a facility's air pollution activities. All existing air permits previously issued to a facility serve as the starting basis for the requirements of the Title V permit. Once the requirements of the existing permits are consolidated, these existing permits are then superseded by the final Title V Permit. The Title V Permit must also consolidate and include all other state and federally enforceable requirements that may not currently be listed in the existing state air permits for the facility. In addition, the Title V Permit must ensure that each permit requirement has a clear regulatory basis and that periodic monitoring requirements are imposed to ensure continuous compliance with the enforceable standards. The Title V Permit also specifies reporting and record keeping requirements so that periods of compliance and non-compliance are documented. The Title V Permit must be accompanied with a "Statement of Basis" document, which provides the technical and legal rationale and background for the proposed terms and conditions of the Title V Permit.

Tank Venting

The existing VMT Title V Permit (Condition 10) prohibits the crude oil tanks (EU[1] 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.[2]

In 2005, there were two significant excess emission events where tank venting was caused by a power outage.[3] 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 December 11, 2006, ADEC issued a Failure to Comply notification.[4] ADEC's Full Compliance Evaluation (FCE) found that APSC had 17 excess emission events between 2003 (when the permit was issued) and December 2004 due to tank venting in violation of its permit. According to APSC, venting causes varied but generally occurred due to equipment malfunction and maintenance-related cases (e.g., pressure header valve malfunction, vent valve actuator failure, actuator

[1] EU= Emission Unit
[2] 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.
[3] 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.
[4] 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.

hydraulic pump motor shaft failure, and vent valve failure due to low actuator oil). In some cases, no cause was provided.

On October 2, 2008, ADEC issued another Failure to Comply notification to APSC.[5] 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.[6] 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 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.

[5] 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.

[6] 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.

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.[7] PWSRCAC requests that the proposed permit be revised to require ASPC to change the BOMP to address the causes of recent tank venting incidents.

Source Inventory

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 Floatation (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.

Marine Vessel Visible Emissions

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

[7] 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.

Method 9 marine vessel visible emissions monitoring when opacity exceeds 10%, and to require at a minimum annual Method 9 training for observers.

VMT is a Major Source of Hazardous Air Pollutants

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.

Particulate Matter Monitoring

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.

Sulfur Emissions from Tankers

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.[8] The 1996 modeling contains a worst case scenario describing cumulative predicted impacts approaching 91% of the limits of the three-hour sulfur dioxide (SO_2) 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 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 SO_2 standard. SO_2 emissions are linked with a number of adverse effects on the respiratory system.[9] Because APSC's modeling shows that the VMT is at 91 percent of the 3-hour SO_2 standard, it may be possible for the SO_2 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 violationTherefore, PWSRCAC agrees with the requirements of the proposed permit that updated modeling that demonstrates a much larger margin for compliance with the three-hour SO_2 standard should be provided.

Absent updated modeling, PWSRCAC requests that APSC be required to demonstrate that it will not exceed the SO_2 NAAQS in the event excess sulfur emissions occur from any individual or combination of permitted units.

[8] ADEC Statement of Basis of the terms and conditions for Permit No. AQ0082TVP02, March 23, 2011, p. 22.
[9] http://www.epa.gov/air/sulfurdioxide/

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 SO_2 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 SO_2 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.

Incinerator Particulate Matter (PM) Emission Testing

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 CFR 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.[10]

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

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

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 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.

Incinerator Nitrogen Oxide (NO_x) Emission Testing

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.

Incinerator VOC Emission Testing

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).

NESHAP Subpart DDDDD Requirements

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).[11] 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 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.

East Metering Fugitive Emissions

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.

ADEC Required Source Testing

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

[11] 40 CFR 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.

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.

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.

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.

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.

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.

Excess Emissions Reporting and Impact Assessment

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.

Waivers

Proposed VMT Title V Permit Condition 90.2 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.

Actual Emissions Reporting

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.

Regulatory Effects on Renewal Timing

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.