Alaska Department of Environmental Conservation

Air Permits Program

Final - March 2, 2011

Municipality of Anchorage - Anchorage Water and Wastewater Utility (AWWU)

John M. Asplund Water Pollution Control Facility

STATEMENT OF BASIS

of the terms and conditions for

Permit No. AQ0245TVP02

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0245TVP02.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0245TVP02 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by, Municipality of Anchorage - Anchorage Water and Wastewater Utility (AWWU) and Anchorage Water and Wastewater Utility is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 4952 - Sewerage Systems.

The John M. Asplund Water Pollution Control Facility is used as a primary wastewater treatment plant for the Anchorage Bowl and the surrounding communities, with a residential population of around 250,000 and some industrial sources in the Anchorage area. Built in 1972 and expanded to a capacity of 58 million gallons per day (mgd) in 1987, this stationary source operates under an EPA secondary treatment waiver. The plant provides primary treatment to an average daily flow of wastewater of approximately 30 mgd. Unit processes include screen, grit removal, clarification, disinfection, solids thickening, dewatering, and incineration. Biosolids and skimmings removed from the six clarifiers are thickened, de-watered, and incinerated. The residual ash is wetted and hauled to the municipal landfill for disposal. The effluent is chlorinated before it is discharged through an 800-foot-long outfall to Knik Arm, an extension of Cook Inlet.

EMISSION UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 C.F.R. 71.5(c)(3).

The emission units at the John M. Asplund Water Pollution Control Facility that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0245TVP02.

Table A of Operating Permit No. AQ0245TVP02 contains information on the emission units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

Emergency Generators (EU IDs 2 and 3)

The diesel-fired emergency generators EU IDs 2 and 3 were added to Table A during this review. EU IDs 2 is subject to the requirements of 40 C.F.R. 60 Subpart IIII, and EU IDs 2 and 3 are subject to the requirements of 40 C.F.R. 63, Subpart ZZZZ and are therefore considered significant emission units. The requirements of 18 AAC 50.055 for industrial processes and fuel burning equipment have been added to the permit for EU IDs 2 and 3.

Note: Although internal combustion engine EU ID 3 is designed to be carried or moved from one location to another, this unit does not meet the definition of non-road engines in 40 C.F.R.

1068.30 because the engine has remained at a location for more than 12 consecutive months. According to 40 C.F.R. 1068.30, a location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

Incinerator (EU ID 1)

A Zimpro Multiple-Hearth incinerator was installed at the stationary source to replace the older BSP Envirotech sewage sludge incinerator, and began operation in 1986. The older BSP Envirotech incinerator is still located at the plant but has been removed from service. This incinerator is not capable of being operated. During a stack emissions test of EU ID 1 performed on September 11, 2007, the feedrate was calculated to be 9,986 dry tons of sludge per year. The Department determined that this feedrate is an acceptable specification of the incinerator's rating.[1] This is the rate used to demonstrate compliance with applicable emissions standards for this unit.

Compliance monitoring devices of EU ID 1 include a continuous opacity monitoring system (COMS) and a pressure differential meter on the scrubber system. Other required measuring systems include an oxygen monitor, temperature monitors on the hearths, a sludge belt scale, a natural gas meter, and an effluent flow-meter.

The incinerator has a multiple throat venturi scrubber and multiple impingement tray wet scrubber in series controlling air pollutant emissions in the exhaust from the incinerator. The sewage sludge incinerator is a natural gas-fired unit and fueled by pipeline quality natural gas. The upper part of the tray scrubber is a mist eliminator. A second mist eliminator follows the tray scrubber. Ash handling is done under negative pressure, effectively containing any fugitive emissions within the ash ducts. The ash is watered and the slurry is loaded on dump trucks for land filling at the Anchorage landfill. During summer some of the ash and grit is used at a composting facility nearby. Dewatered (belt pressed) sludge entering the incinerator top has around 30% solids. Rotating Rabble arms rake the sludge, exposing surface area to heat. The sludge travels from one hearth to next during the incineration from the drying hearts (1 and 2) at the top, to the combustion hearts (3 and 4) in the center and finally to the cooling hearths (5 and 6) at the bottom.

Combustion gases from the top of the incinerator move up the scrubber aided by the ID fan's suction, through counter current water spray in a series of perforated impingement plates, to the stack exit. CEMs for measuring stack temperature, and opacity are located at the stack exit.

According to the permit renewal application (i.e., AQ0245TVP02A), the following improvements were made during the term of AQ0245TVP01, which were described as "functionally equivalent components", were made to the incinerator (EU ID 1) under an "off-permit" classification under 40 C.F.R. 71.6(a)(12).

1. Internal refractory and steel shell repairs to the furnace;
2. Replacement of a fixed speed 125 hp induced draft fan with a variable speed 100 hp fan;

[1] Determination made April 19, 2010, based on Department discussion with the Permittee; and relatively flat growth profile for Anchorage due to spatial limitations. Additionally, the stationary source installed an upstream filter (screen) for solids removal with screened solids sent to the landfill instead of the incinerator.

3. Replacement of a single throat venturi and multiple impingement tray wet scrubber with a multiple throat venturi and multiple impingement tray wet scrubber;
4. Replacement of all 8 gas burners with equivalent BTU/hr rated low-NO_X gas burners;
5. Installation of 2 ambient air ports (common industry practice); and
6. SCADA monitoring, display, and control system improvements replacing manual systems.

The Permittee has certified that the fixed capital costs associated with these improvements to the existing incinerator (EU ID 1) did not exceed 50 percent of the fixed capital cost that would be required to construct a comparable entirely new incinerator.[2]

Insignificant Emission Units and Activities

The Permittee identified the following insignificant emission units and activities, which are exempt from being included in the permit because of their size or production rates:

1) Mobile sources;
2) Air-conditioning, ventilating units, and heating units used for human comfort;
3) Noncommercial food preparation;
4) Consumer use of office equipment and products;
5) Janitorial services and consumer use of janitorial products;
6) Internal combustion engines used for landscaping purposes;
7) Two natural gas-fired hot water boilers (< 4 MMBtu/hr each);
8) Eight natural-gas fired space heaters (< 4 MMBtu/hr each);
9) Three natural-gas fired HVAC units (< 4 MMBtu/hr each);
10) One natural-gas fired humidifier (140,000 Btu/hr);
11) One above ground 2,000 gallon diesel fuel tank;
12) Two grit chambers (domestic sewage);
13) One flow splitting structure (domestic sewage);
14) Six clarifiers (domestic sewage); and
15) Four thickeners (domestic sewage).

EMISSIONS

A summary of the potential to emit (PTE)[3] and assessable PTE as indicated in the application, and which were verified by the Department, from the John M. Asplund Water Pollution Control Facility is shown in the table below.

[2] In their June 2, 2010 Request for Information response, AWWU indicated that the upgrades to the incinerator cost $7.71 million and that the 1999 Asplund WWTF Facility Plan by CH2M-Hill estimated the cost of a new fluidized bed incinerator to be $42 million.

[3] *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(23), effective 12/3/05.

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

Pollutant	NO_X	CO	PM-10	SO_2	VOC	HAPs	CO_2e	Total
PTE	32.6	156.5	1.4	1.3	14.7	0.2[(a)]	3,051	206.5
Assessable PTE	32.6	156.6	--	--	14.7	--	--	203.9

(a) HAP emissions that were also VOCs were not included in this column because this would double count the emissions. Phenol was the highest HAP/VOC.

(b) This stationary source is not a major source of HAPs because the PTE of each individual HAP is less than 10 TPY and the combined HAPs for the stationary source are less than 25 TPY.

(c) CO_2e emissions are not included in the total PTE or the assessable PTE. No fees are charged for CO_2e at this time.

(d) CO_2e emissions listed here in metric tons/year.

The assessable PTE listed under Condition 43.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY. The emissions listed in Table A are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source.

Emissions were calculated as follows:

Emissions of criteria pollutants and HAPs from the incinerator (EU ID 1) were calculated using U.S. EPA AP-42 emission factors and a potential feedrate of 9,986 tons of dry sludge per year. VOC emissions, including fugitive emissions, from wastewater and sludge handling processes were calculated using emission factors from the Joint Emission Inventory Program (JEIP) for the California South Coast Air Quality Management District for Rule 1179. HAP emissions from wastewater and sludge handling processes were calculated using results of the August 1996 priority pollutant testing. Emissions of criteria pollutants from the emergency diesel generators (EU IDs 2 and 3) were calculated using U.S. EPA AP-42 emission factors and a maximum of 500 hours of operation per year.

Note: Source testing of EU ID 1 was performed by the Permittee on September 11, 2007. The test was performed by Anchorage Water and Wastewater Utility to establish site specific emission factors for calculating the stationary source's potential to emit for Title V permit applicability. Anchorage Water and Wastewater Utility performed the emissions source test to demonstrate that the stationary source emissions of regulated air pollutants were below 100 TPY, the Title V permit requirement threshold, based on the incinerator carbon monoxide (CO) production rates (the largest emission) from this source test. If the PTE was shown to be below 100 TPY for CO, then the Anchorage Water and Wastewater Utility stationary source would no longer be required to obtain a Title V permit.

On March 18, 2010, the Department sent a letter to Anchorage Water and Wastewater Utility indicating that the September 11, 2007 test was not representative of Anchorage Water and Wastewater Utility's normal operations. As such, the Department has denied the Anchorage Water and Wastewater Utility's requested revisions included above.

Based on this decision, the Department maintains that AWWU is a Title V source based on emissions of regulated air pollutants which require a Title V operating permit as set forth in AS

46.14.130(b) and 18 AAC 50.326(a) and will proceed with processing of AWWU's Title V renewal application."

In the renewal application submitted by Anchorage Water and Wastewater Utility on January 29, 2008, Anchorage Water and Wastewater Utility also requested changes to the calculated rated size of the Zimpro Incinerator with multi-venturi scrubber and impingement tray scrubber (EU ID 1) to 9,986 dry tons of sludge per year instead of 15,172 dry tons per year. The Department determined that a federate of 9,986 dry tons per year is an acceptable specification of the incinerator's rating.

The following request was also included in the renewal application:

The 2007 source test reported an incinerator particulate matter emission rate of 0.245 lbs/dry ton of bio-solids. This is less than the 0.75 lbs/dry tons of bio-solids threshold limit and qualifies AWWU for the monitoring of operation exemptions provided in NSPS Subpart O – 40 C.F.R. 60.153(d). The Permittee requested the Subpart O monitoring exemptions specified below be applied to the John M. Asplund Water Pollution Control Facility Title V operating permit. However, at any time the Permittee exceeds the NSPS monitoring threshold (i.e., 0.75 lb/dry tons bio-solids), such exemptions shall no longer apply to this stationary source:

1) Continuous operation of the monitoring devices and data recorders in 40 C.F.R. 60.153(a)(1), 40 C.F.R. 60.153(b)(3), and 40 C.F.R. 60.153(b)(4) shall not be required.

2) Daily sampling and analysis of sludge feed in 40 C.F.R. 60.153(b)(5) shall not be required.

3) Recordkeeping specified in 40 C.F.R. 60.153(c)(3) shall not be required.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[4] must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists three categories of sources that require an operating permit:

- A major source;
- A stationary source including an area source subject to federal new source performance standards under Section 111 of the Clean Air Act or national emission standards under Section 112 of the Clean Air Act;
- Another stationary source designated by the federal administrator by regulation.

This stationary source requires an operating permit because it is classified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a) as

- A major stationary source as defined in Section 302 of the Clean Air Act that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant.

[4] *Title V source* means a stationary source classified as needing a permit under AS 14.130(b) [ref. 18 AAC 50.990(111)].

AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent permit to operate that was issued for this stationary source is Permit-to-Operate No. 9521-AA0011. This permit-to-operate included all construction authorizations issued through April 21, 1995, and was issued before January 18, 1997 (the effective date of the new divided Title I/Title V permitting program). All stationary source-specific requirements established in this permit are included in the new operating permit as described in Table F.

Title I (Construction and Minor) Permits

The Department issued no construction permit for this stationary source after January 17, 1997 (the effective date of the new divided operating and construction-permitting program). The Department issued no minor permit for this stationary source after September 30, 2004.

Title V Operating Permit Application, Revisions and Renewal History

The owner or operator submitted an initial permit application on December 5, 1997. The permit was issued on July 1, 2003.

Revision 1 to the initial permit was issued on November 19, 2004. This revision removed permit conditions which incorporated requirements of 30 C.F.R. 503, which are based on the Clean Water Act. The Permittee requested the removal of those conditions because Clean Water Act regulations are not applicable to the Air Quality program.

The owner or operator submitted a permit renewal application on January 29, 2008.

The application was amended on April 24, 2008. In this amended application the Permittee provided revised information for the 125 kW and 150 kW generators (insignificant emissions units).

The Department received additional information on October 1, 2009. This information was in response to a Request for Information letter sent to AWWU on August 12, 2009 regarding the September 11, 2007 source testing results.

The Department received additional information on November 25, 2009. This information was in response to the Department's request for additional information, made during a teleconference on October 16, 2009, concerning the sludge incinerator.

The Department received additional information on June 3, 2010. This information was in response to the Department's Request for Information letter sent to AWWU on May 10, 2010 regarding PTE calculations, the applicability of NESHAP Subpart ZZZZ for the emergency generators, and the fixed capital costs of incinerator improvements. In their response AWWU also indicated that the 125 kW generator, referenced in the April 24, 2008 amended application, has since been replaced with a 750 kW generator as well as several other minor modifications to the insignificant emission unit list.

COMPLIANCE HISTORY

Full Compliance Evaluations conducted in 2004, 2006, and 2008 found ongoing violations of the opacity standard. AWWU responded to the 2008 FCE on June 18, 2008. Their response detailed AWWU's Incinerator Re-Control Project and Incinerator Upgrades Project. The

Department found that reports of excess opacity were greatly reduced after those improvement projects were completed, and no further action was taken.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.6 defines "applicable requirement" to include the terms and conditions of any pre-construction permit issued under rules approved in Alaska's State Implementation Plan (SIP).

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

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

Pre-construction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions and conditions that quote or paraphrase requirements in regulation.

These requirements include, but not limited to, each emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table F below lists the requirements carried over from Permit to Operate No. 9521-AA001 and Operating Permit No. AQ0245TVP01 into Operating Permit No. AQ0245TVP02 to ensure compliance with the applicable requirements.

Table F - Comparison of Previous Permit-to-Operate No. 9521-AA001 Conditions and Operating Permit No. AQ0245TVP01 Conditions to Operating Permit No. AQ0245TVP02 Conditions [5]

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Throughout Permit	Stationary Source Name	Throughout Permit	Name was as follows: John M. Asplund Water Pollution Treatment Facility	Throughout Permit	Name was changed to the following: John M. Asplund Water Pollution Control Facility
None	Opacity Recordings	Condition 3.g	Opacity strip chart recorders requirements and corrective measures were added to the permit.	Condition 2.3.d	The opacity strip chart recorders requirements were replaced with SCADA monitoring, display, and control system requirements.

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

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Exhibit B	Opacity Limit	Condition 3.a	In AQ0245TVP01 an additional opacity limit was added to the permit, which was 20% opacity averaged over any six consecutive minutes. The following opacity limit was found in both permits: 20% opacity not to be exceeded for more than three minutes in any one hour.	Condition 1	The following opacity limit was not carried forward because the opacity requirements were revised in the Alaska SIP: 20% opacity not to be exceeded for more than three minutes in any one hour.
Condition 1	Comply with ambient air quality standards	None	Now required only for construction permits.	None	Same as AQ0245TVP01.
Condition 2	Comply with most stringent emission standards, limits, & specifications	Conditions 1 through 32	Emission limits unchanged and now listed as conditions	Conditions 2 through 36.5	Same as AQ0245TVP01, VE standards updated.
Condition 3	Provide optimum control of emission	Condition 9	Same information, different format	Condition 20	Same as AQ0245TVP01. "Source ID" was changed to "EU ID".
Condition 4	Conduct performance test upon request	Condition 42	Superseded by 18 AAC 50.220(a).	Condition 57	Same as AQ0245TVP01.
Condition 5	Changes or modifications to the incinerator that increase emissions require source testing	Condition 22	No change in requirement	Condition 15.3	Condition 16.3 requires notification to the Department and EPA of changes to an existing emission unit, including the incinerator. The Department may then request source testing as set out in Condition 57.

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Conditions 6, 7, and 8	Source Testing guidelines	Section 9	Same requirements, but updated language.	Section 6	Same as AQ0245TVP01.
Condition 9	Permittee shall record and report control device parameters while conducting source testing	Condition 23	No change in requirement.	Condition 12	Same as AQ0245TVP01.
Condition 10	Test Reporting	Condition 50	Same requirement but deadline extended to 60 days for reporting of results under 18 AAC 50.345(a) and (o).	Condition 65	Same as AQ0245TVP01.
Condition 11	Requirement to source test if deterioration is suspected.	Condition 42	Superseded by 18 AAC 50.220(a).	Condition 57	Same as AQ0245TVP01.
Condition 12	Process monitors shall be installed, operated, and maintained in accordance with 18 AAC 50.520	Condition 12	The requirements are from 40 C.F.R. 60, Subpart O and are included in the condition identified.	Condition 24	Same as AQ0245TVP01.
Conditions 13 and 14	Excess Emissions reporting	Condition 56	Updated to current excess emissions requirements	Condition 71	Same as AQ0245TVP01. The website address in Condition 71.2 was updated.
Condition 15	Access to the facility	Condition 66	Updated to current standard condition requirements	Condition 84	Updated to current standard condition requirements
Condition 16	Facility operating report	Condition 58	Updated to current Operating Report requirements	Condition 72	Updated to current standard condition requirements

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Condition 17	Maintain data to demonstrate compliance with permit requirements	Condition 55	A requirement for maintaining source test results has been added to the requirements of 18 ACC 50.350(h). All other information in this paragraph is required by 18 ACC 50.350(h). The time frame for maintenance of these records has increased to 5 years from the time of collection of data.	Condition 67	Same as AQ0245TVP01 except the reference to 18 AAC 50.350 has been removed from the citation because that rule was repealed. The citation was replaced with reference to 18 AAC 50.326, 40 C.F.R 60.7(f), Subpart A, and 40 C.F.R 71.6(a)(3)(ii)(B) as the basis for these requirements.
Condition 18	Notification when a modification may result in an increase of emissions.	Condition 5	Requirements of this paragraph are covered by 40 C.F.R. 60, Subpart A notification requirements.	Condition 15	Same as AQ0245TVP01.
Condition 19	Display a copy of the permit	None	Rescinded	None	Same as AQ0245TVP01. Rescinded.
Exhibit A	Source Inventory	Section 3	The Zimpro incinerator is the only source required to be listed in the Title V permit. The BSP Envirotech incinerator is no longer in service, and none of the tanks at the facility are 'significant sources'.	Section 2	Same as AQ0245TVP01. Also, the emergency generators were added to the emission unit inventory in Table A.
Exhibit B (a)	Operation limits: BSP incinerator	None	No requirements because BSP incinerator is no longer in service.	None	Same as AQ0245TVP01.

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Exhibit B (b)	Opacity and Particulate matter requirements	Conditions 3 and 30	Same requirements.	Conditions 2 and 7	Condition 3a of AQ0245TVP01 was not carried forward in Condition 2 of AQ0245TVP02 because this condition has been repealed in 18 AAC 50.050(a)(2). This condition limited the opacity from EU ID 1 to no more than 20 percent for a total of more than three minutes in any one hour.
Exhibit B (c – e)	Emission limits estimates	None	Values were estimates only. Emissions calculations for this Title V permit were performed using EPA AP-42 emission factors.	None	Same as AQ0245TVP01.
Exhibit B (f)	THC Emissions concentration limit in incinerator exhaust	Not carried forward	Requirement is derived from 40 C.F.R. 503 and is not an applicable requirement for an Air Quality Permit. This was removed in Revision 1 to AQ0245TVP01.	None	Same as AQ0245TVP01.
Exhibit B (i)	Minimum pressure drop and flow rate across venturi scrubber and impingement tray	Not carried forward	Requirement is derived from 40 C.F.R. 503 and is not an applicable requirement for an Air Quality Permit.	None	Same as AQ0245TVP01.
Exhibit B (g, h)	Beryllium and mercury standards	Conditions 13 and 17	No change in requirements.	Conditions 32 and 36	No change in requirements.

Permit No. 9521-AA001 Condition No.	Description of Requirement	Permit No. AQ0245TVP01 Condition No.	How Condition was revised	Permit No. AQ0245TVP02 Condition No.	How Condition was revised
Exhibit C	Continuous Emission and Process Monitoring Requirements	Condition 12	The requirements are from 40 C.F.R. 60, Subpart O and are included in the condition identified.	Condition 24	Same as AQ0245TVP01.
Exhibit C	Emission Testing Requirements	Condition 24	Language converted from paragraph to table format. No change in requirement.	Condition 12	Same as AQ0245TVP01.
Exhibit D	Facility operating report requirements	Condition 25	Included only language requesting information that is additional to the standard Facility Operating Report language. Requirements for the Facility Operating Report have not been changed.	Condition 13	Same as AQ0245TVP01.
Exhibit E	Permit Application Documentation	None	No requirements to carry forward.	None	No requirements to carry forward.
None	Particulate Matter Calculation	Condition 51	Condition was added in AQ0245TVP01.	Condition 66	Particulate matter emission rate compliance determination methods were added for EU IDs 1, 2, and 3 and insignificant emission units.
--	--	--	--	Conditions 25 - 28	New provision
--	--	--	--	Conditions 37 - 38	New provision

NON-APPLICABLE REQUIREMENTS

Each permit is required to contain a discussion of all applicable requirements as set forth in 40 C.F.R. 71.6(a) adopted in 18 AAC 50.040(j). This section discusses standard conditions that have been removed from the permit or are not included for specific reasons.

- 40 C.F.R. 60, Subpart CCCC: This rule applies to commercial and industrial solid waste incineration units for which construction commenced after November 30, 1999 or for which modification or reconstruction commenced on or after June 1, 2001. The incinerator at this stationary source was constructed in 1986 and has not been modified or reconstructed since it was installed.
- 40 C.F.R. 60, Subpart EEEE: This rule applies to other solid waste incineration (OSWI) units or air curtain incinerators for which construction commenced on or after December 9, 2004 or reconstruction commended on or after June 16, 2006. The incinerator at this stationary source was constructed in 1986 and has not been modified or reconstructed since it was constructed.
- 40 C.F.R. 60, Subpart IIII: The requirements of 40 C.F.R. 60, Subpart IIII do not apply to emergency generator EU ID 3 because it was not manufactured after April 1, 2006. Additionally, this unit was constructed prior to July 11, 2005 and has not been modified or reconstructed since installed.
- 40 C.F.R. 60, Subpart JJJJ: The requirements of 40 C.F.R. 60, Subpart JJJJ do not apply to the two emergency generators because these units are not spark ignition engines.
- Compliance Assurance Monitoring, 40 C.F.R. 64: This rule applies to emission units which use a control device to achieve compliance with a federal emission limitation or standard and have pre-control device emissions greater than 100 tons per year. The pre-control emissions of PM-10 from EU ID 1 are less than 100 tons per year.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. AQ0245TVP02. The Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

Conditions 1 - 5, Visible Emissions Standard and MR&R

Legal Basis: These conditions ensure compliance with the applicable requirements in 18 AAC 50.050(a) and 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 2 and 3 are fuel-burning equipment or industrial processes.
- 18 AAC 50.050 (a) applies to the operation of incinerators. EU ID 1 is an incinerator.

U.S. EPA incorporated these standards as revised in 2002 into the SIP effective September 13, 2007.

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). Condition 2 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.050(a). Condition 2 applies to federal and State visible emissions standards to each solid waste incinerator. The Permittee shall not cause or allow the equipment to violate these standards.

Visible emission monitoring, recordkeeping, and reporting strategy is the same for both applicable requirements. The Permittee must monitor, record, and report emissions in accordance with Conditions 2 through 5 of the permit.

Conditions 3 through 5 MR&R conditions are standard conditions adopted into regulation pursuant to AS 46.14.010(e). The Department determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

Liquid Fuel-Fired Burning Equipment:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Condition 3. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

Recordkeeping – The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

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

Incinerator:

The Permittee is required to monitor, record, and report according to Conditions 2.2, 2.3, 2.5, and 2.6. These requirements will ensure that the COMS used to monitor visible emissions from the Zimpro incinerator is operated and maintained such that the unit will provide an accurate and reliable measure of visible emissions. A Quality Assurance plan shall be carried out by the Permittee and shall incorporate the requirements of 40 C.F.R. 60 Appendix B, PS-1.

Conditions 6, 8 - 10, Particulate Matter (PM) Standard

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

- EU IDs 2 and 3 are fuel-burning equipment.

These PM standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

Factual Basis: Condition 6 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment nor industrial processes to violate this standard.

MR&R requirements are listed in Conditions 6, 8, and 10 of the permit.

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

Liquid Fuel-Fired Burning Equipment:

For liquid fuel units the MR&R conditions are Standard Permit Condition IX adopted into regulation pursuant to AS 46.14.010(e). The Department determined that these standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 7, Incinerator Particulate Matter Emissions and MR&R

Legal Basis: Condition 7 ensures compliance with the incinerator particulate matter standards. The particulate matter emission standards as listed in Table B for this permit apply to the operation of each incinerator based on its rated capacity. U.S. EPA incorporated these standards as revised in 2002 into the SIP effective September 13, 2007.

Factual Basis: The condition requires the Permittee to comply with the particulate matter emission standards applicable to incinerators based upon rated capacity. The Permittee may not cause or allow the affected incinerator to violate this standard.

The Permittee is required to monitor, record, and report according to Conditions 7.1 and 7.2.

Source testing conducted on the exhaust of the Zimpro incinerator shall be performed at least once per permit term to ensure that the particulate matter loading complies with the standard in Condition 7. This frequency of source testing is warranted based on the low PM emissions demonstrated in the most previous source tests. Source testing once per permit term is sufficient to demonstrate compliance with this standard.

Condition 11, Sulfur Compound Emissions

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

- EU IDs 2 and 3 are fuel-burning equipment.

These sulfur compound standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

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

Liquid Fuels:

For liquid fuel fired units, the MR&R conditions are Standard Permit Conditions XI and XII adopted into regulation pursuant to AS 46.14.010(e).

Standard Permit Condition XI has been streamlined in this permit to reflect that fuel burned in EU ID 2 must comply with the standards in Condition 26 which also complies with the state standard of Condition 11.

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

Conditions 12-13, Pre-Construction Permit Requirements

Legal Basis: The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permit(s), SIP approved minor permits, operating permits issued between January 18, 1997 and September 30, 2004, or owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a federally approved SIP or approved Operating Permit program. EPA approved the latest SIP effective September 13, 2007.

Factual Basis: See discussion below.

Condition 12, Emission Testing Requirements

Legal Basis: This condition was carried forward from the former AQC Permit No. 9521-AA001 and revised during this review.

Factual Basis: This condition outlines the operational parameters that must be measured at the facility and the methods to be employed in testing those parameters. Condition 12 was revised during this review to more clearly specify the frequency of testing for the incinerator (EU ID 1).

Condition 13, Reporting Requirements

Legal Basis: This condition has been carried forward from the former AQC Permit No. 9521-AA001.

Factual Basis: This condition requires that the Permittee report several operating parameters with the operating report. These parameters provide information necessary to determine compliance with applicable standards. The Department gap-filled this condition to require submission of records of operation maintained by the permittee in order to maintain a demonstration of compliance as set forth in 40 C.F.R. 71.6(a)(3)(i).

Conditions 14, Insignificant Emission Units

Legal Basis: The Permittee is required to meet state emission standards set out in 18 AAC 50.055 for all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual Basis: The conditions re-iterate the emission standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

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

Condition 14.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Conditions 15 – 23, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with those New Source Performance Standard (NSPS) provisions incorporated by reference the NSPS effective July 1, 2007, for specific industrial activities, as listed in 18 AAC 50.040[6].

Most affected facilities subject to an NSPS are subject to Subpart A. At this stationary source, EU ID 1 is subject to NSPS Subpart O and EU ID 2 is subject to NSPS Subpart IIII. Therefore, these units are subject to Subpart A. Units subject to NSPS Subpart IIII are exempt from certain provision of Subpart A per 40 C.F.R. 60.4218.

Factual Basis: Subpart A contains the general requirements applicable to all affected facilities (emission units) subject to NSPS. In general, the intent of NSPS is to provide

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

technology-based emission control standards for new, modified and reconstructed affected facilities.

EU ID 3 is not subject to any NSPS and is therefore not subject to any requirements of 40 C.F.R. 60 Subpart A.

Condition 15 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU ID 1. The Permittee is not required to submit an initial notification for EU ID 2 as per 40 C.F.R. 60.4214(b). The requirements of 40 C.F.R. 60.7 (a)(4) are included in the permit because the Permittee is still subject to these requirements in the event of a new NSPS affected facility[7] or in the event of a modification or reconstruction of an existing facility[8] into an affected facility. The Permittee is subject to Condition 15.7 for EU ID 1 and 2 in the event that the Permittee replaces components of these units as described in 40 C.F.R. 60.15(d). As noted in the Chugach Electric Association, Bernice Lake, Director's Decision of Informal Appeal of March 23, 2010, ADEC agrees to allow a permit shield for 40 CFR 60.7(a) for emission units as currently installed at the time of permit issuance which have already complied with the one-time-only notification requirements. This shield will no longer be applicable upon modification, reconstruction or replacement of the as-permitted emission units.

Condition 16 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to EU ID 1.

Conditions 17 and 18 - NSPS excess emission reporting requirements and summary report form in 40 C.F.R. 60.7(c) & (d) are applicable to EU ID 1. The Department has included in Attachment A of the permit a copy of the federal EEMSP summary report form for use by the Permittee.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to EU ID 1. (Satisfied by Condition 67)

Condition 19 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU ID 1, therefore the requirements of 40 C.F.R. 60.8(b) through (e) are not applicable to EU ID 1. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility or at such other times as may be required by EPA. 40 C.F.R.60.8 (a) remains an applicable requirement. The requirements of 40 C.F.R. 60.8 do not apply to EU ID 2 because 40 C.F.R. 60.8 only applies to a stationary CI ICEs with displacement of greater than or equal to 30 liters per cylinder and engines that are not certified.

Condition 20 - Good air pollution control practices in 40 C.F.R. 60.11 are applicable to EU ID 1. The requirements of 40 C.F.R. 60.11 do not apply to EU ID 2.

[7] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/07.

[8] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2, effective 7/1/07.

Condition 21 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU ID 1. The requirements of 40 C.F.R. 60.11 do not apply to EU ID 2 per Table 8 of NSPS Subpart IIII.

Condition 22 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU IDs 1 and 2.

Condition 23 - Monitoring requirements in 40 C. F. R. 60.13 are applicable to EU ID 1because a CMS is used to determine compliance with Subpart O emission standards.

Condition 24, NSPS Subpart O Requirements

Legal Basis: This condition prohibits the Permittee from exceeding emission standards set out in Subpart O. The Subpart applies to incinerators that were constructed or modified after July 11, 1973 and burn wastes containing more than 10 percent sewage sludge (dry basis) from municipal sewage treatment plants or that charges more than 1000 kg per day municipal sewage sludge (dry basis).

- EU ID 1 meets these criteria and is therefore subject to NSPS Subpart O.

Factual Basis: This condition incorporates the Subpart O particulate matter and visible emissions standards. The Permittee may not cause or allow EU ID 1 to violate these standards as follows:

EU ID 1 shall not discharge or cause the discharge into the atmosphere of:

1) Particulate matter greater than 0.65 g/kg of dry sludge input (1.30 lb/ton of dry sludge input).

2) Visible emissions, excluding condensed water vapor, with greater than 20 percent opacity, averaged over any six consecutive minutes.

This condition also provides MR&R specifically called out for within the subpart. Periodic source testing under Conditions 7.1 and 12 will demonstrate compliance with the particulate matter standard of Condition 24.1.

The Permittee shall comply with the monitoring and recordkeeping requirements and procedures of 40 C.F.R. 60.153; and the reporting requirements of 40 C.F.R. 60.155(a), and if necessary, 40 C.F.R. 60.155(b).

The 2007 source test reported an incinerator particulate matter emission rate of 0.245 lbs/dry ton of biosolids. This is less than the 0.75 lbs/dry tons of biosolids threshold limit and qualifies AWWU for the monitoring of operation exemptions provided in NSPS Subpart O – 40 C.F.R. 60.153(d). The Permittee requested the Subpart O monitoring exemptions specified below be applied to the John M. Asplund Water Pollution Control Facility Title V operating permit. However, at any time the Permittee exceeds the NSPS monitoring threshold (i.e., 0.75 lb/dry tons biosolids) based on a periodic source test, such exemptions below shall no longer apply to this stationary source:

1. Continuous operation of the monitoring devices and data recorders in 40 C.F.R. 60.153(a)(1), 40 C.F.R. 60.153(b)(3), and 40 C.F.R. 60.153(b)(4) shall not be required.
2. Daily sampling and analysis of sludge feed in 40 C.F.R. 60.153(b)(5) shall not be required.

3. Recordkeeping specified in 40 C.F.R. 60.153(c)(3) shall not be required.

Note: The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator from which the average particulate matter emission rate measured during the performance test performed under 40 C.F.R. 60.154(d) exceeds 0.38 g/kg of dry sludge input (0.75 lb/ton of dry sludge input) shall include in the report for each calendar day that a decrease in scrubber pressure drop or increase in oxygen content of exhaust gas is reported, the records in Condition 24.6.b.

Conditions 25-28, NSPS Subpart IIII Requirements

Legal Basis: NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU ID 2 is subject to Subpart IIII under 40 C.F.R. 60.4200 because it is a stationary CI ICE constructed after July 11, 2005 and it was manufactured after April 1, 2006. EU ID 2 is an emergency generator and a non-fire pump engine.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU ID 2. The Permittee may not cause or allow EU ID 2 to violate these standards. These conditions also provide MR&R specifically called out for within the subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. The Permittee shall certify that the emission standards for new nonroad CI engines in 40 C.F.R. 60.4202 are met, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. The engine must be installed and configured according to the manufacturer's specifications. The Permittee must install a non-resettable hour meter prior to startup of the engine.

EU ID 3 is not subject to the requirements of NSPS Subpart IIII because the engine was constructed before July 11, 2005 and the unit has not been modified or reconstructed since it was constructed.

Note: Although internal combustion engine EU ID 3 is designed to be and capable of being carried or moved from one location to another, this unit does not meet the definition of non-road engine in 40 C.F.R. 1068.30 because it has remained at a location for more than 12 consecutive months. According to 40 C.F.R. 1068.30, a location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. As such, the applicability of NSPS Subpart IIII must be reviewed prior to modification or reconstruction of this unit.

Condition 29 - 31, NESHAP Requirements, 40 C.F.R. Part 61, Subpart A

Legal Basis: The Department has incorporated by reference the NESHAP requirements of 40 C.F.R. Part 61 effective July 16, 2007, for specific industrial activities, as listed in 18 AAC 50.040(b).

Most sources subject to a NESHAPs requirement are subject to Subpart A. EU ID 1 is subject to NESHAP Part 61 Subparts C and E and 3 is therefore subject to the provisions of Subpart A.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 61 requirements. The Permittee may not cause or allow violations of these prohibitions.

Conditions 32 - 35, NESHAP Requirements - Incinerators Subject to National Emissions Standards for Beryllium, 40 C.F.R. Part 61, Subpart C

Legal Basis: Applies to incinerators which process beryllium-containing wastes. Domestic wastewater solids contain beryllium and therefore the sewage sludge incinerator is subject to this subpart.

Factual Basis: These conditions incorporate the portions of Subpart C that are applicable to domestic wastewater solids incineration operations. The Permittee may not cause or allow EU ID 1 to violate these standards. The Permittee may not change operations which would increase potential emissions of beryllium without calculating a new emission level for beryllium.

The Permittee is required to comply with the following beryllium standard for EU ID 1:

Emissions to the atmosphere from EU ID 1 shall not exceed 10 grams (0.022 lb) of beryllium per 24-hour period.

In accordance with 40 C.F.R. 61.32(c), the Permittee is prohibited from burning beryllium and/or beryllium-containing waste, except propellants, except in EU ID 1, emissions from which must comply with the standard. Additionally, in accordance with 40 C.F.R. 61.33(c), no changes in the operation of EU ID 1 shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Department. The Permittee must maintain records of emissions testing results in accordance with 40 C.F.R. 61.33(e) and Condition 67.

The Department gap-filled these conditions to require periodic source testing in accordance with a timeline set forth in Condition 12.1 in order to maintain a demonstration of compliance as set forth in 40 C.F.R. 71.6(a)(3)(i).

Conditions 36, NESHAP Requirements - Incinerators Subject to National Emissions Standards for Mercury, 40 C.F.R. Part 61, Subpart E

Legal Basis: The provisions of 40 C.F.R. 61, Subpart E apply to stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge. The John M. Asplund Water Pollution Control Facility incinerates wastewater treatment plant sludge.

Factual Basis: The John M. Asplund Water Pollution Control Facility incinerates wastewater treatment plant sludge and is therefore subject to the requirements of 40 C.F.R. 61, Subpart E. The Permittee is required to comply with the following mercury standard for EU ID 1:

Emissions to the atmosphere from the incinerator plant, EU ID 1, shall not exceed 3.2 kg (7.1 lb) of mercury per 24-hour period.

The Permittee is required to comply with the stack sampling recordkeeping requirements of 40 C.F.R. 61.53(d); the sludge sampling and charging rate determination requirements of 40 C.F.R. 61.54(e) and (g); and the monitoring of emissions and operations requirements of Method 105 of 40 C.F.R. Part 60, Appendix B or the procedures specified in 40 C.F.R. 61.53(d)(2) and (4) and the results of monitoring shall be reported and retained according to 40 C.F.R. 61.53(d)(5) and (6) or 40 C.F.R. 61.54(f) and (g).

The Department gap-filled this condition to require periodic source testing in accordance with a timeline set forth in Condition 12.1 in order to maintain a demonstration of compliance as set forth in 40 C.F.R. 71.6(a)(3)(i).

Condition 37, NESHAP Requirements – 40 C.F.R. Part 63, Subpart A

Legal Basis: The Department has incorporated by reference the NESHAP requirements effective July 16, 2007, for specific industrial activities, as listed in 18 AAC 50.040(c).

Most sources subject to a NESHAPs requirement are subject to Subpart A. EU IDs 2 and 3 are subject to NESHAP Part 63 Subpart ZZZZ and EU ID 3 is therefore subject to the provisions of Subpart A listed in Table 8 of Subpart ZZZZ. EU ID 2 is exempted from the requirements of Subpart A by §63.6590(c).

Factual Basis: These conditions incorporate applicable 40 C.F.R. 63 requirements. The Permittee may not cause or allow violations of these prohibitions.

Condition 38, NESHAP Requirements – National Emissions Standards for Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ

Legal Basis: The provisions of 40 C.F.R. 63, Subpart ZZZZ apply to owners or operators of a stationary Reciprocating Internal Combustion Engine (RICE) at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

Factual Basis: The diesel-fired emergency generator EU ID 2 is subject to NESHAP Subpart ZZZZ. In accordance with 40 C.F.R. 63.6590(a)(2)(iii), EU ID 2 is considered a new stationary RICE because it is located at an area source of HAPs and it was constructed after June 12, 2006. Pursuant to 40 C.F.R. 63.6590(c), an affected source that is a new stationary RICE located at an area source (i.e., EU ID 2) must meet the requirements of 40 C.F.R. 63, Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60, Subpart IIII for compression ignition engines. No further requirements apply for such engines under Part 63. The requirements of NSPS Subpart IIII for EU ID 2 have been added to the permit under Conditions 25 through 28.

In accordance with 40 C.F.R. 63.6590(a)(1)(iii), EU ID 3 is considered an existing stationary RICE because it is located at an area source of HAPs and it was constructed before June 12, 2006. It is an emergency RICE and is therefore not subject to numerical CO emission limitations.

For EU ID 3, the Permittee must comply with 40 C.F.R. 63, Subpart ZZZZ no later than May 3, 2013.

For EU ID 3, the Permittee must meet the applicable notification requirements in 40 C.F.R. 63.6645 and in 40 C.F.R. 63, Subpart A.

In accordance with 40 C.F.R. 63.6603(a), EU ID 3, must comply with the requirements in Table 2d of 40 C.F.R. 63 for Emergency CI engines.

The Permittee must comply with the general requirements of 40 C.F.R. 63.6605(b).

The Permittee must comply with the operational limitations for emergency generators for EU ID 3 under 40 C.F.R. 63.6640(f).

The Permittee must comply with the installation and maintenance requirements of 40 C.F.R. 63.6625(e) and (f), including the requirement to install a non-resettable hour meter, if one is not already installed.

The Permittee must comply with the recordkeeping requirements 40 C.F.R. 63.6655(e) and 40 C.F.R. 63.6660.

The Permittee must report any deviation from the work practice standards of Subpart ZZZZ.

Conditions 39 - 41, Standard Terms and Conditions

Legal Basis: These are standard conditions required under 18 AAC 50.345(a) and (e)-(g) for all operating permits. This provision is incorporated in the federally approved Alaska operating permit program of November 30, 2001, as updated effective November 9, 2008.

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

Condition 42, Administration Fees

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.400-405 as derived from AS 46.14.130. This condition requires the Permittee, owner, or operator to pay administration fees as set out in regulation. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action.

Factual Basis: The owner or operator of a stationary source who is required to apply for a permit under AS 46.14.130 shall pay to the Department all assessed permit administration fees. The regulations in 18 AAC 50.400-405 specify the amount, payment period, and the frequency of fees applicable to a permit action. Regulations 18 AAC 50.400-405 were updated effective July 1, 2010.

Conditions 43 - 44, Emission Fees

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.410-420. The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions. Regulations 18 AAC 50.410-420 were updated effective July 1, 2010.

Factual Basis: These emission fee conditions are Standard Permit Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). The Department has determined that these standard conditions adequately meet the requirements of AS 46.14.250. No emission unit or stationary source operational or compliance factors indicate that unit-specific or

stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of AS 46.14.250.

These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are generally potential emissions of each air pollutant in excess of 10 tons per year authorized by the permit (AS 46.14.250(h)(1)(A)).

The conditions allow the Permittee to calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air pollutant. Therefore, fees based on actual emissions shall be paid on any pollutant emitted whether or not the permit contains any limitation of that pollutant.

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

Condition 45, Good Air Pollution Control Practice

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(5) and applies to all emission units, **except** those subject to federal emission standards, those subject to continuous emission or parametric monitoring, and for insignificant emission units, i.e., except EU ID(s) 1 and 2, as well as EU ID 3 after the compliance date in Condition 38.2.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows. The Department added the text “EU ID 3 is subject to this condition only until the applicable compliance date as set forth in Condition 38.2” because on the compliance date in Condition 38.2, EU ID 3 subject to NESHAPs Subpart ZZZZ will no longer be subject to this condition (as units subject to federal emission standards) and will instead be required to comply with Condition 38.5. Records kept in accordance with Condition 45.2 for units previously subject to GAPCP need to be maintained for 5 years in accordance with Condition 67 even if a unit is no longer subject to this condition.

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

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with

emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 45, Dilution

Legal Basis: This condition prohibits the Permittee from using dilution as an emission control strategy as set out in 18 AAC 50.045(a). This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

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

Condition 47, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition requires the Permittee to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity in accordance with the applicable requirement in 18 AAC 50.045(d). Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the stationary source.

This condition applies to stationary source operating permits that do not have an approved dust control plan, and contain one of the following: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the control of the operator with frequent vehicle traffic.

Factual Basis: The condition requires the Permittee to comply with 18 AAC 50.045(d), and take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

The Department adopted this standard condition as Standard Permit Condition X under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department determined that this standard condition adequately meets the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 48, Stack Injection

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.055(g). It prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). Stack injection requirements apply to the stationary source because the stationary source contains a stack or unit constructed or modified after November 1, 1982.

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

Condition 49, Air Pollution Prohibited

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.110. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

Factual Basis: While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

ADEC adopted this standard condition into 18 AAC 50.346(a) pursuant to AS 46.14.010(e). The Department determined that this condition adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

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

Condition 50, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. This condition ensures compliance with the applicable requirement in 18 AAC 50.235. Technology Based Emission Standard requirements apply to the stationary source because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with

Condition 71. Excess emission reporting under Condition 81 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 71.

Condition 51, Asbestos NESHAP

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

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

Condition 52, Refrigerant Recycling and Disposal

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F that will apply if the Permittee uses certain refrigerants.

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

Condition 53, NESHAPs Applicability Determinations

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

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and Administrator if the stationary source becomes an affected facility and to keep and make available to the Department copies of the major stationary source determination.

Conditions 54 - 55, Halon Prohibitions

Legal Basis: These prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. The condition prohibits the Permittee from causing or allowing violations of these prohibitions. The John M. Asplund Water Pollution Control Facility uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 82 requirements. The Permittee may not cause or allow violations of these prohibitions.

Condition 56, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the stationary source. This condition ensures compliance with the applicable requirement in 18 AAC 50.065. The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: No specific monitoring is required for this condition. Condition 56.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 73.

Condition 57, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. The Department adopted this condition under 18 AAC 50.345(k) as part of its operating permit program approved by EPA November 30, 2001.

Factual Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.220(a) and applies because this is a standard condition to be included in all operating permits. Monitoring consists of conducting the requested source test.

Conditions 58 - 60, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and 18 AAC 50.220(c) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source tests as set out in Conditions 58 through 60.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 58 through 60 consist of the test reports required by Condition 65.

Condition 61, Test Exemption

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.345(a) and applies when the unit exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), amended November 9, 2008, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 62 - 65, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.345(l)-(o) and apply because the Permittee is required to conduct source test by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 66, Particulate Matter (PM) Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accord with 18 AAC 50.220(f). It applies when the Permittee tests for compliance with the PM standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for PM source tests. The Permittee must use the equation given in this condition to calculate the PM emission concentration from the source test results. This condition supplements specific monitoring requirements stated elsewhere in this permit. In addition, since EU ID 1 is subject to the NSPS, Subpart O which has its own PM emission compliance equation, the Department has added such equation and compliance determination method to this condition and cited the appropriate provisions of Subpart O.

Condition 67, Recordkeeping Requirements

Legal Basis: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement. Additional record keeping requirements from the original permit-to-operate were added into the list in the condition to fully reflect the additional obligations in a single organized list.

Condition 68, Certification

Legal Basis: This condition requires the Permittee to comply with the certification requirement in 18 AAC 50.205 and applies to all Permittees under EPA's approved operating permit program of November 30, 2001.

Factual Basis: This standard condition is required in all operating permits under 18 AAC 50.345(j). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the stationary source report, even though it must still be submitted more frequently than the operating report. This condition supplements the reporting requirements of this permit.

Condition 69, Submittals

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

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the standard reporting and notification requirements of this permit.

Condition 70, Information Requests

Legal Basis: This condition requires the Permittee to submit requested information to the Department. This is a standard condition from 18 AAC 50.345(i) of the state approved operating permit program effective November 30, 2001.

Factual Basis: This condition requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 71, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the applicable requirement in 18 AAC 50.235(a)(2) and 18 AAC 50.240. Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The Department adopted this condition as Standard Permit Condition III under 18 AAC 50.346(b)(2) and (3), pursuant to AS 46.14.010(e). The Department has previously determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Section 13, Notification Form

The notification form contained in Standard Permit Condition IV meets the requirements of Chapter 50, Air Quality Control.

Condition 72, Operating Reports

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(6) and applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008 pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Condition 73, Annual Compliance Certification

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(j)(4) and applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Each annual certification provides monitoring records for compliance with this condition.

Condition 73.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion as stated in Condition 69.

Condition 74, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the federal Administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 75, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement to submit emission inventory data from point sources as required under 40 CFR 51.321 (6/10/02). It applies to sources defined as point sources in 40 CFR 51.20. The State must report all data elements in Table 2A of Appendix A to Subpart A of 40 CFR 51 to EPA (73 FR 76556).

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1), 12/17/08). A due date of March 31 corresponds with sources reporting actual emissions for assessable emissions purposes and provides the Department sufficient time to enter the data into EPA's electronic reporting system.

The air emissions reporting requirements under 40 CFR Part 51 Subpart A apply to States; however, States rely on information provided by point sources to meet the reporting requirements of Part 51 Subpart A. In the past, the department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart

A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

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

Condition 76, Permit Applications and Submittals

Legal Basis: The Permittee may need to submit permit applications and related correspondence.

Factual Basis: Standard Permit Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee.

Conditions 77 - 79, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(10), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these provisions within this permit. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These are conditions required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision.

The Permittee did not request trading of emission increases and decreases as described in 71.6(a)(13)(iii).

Condition 80, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accord with the operating permit program under18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if

it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and must remit payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, for as long as an application has been submitted within the timeframe allowed under 40 C.F.R. 71.5(a)(1)(iii), and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Conditions 81 - 84, General Compliance Requirements and Schedule

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3). The Permittee is required to comply with these standard conditions set out in 18 AAC 50.345 included in all operating permits. 40 C.F.R. 70, Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

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

Conditions 85 - 86, Permit Shield

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j) and apply because the Permittee has requested that the Department shield the source from the applicable requirements listed under this condition under the Federally approved State operating program effective November 30, 2001

Factual Basis: Table D of Operating Permit No. AQ0245TVP02 shows the permit shield that the Department granted to the Permittee. The permit conditions set forth the requirements that the Department determined were not applicable to the stationary source. The following table shows the requests that were denied and the reasons that they were denied. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits and inspection reports.

Table G - Permit Shields Denied

Shield Requested for:	Reason for Shield Request:	Reason for Denial:
Source-wide		
18 AAC 50.080 – Ice Fog	Agency action – no requirement	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
18 AAC 50.205 and 50.215 – Certification and Ambient air quality analysis methods.	No requirements	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
18 AAC 50.245, 50.250 – Air episodes and advisories & Procedures and criteria for revising air quality classifications	No requirements	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
18 AAC 50.316, 50.321, 50.326 – Construction and Operating Permits definitions and administrative	No requirements	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
18 AAC 50.345 and 50.346 – Standard Conditions, Content	No requirements	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
18 AAC 50.410, 50.700 to 735, 50.900, 50.990 – Emissions Fees, Conformity, Small Business Assistance Program, Definitions	No requirements	Because there are no "obligations" in the listed regulations, no permit shield can be granted for those regulations.
40 C.F.R. 50, 53 to 58, 73 to 81, 85 to 88 – Federal Regulations	No affected units at the stationary source. Not within source categories.	Because these regulations are not adopted by reference within AS 46.14 or 18 AAC 50, no permit shield can be granted for those regulations.
40 C.F.R. 503, MOA 15.30 – Federal and Municipal Regulation	Requirements do not apply to the stationary source.	Because these regulations are not adopted by reference within AS 46.14 or 18 AAC 50, no permit shield can be granted for those regulations.

Shield Requested for:	Reason for Shield Request:	Reason for Denial:
40 C.F.R. 60.153(a)(1), 40 C.F.R. 60.153(b)(3), and 40 C.F.R. 60.153(b)(4)	The 2007 source test for EU ID 1 reported an incinerator particulate matter emission rate of 0.245 lbs/dry ton of biosolids. This is less than the 0.75 lbs/dry tons of biosolids threshold limit and qualifies AWWU for the monitoring of operation exemptions provided in NSPS Subpart O – 40 C.F.R. 60.153(d).	Particulate matter emissions for EU ID 1 may exceed this threshold during the permit term.
40 C.F.R. 61.32(b), Alternative standard	The stationary source did not request the alternative standard.	Because these regulations are not adopted by reference within AS 46.14 or 18 AAC 50, no permit shield can be granted for those regulations.
40 C.F.R. 61.34, testing for sources subject to ambient monitoring requirements	The stationary source is not complying with the ambient monitoring option.	Because these regulations are not adopted by reference within AS 46.14 or 18 AAC 50, no permit shield can be granted for those regulations.
40 C.F.R 61.53(c)(4), Emissions standard and testing for facilities other than sewage sludge incinerators.	Stationary source does not fall into the specified source category.	Per 40 C.F.R. 61.56, the authority for this section will not be delegated to states, therefore no permit shield can be granted for these regulations.
40 C.F.R. 61.55(a) – Testing requirements for Mercury	Mercury emissions do not exceed 1,600 grams/24 hour period.	Mercury emissions may exceed this threshold during the permit term.
40 C.F.R. 61.55(d), Testing frequency and method for facilities other than sewage sludge incinerators.	Stationary source does not fall into the specified source category.	Per 40 C.F.R. 61.56, the authority for this section will not be delegated to states, therefore no permit shield can be granted for these regulations.
40 C.F.R. 61.56, Authority granted in this subpart shall not be delegated to the states.	Does not apply to Permittee.	Because there are no “obligations” in the listed regulations, no permit shield can be granted for those regulations.