

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

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**Nushagak Cooperative, Inc.
Dillingham Power Plant**

**STATEMENT OF BASIS
of the terms and conditions for
Permit No. AQ0214TVP02**

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0214TVP02.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0214TVP02 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by Nushagak Cooperative, Inc., and Nushagak Cooperative, Inc. (NCI) is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 4911.

As provided in the application, the stationary source contains nine (7) permitted diesel electric generating sets and four (4) diesel fuel storage tanks. The generators are all significant sources, and the storage tanks are all insignificant sources.

The Permittee's application for this permit renewal was submitted to ADEC in April 2005. Since that time, the Permittee removed EU IDs 3, 5, 6, 8 and 9 and replaced them with EU IDs 14, 15, and 16 as discussed in a subsequent permit history section of this statement of basis.

EMISSION UNIT INVENTORY AND DESCRIPTION

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

The emission units at the Dillingham Power Plant that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0214TVP02.

Table A of Operating Permit No. AQ0214TVP02 contains information on the emission units regulated by this permit as provided in the application and Annual Compliance Certifications. The table is provided for informational and identification purposes only. Specifically, the source rating/size provided in that table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)¹ and assessable PTE as calculated by the Department from the Dillingham Power Plant is shown in the table below.

¹ Potential to Emit or PTE means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(23), effective 12/3/05.

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

Pollutant	NO _x ^a	CO ^a	PM-10 ^a	SO ₂ ^a	VOC ^b	HAPs ^c	Total
PTE	363.6	160.8	20.4	67.8	12.9	<0.1	625.6
Assessable PTE	363.6	160.8	20.4	67.8	12.9	0.0	625.5

Notes:

- ^a Emissions estimates are from Permit No. AQ0214MSS01.
- ^b The Permittee did not supply revised estimates of VOC emissions based on operational limits in Minor Permit AQ0214MSS01. Emissions of VOCs are estimated based on the VOC emissions from Permit No. AQ0214TVP01 (10.4 tons) ratioed according to the increase in the sum of assessable emissions of NO_x, CO, SO₂ and PM-10 from AQ0214TVP01 to AQ0214MSS01.
- ^c Emissions of HAPs are less than the major source thresholds of 10 tpy for a single HAP and 25 tpy aggregate for all HAP emissions, and therefore not included in this table.

The assessable PTE listed under Condition 74.1 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.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source² must obtain a Title V permit consistent with 40 CFR Part 71, as adopted by reference in 18 AAC 50.040.

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

- (1) A major source;
- (2) A stationary source subject to federal new source performance standards or national emission standards;
- (3) Another stationary source designated by the federal administrator by regulation.

This stationary source is further classified under 18 AAC 50.326(a) and 40 CFR 71.3(a) as

- a) Directly emitting, or has the potential to emit, 100 tpy or more of any air pollutant.

² “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

Title I (Construction and Minor) Permits

The Department permitted a major modification of the Dillingham Power Plant under Construction Permit No. 0025-AC003 on May 12, 2000 to install three new diesel electric generators and imposed best available control technology upon EU ID 11-13 for oxides of nitrogen. The Department revised the permit on three occasions: December 12, 2003, January 29, 2004, and July 30, 2004. Revision 3 of this permit, issued July 30, 2004 contained restrictions to limit the stationary source's power generation by individual emission unit or groups of emission units. The permit also contained specific conditions to protect ambient air quality.

NCI requested coordinated Title V and Title I review in the project's minor source permit application dated December 18, 2006.

Permit No. AQ0214MSS01, issued on March 6, 2008 carried forward all relevant permit conditions from Construction Permit No. 0025-AC003 Revision 3 into that minor permit and rescinded Construction Permit 0025-AC003, Revision 3. Additionally, Permit No. AQ0214MSS01 established plant-wide applicability limitations (PALs) for NO_x, sulfur dioxide (SO₂), particulate matter less than 10 microns in aerodynamic diameter (PM-10), and carbon monoxide (CO). The minor permit also authorized installation of Units 14 and 15 to replace two retired diesel internal combustion engines.

Title V Operating Permit Application, Revisions and Renewal History

NCI applied for their original operating permit December 3, 1997. The Department issued that Operating Permit No. AQ0214TVP01 effective on October 19, 2000. On September 6, 2002, NCI requested and was granted by the Department an Administrative Revision I to their original operating permit. This revision incorporated all terms and conditions of Construction Permit No. 0025-AC003 Rev.1, which included stack height requirements and NO_x requirements. On November 9, 2002, NCI requested a second revision to their operating permit to incorporate all terms and conditions of Construction Permit No. 0025-AC003 Rev.2 which were changes regarding Condition 13.3 of the Construction Permit Rev. 1. Additionally, on August 25, 2004 a third revision request for their operating permit was submitted to the Department to include all the terms and conditions of Construction Permit No. 0025-AC003 Rev.3 into the TV Operating Permit.

The owner submitted a permit renewal application on April 12, 2005. As noted above within the Title I permit discussion NCI requested a coordinated Minor permit/Title V permit processing coordination as a revision to their pending application on December 18, 2006.

The Department did not start processing this application upon receipt. The stationary source continues to operate under the current permit in accordance with AS 46.14.230(b) and the application shield in accordance with AS 46.14.275.

COMPLIANCE HISTORY

The stationary source has operated at its current location since the early 1960s. Review of the permit files for this stationary source, indicate a stationary source, which had an air quality

control permit issued in 1977 and effective for five years. Based upon changes in the Department's air quality control regulations, the department determined that the Dillingham Power Plant did not require a permit in 1982. From 1983 until May 12, 2000, the Dillingham Power Plant operated without an Air Quality Control Permit.

In late 2003 NCI was struggling to comply with the power generation limits established by Construction Permit 0025-AC003 issued May 12, 2000. The Department issued a compliance letter in early 2004 requesting a compliance plan. The Permittee responded with a plan to submit an application to modify the existing construction permit with new power generation limits that would allow more operational flexibility. As described in the Title I permit history above, the construction permit was revised appropriately to allow the needed flexibility. Additional changes of the pre-construction Title I permit terms established plant-wide applicability limitations for NO_x, SO₂, PM-10, and CO in March 2008.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 CFR 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.

Alaska's State Implementation Plan 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 14, 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 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. Tables F and G below lists the requirements carried over from Permit-to-Operate No. AQ0214TVP01, and Minor Permit No. AQ0214MSS01 into Operating Permit No. AQ0214TVP02 to ensure compliance with the applicable requirements. These tables are not a comprehensive list of AQ0214TVP02 terms and conditions. They summarize the historical terms and changes made to those historical terms. See the following statement of basis section for permit terms for a comprehensive list.

Table F - Comparison of Previous Permit-to-Operate No. AQ0214TVP01 Conditions to Operating Permit No. AQ0214TVP02 Conditions³

Permit No. AQ0214TVP01 Condition Number	Description of Requirement	Permit No. AQ0214TVP02 Condition Number	How condition was revised
1 and 2	Fee requirements	73, 74, 75	Similar updated provisions
3, 57, 58, 59	Visible emission standard	1 and 2	Similar updated provisions
4, 60, 61	Particulate matter emission standard	5, 6, 7 respectively	Similar updated provisions
5	Sulfur compound emission standard	8	Similar updated provisions
6	Fuel sulfur content limit	9	Similar updated provisions
9	Stack requirements	9.1 and 9.2	Similar updated provisions
10, 11, 12	NO ₂ requirements power generation limits, and NO _x BACT	12 and Section 5	NO _x BACT was carried forward and NO _x PAL was added in Permit No. AQ0214MSS01. MR&R was carried forward from the MSS replacing the standard conditions in the TVP01.
13	PSD avoidance – CO	Section 6	CO PAL was added in Permit No. AQ0214MSS01.
14	PSD avoidance – SO ₂	Section 8	SO ₂ PAL was added in Permit No. AQ0214MSS01.
15, 16, 14	Insignificant source requirements	Section 4	Similar updated provisions
18	Asbestos NESHAP	82	Similar updated provisions
16	Refrigerant recycling and disposal	83	Similar updated provisions
20	Good air pollution control practice	76	Similar updated provisions
21	Dilution	77	Similar updated provisions
22	Modification	N/A	No longer a standard permit condition.
23	Reasonable precautions to prevent fugitive dust	78	Similar updated provisions
24	Stack injection	79	Similar updated provisions
25	Open burning	84	Similar updated provisions
26	Air pollution prohibited	80	Similar updated provisions
27	Technology-based emission standard	81	Similar updated provisions
28	Permit renewal	107	Similar updated provisions
29	Requested source tests	85	Similar updated provisions
30	Operating conditions	86	Similar updated provisions
31	Reference test methods	87	Similar updated provisions
32	Excess air requirements	88	Similar updated provisions
33	Test exemption	89	Similar updated provisions
34	Test deadline extension	90	Similar updated provisions
35	Test plans	91	Similar updated provisions
36	Test notification	92	Similar updated provisions
37	Test reports	93	Similar updated provisions

³ This table does not include all standard and general conditions.

Permit No. AQ0214TVP01 Condition Number	Description of Requirement	Permit No. AQ0214TVP02 Condition Number	How condition was revised
38	Particulate matter calculations	94	Similar updated provisions
39	Certification	96	Similar updated provisions
40	Submittals	97	Similar updated provisions
41	Information Requests	98	Similar updated provisions
42	Recordkeeping requirements	95	Similar updated provisions
43	Excess emission and permit deviation reports	99	Similar updated provisions
44	NSPS and NESHAP reports	102	Similar updated provisions
45	Facility operating reports	100	Carried forward the PAL MR&R reporting requirements from the MSS.
46	Annual compliance certification	101	Similar updated provisions
47	Standard condition	N/A	No longer a standard permit condition.
48, 49, 50, 51, 52, 53, 54	Standard conditions	70, 71, 72, 108, 109, 110, 111 respectively	Similar updated provisions
Section 11	Permit shield	Section 15	Similar updated provisions
Section 13	Visible emissions form	Section 16	Similar updated provisions
Section 14	Material balance calculation	Section 17	Similar updated provisions
Section 15	ADEC notification form	Section 18	Similar updated provisions

Table G - Comparison of Permit No. AQ0214MSS01 Conditions to Operating Permit No. AQ0214TVP02 Conditions⁴

Permit No. AQ0214MSS01 Condition Number	Description of Requirement	Permit No. AQ0214TVP02 Condition Number	How condition was revised
Section 1	Emission Unit Inventory	Section 2	Incorporated in Title V permit
3	Visible emissions standard	1, 2	Incorporated in Title V permit
4	Particulate matter standard	5	Incorporated in Title V permit
5	Sulfur compound emission standard	8	Incorporated in Title V permit
6	Ambient standards and increment protection	9	Incorporated in Title V permit
7	NO _x BACT	12	Carried forward the NO _x BACT requirements from the MSS.
Section 5	NO _x PAL	Section 5	Carried forward the PAL MR&R reporting requirements from the MSS. Required source testing with NSPS affected units.
Section 6	CO PAL	Section 6	Carried forward the PAL MR&R reporting requirements from the MSS. Required source testing with NSPS affected units.
Section 7	PM-10 PAL	Section 7	Carried forward the PAL MR&R reporting requirements from the MSS. Required source testing with NSPS affected units.
Section 8	SO ₂ PAL	Section 8	Carried forward the PAL MR&R reporting requirements from the MSS.
Section 9	General PAL Requirements	Section 4	All provisions copied exactly into Title V
Sections 10 through 14	General permit requirements	Section 12 through Section 15	Provisions have been incorporated in Title V permit

⁴ This table does not include all standard and general conditions.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. AQ0214TVP02. The Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 CFR 71.6(a)(1)(i).

Conditions 1 - 4. Visible Emissions Standard and MR&R

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

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 3, 5, 6, and 10 through 15 are fuel burning equipment.

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

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of 18 AAC 50.055(a)(1).

Visible emission monitoring, recordkeeping and reporting are the same for both applicable requirements. The Permittee must monitor, record-keep and report emissions in accordance with Conditions 2 through 4 of the permit.

Conditions 2 - 4, MR&R conditions are standard conditions adopted into regulation pursuant to AS 46.14.010(e).

The Department has previously determined that the standard conditions adequately meet the requirements of 40 CFR 71.6(a)(3). No 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 CFR 71.6(a)(3).

Liquid Fired Fuel Burning Equipment:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Condition 2. 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 stationary source operating report.

Conditions 5 - 7, 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 10 through 16 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 5 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 - 7 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.

For liquid fuel units the MR&R conditions are Standard Condition IX adopted into regulation pursuant to AS 46.14.010(d). The Department determined that these standard conditions adequately meet the requirements of 40 CFR 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 CFR 71.6(a)(3).

Liquid Fired:

For liquid fuel units the MR&R conditions are Standard Condition IX adopted into regulation pursuant to AS 46.14.010(d). The Department determined that these standard conditions adequately meet the requirements of 40 CFR 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 CFR 71.6(a)(3).

Condition 8, Sulfur Compound Emissions

Legal Basis: The sulfur standard can be met by compliance with Condition 9 which is more restrictive than the State standards. 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 10 through 16 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 oil-fired fuel burning equipment, the MR&R conditions are Standard Condition XI and XII adopted into regulation pursuant to AS 46.14.010(d). The Department determined that these standard conditions adequately meet the requirements of 40 CFR 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 CFR 71.6(a)(3).

Conditions 9-10, Ambient Standards and Increment Protection

Legal Basis: These conditions were incorporated in the Title V permit from Permit No. AQ0214MSS01. The Permittee submitted an ambient air quality modeling assessment to demonstrate that they can comply with the Alaska Ambient Air Quality Standards (AAAQS) listed in 18 AAC50.010. During the minor permit application processing, the Department reviewed the modeling assessment and has determined that the stationary source does not cause or contribute to an ambient standard or increment analysis. For more information, please see the Department's technical analysis report on the Department's website: <http://www.dec.state.ak.us/air/ap/docs/AQ0214MSS01fintar.pdf>.

Factual Basis: The complete factual basis for these requirements is included in the Technical Analysis Report for Air Quality Control Minor Permit No. AQ0214MSS01. Through a TI Ambient Air Quality Modeling Analysis, it was determined that the Permittee would comply with the NO_x standard under any operational scenario while complying with Condition 32.

Condition 11, 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 11 requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Condition 12, BACT for NO_x

Legal Basis: Under 40 CFR 52.21(aa)(1)(iii), the Permittee shall continue to comply with all applicable state and federal requirements, emissions limitations and work practice requirements that were established prior to the effective date of the PAL (also included in this permit). The Permittee is therefore still subject to the BACT requirements previously established in Construction Permit 0025-AC003 for EU IDs 11 – 13. This section contains the requirements for NO_x BACT imposed by Construction Permit No. 0025-AC003 for EU IDs 11 through 13. The requirements were carried forward from the construction permit into AQ0214MSS01 upon rescinding the referenced construction permit on March 6, 2008

Factual Basis: The complete factual basis for these requirements is included in the Technical Analysis Report for Air Quality Control Minor Permit No. AQ0214MSS01. Since the initial source testing requirement established in the original BACT has been completed, the Department has not carried that condition forward. The Department has instead

substituted a recurring source testing term in Condition 12.2 to periodically verify EU performance within this emissions limitation as specified in 40 CFR 71.6(a)(3)(i)(B). The Permittee may satisfy this condition by a performance test conducted under Conditions 24 within limitations. The latest emission source test on two of these three units shows compliance with the applicable BACT limit with a compliance margin of roughly 20%. Worst case results (Unit 13) were emissions of 22.0 lb/hour within 10% of full load.

Conditions 13 - 59, PAL Provisions

Legal Basis: Permit No. AQ0214MSS01 established PAL provisions for the stationary source for NO_x, CO, PM-10, and SO₂. These PALs have been carried forward into the Title V permit for this renewal. The Permit contains all necessary terms and conditions to meet the requirements for a PAL permit under 40 CFR 52.21(aa)(7) and to protect ambient air.

Factual Basis: The complete factual basis for these requirements is included in the Technical Analysis Report for Air Quality Control Minor Permit No. AQ0214MSS01. In addition, the Department is linking the periodic PAL emission source testing to confirm in-use compliance with the federal new source performance standards for units 14 through 16 and all affected facilities installed at the Dillingham Power Plant.

A minor edit was performed in bringing forward the SO₂ PAL (Section 8 of this permit) from Section 8 of Permit AQ0214MSS01 such that Conditions 52 and 53 were modified to remove the text "...or another method approved by the Department." as brought forward from Conditions 80 and 81 of the minor permit. This text was discarded as Item C.2. during the Revised Action Plan submitted to EPA on July 15, 2007 as a result of the EPA Audit of the September 2006 Title V Program Review as it allows the Permittee to change monitoring methods while bypassing the public process for a significant permit modification.

Conditions 60 – 63, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with those New Source Performance Standard (NSPS) provisions incorporated by reference effective July 1, 2004, for specific industrial activities, as listed in 18 AAC 50.040⁵.

Most (with the exception of some storage tanks) affected facilities subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 14 through 16 are subject to NSPS Subpart IIII and therefore subject to Subpart A.

Condition 60.1 through 60.3 - The Permittee is subject to these requirements in the event of a new NSPS affected facility or in the event of a modification or reconstruction of an existing facility into an affected facility.

Condition 60.4 through 60.6 - The requirements to notify the EPA and the Department of the date of a continuous monitoring system performance demonstration, no less than 30 days before demonstration commences (40 CFR 60.7(a)(5) – (7)) are applicable to EU IDs 14 through 16 **only if a CMS is installed as an NSPS requirement.**

Condition 60.7 - The requirements to notify the EPA and the Department of any proposed replacement of an affected facility (40 CFR 60.15) applies to EU IDs 14 through 16 in the event of a proposed replacement of these affected facilities.

⁵ EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit.

Condition 61 - Start-up, shutdown, or malfunction record maintenance requirements in 40 CFR 60.7(b) are applicable to all NSPS affected facilities subject to Subpart A.

Recordkeeping requirements in 40 CFR 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 95)

Condition 62 - Good air pollution control practices in 40 CFR 60.11 are applicable to all NSPS affected facilities subject to Subpart A (EU IDs 14 through 16).

Condition 63 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU ID s 14 through 16.

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

Condition 64 - 69, NSPS/NESHAP Subpart A, IIII and ZZZZ Requirements

Legal Basis: Since the Permittee identified affected facilities at this stationary source, these conditions require the Permittee to comply with NSPS Subpart IIII and any applicable NESHAP Subpart A requirements. The NSPS applies to 2007 model year non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder. EU IDs 14 through 16 are 2007 model year and later non-emergency generators with a displacement of less than 30 liters per cylinder, and are therefore subject to Subpart IIII.

Factual Basis: The Conditions require the Permittee to comply with the Subpart IIII standards. The Permittee may not cause or allow EU IDs 14 through 16 to violate these standards. The requirements require the Permittee to maintain the generators according to the manufacturer's specifications and to comply with fuel standards. For EU IDs 14 through 16 and other replacement NSPS affected units, a source test is required in accordance with Condition 68.

Conditions 70 - 72, 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.

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

Conditions 73, 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.

Conditions 74 - 75, 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.

Factual Basis: These emission fee conditions are Standard Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(d). The Department 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 76, 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 IDs 14 through 16.

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

The Department adopted this condition under 18 AAC 50.346(b) as Standard operating Permit Condition VI pursuant to AS 46.14.010(d). The Department determined that this standard condition adequately meets the requirements of 40 CFR 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 CFR 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 77, 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 78, 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 sources: 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. NCI proposed for AQ0214MSS02 to construct three new units and under the plant-wide applicability limit to make other source changes. The Department included this standard condition because NCI's civil construction associated with this capital project may result in fugitive dust generating activities.

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 Operating Permit Condition X under 18 AAC 50.346(c) pursuant to AS 46.14.010(d). The Department determined that this standard condition adequately meets the requirements of 40 CFR 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 CFR 71.6(a)(3).

Condition 79, Stack Injection

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.045(e)-(f). 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 source constructed or modified after November 1, 1982.

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

Condition 80, 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(d). The Department determined that this condition adequately meet the requirements of 40 CFR 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 CFR 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 81, 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 99. Excess emission reporting under Condition 99 requires information on the

steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 99.

Condition 82, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 CFR 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and (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 83, 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 CFR 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 84, 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 84.1 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. Additional monitoring is achieved through Condition 80, which requires a record of complaints.

Condition 85, 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 86 - 88, 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 apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source test as set out in Conditions 86 through 88.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 86 through 88 consist of the test reports required by Condition 93.

Condition 89, Test Exemption

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

Factual Basis: As provided in 18 AAC 50.345(a), amended May 3, 2002, 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 90 - 93, 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 94, 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.

Condition 95, 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.

Condition 96, 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 all reports 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 stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 97, 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. 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 98, 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 99, 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 Operating Permit Condition III under 18 AAC 50.346(c) pursuant to AS 46.14.010(d). The Department determined that this standard condition adequately meet the requirements of 40 CFR 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 CFR 71.6(a)(3).

Section 18, Notification Form

The Department modified the notification form, deviating from Standard Permit Condition IV, to more adequately meet the requirements of Chapter 50, Air Quality Control. The modification consisted of correcting typos and moving failure to monitor/report and recordkeeping to the permit deviations Section 2.

Condition 100, 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 made a correction to the Standard Permit Condition VII by changing the number of copies of documents to be submitted from “an original and two copies” to “an original and one copy”. 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 as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

Condition 101, 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 provide monitoring records for compliance with this condition.

Condition 101.2 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 and the effective permit at that time, or may chose 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 may submit one of the required copies electronically at their discretion. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations.

Condition 102, NSPS and NESHAP Reports

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

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

Condition 103, 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 104 - 106, Permit changes and revisions requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 AAC 50.326(j)(4). 40 CFR 71.6(a)(10), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these provisions within this permit. 40 CFR 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 CFR 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 107, 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 under 18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 CFR 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 CFR 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 Dillingham Power Plant as listed in this condition. As stated in 40 CFR 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 CFR 71.5(c) and must remit

payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 CFR 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

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

Conditions 108 - 112, 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 CFR 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 113 - 114, Permit Shield

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.326(j) and applies 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: Condition 114 of Operating Permit No. AQ0214TVP02 shows the permit shields 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.

Attachment A

Pollutant (Circle One—SO₂/NO_x/fuel sulfur)

Reporting period dates:

From _____ to _____

Company: _____

Emission Limitation _____

Address: _____

Monitor Manufacturer and Model No _____

Date of Latest CMS (CEMS and PEMS) Certification or Audit _____

Process Unit(s) Description: _____

Total source operating time in reporting period¹ _____

Figure 1 -- Summary Report -- Excess Emission and Monitoring System Performance

Emission data summary ¹	CMS (CEMS and PEMS) performance summary ¹
<p>1. Duration of excess emissions in reporting period due to:</p> <p>a. Startup/shutdown _____</p> <p>b. Control equipment problems _____</p> <p>c. Process problems _____</p> <p>d. Other known causes _____</p> <p>e. Unknown causes _____</p> <p>2. Total duration of excess emission _____</p> <p>3. Total duration of excess emissions X (100)/[Total source operating time] _____ %²</p>	<p>1. CMS (CEMS and PEMS) downtime in reporting period reporting period due to:</p> <p>a. Monitor equipment malfunctions _____</p> <p>b. Non-Monitor equipment malfunctions _____</p> <p>c. Quality assurance calibration _____</p> <p>d. Other known causes _____</p> <p>e. Unknown causes _____</p> <p>2. Total CMS (CEMS and PEMS) Downtime _____</p> <p>3. [Total CMS (CEMS and PEMS) Downtime] X (100)/[Total source operating time] _____ %²</p>

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS (CEMS or PEMS) downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in this condition shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

 Name

 Signature