Alaska Department of Environmental Conservation Air Permits Program

Public Comment - July 18, 2024 UniSea, Inc. Dutch Harbor Seafood Processing Plant

> STATEMENT OF BASIS for the terms and conditions of Permit No. AQ0088TVP05

Prepared by Peter Saengsudham ADEC AQ/APP (Juneau)

Reviewed by Grace Germain ADEC AQ/APP (Juneau)

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0088TVP05.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0088TVP05 contains information on the stationary source as provided in the Title V permit application.

The Dutch Harbor Seafood Processing Plant is owned and operated by UniSea, Inc and UniSea, Inc. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 2092 - Fresh or Frozen Packaged Fish. The North American Industrial Classification System code is 311710 - Seafood Preparation and Packaging.

The stationary source is a seafood processing facility that processes fish and crab into edible products for human consumption. By products and waste material from the operation are processed into fishmeal.

EMISSIONS 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 emissions units at the Dutch Harbor Seafood Processing Plant that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0088TVP05.

Table A of Operating Permit No. AQ0088TVP05 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

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

Emissions	NO _x	СО	РМ	SO ₂	VOC	CO ₂ e ¹	HAPs ²	Total ³
PTE	750.30	63.74	20.06	2.64	16.79	89,150	0.60	853.53
Assessable PTE	750.30	63.74	20.06	2.64	16.79	N/A	0	853.53

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

Notes:

1. CO₂e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.

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

- 2. HAP emissions are a subset of either VOC emissions or PM_{10} emissions and are excluded from the assessable emissions total to avoid double counting.
- 3. Total PTE and total assessable PTE shown in the table do not include CO2e and HAPs.

The assessable PTE listed under Condition 65.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table E are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants and GHGs, emissions are as calculated by the Department for the Title V permit renewal. PTE's for NO_x, CO, $PM_{2.5/10}$, and VOC were estimated based on provided constants and equations in the permit renewal application. The differences between the PTEs from the provided application are attributed to the following:

- a) for NOx, CO, PM_{2.5/10}, and VOC, the rounding PTE of all EUs to two decimal places after summation;
- b) assumes NO_x PTE for EU IDs 1 6 on the combined limit of 624.4 TPY;
- c) the fuel consumption limit of 5,712 gal/yr for EU ID 17; and
- d) the addition of residential heaters (EU ID 25).

 NO_x , CO, and $PM_{2.5/10}$ PTE were estimated based on 2002 source tests, manufacturer emission factors and data, and AP-42 factors. SO₂ PTE was based on mass balance, assuming a density of fuel to be 7.1 lbs/gal. VOC PTE was estimated using manufacturer emission factors, and relevant AP-42 factors.

The Permittee calculated HAP emissions using AP-42 emission factors. The Department added the HAP emissions for EU ID 25 based on the max fuel consumption of 563,965 gal/yr, derived from the total firing rate of 8.82 MMBtu/hr for the 25 boilers, 0.137 MMBtu/gallon No.2 Oil heating rate, and 8,760 operational hours/year. The annual firing rate (MMBtu/yr) and fuel use rate (Mgal/yr) of EU ID 25 was added to the overall annual firing rate and fuel use rate from EU IDs 9 - 16, 23, and 24 that was provided in the application.

In addition, the Department adjusted the NO_x emissions by accounting for the combined NO_x limit of 624.4 TPY for EU IDs 1 - 6 (Condition 26), rather than the combined NO_x PTE of 618.43 TPY for EU IDs 1 - 6 in the application.

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 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 the following 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 (NSPS) under Section 111 of the Clean Air Act or National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the CAA;

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

• Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the Dutch Harbor Seafood Processing Plant as specified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a), because the stationary source is:

• A major source. This stationary source is a major source because defined in Section 302 of the CAA, it directly emits, or has the potential to emit, 100 TPY or more of any air pollutant subject to regulation.

AIR QUALITY PERMITS

Permits to Operate

<u>Permit to Operate No. 9625-AA01.</u> The last Permit to Operate issued for this stationary source is Permit to Operate No. 9625-AA01, issued January 17, 1997. This Permit to Operate included all construction authorizations since it 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 were subsequently carried over and revised under Construction Permit 9825-AC011 issued August 25, 1998. The Department incorporated all stationary source-specific requirements in Permit-to-Operate 9625-AA001, as revised in Permit 9825-AC011, into Title V Permit AQ0088TVP01, issued March 28, 2001. This permit expired upon issuance of Permit AQ0088TVP01.

Title I (Construction and Minor) Permits

Construction Permits

<u>Permit No. 9825-AC011 (with Administrative ID AQ0088CPT02).</u> The Department issued the permit to the stationary source on August 25, 1998. The permit was issued under PSD regulations and limited fuel combustion for groups of equipment to protect ambient air quality. The Department included all stationary source-specific requirements established in Permit 9825-AC011 in Operating Permit AQ0088TVP05 as described in Table F.

<u>Permit No. 088CP01 (with Administrative ID AQ0088CPT01).</u> The Department issued the permit to the stationary source on August 13, 2003. Permit 088CP01 modified Permit 9825-AC011, increased actual emissions, allowed use of fish oil in EU IDs 1 - 6, 23, and 24, and revised ambient air quality protection requirements. The Department included all stationary source-specific requirements established in Permit 088CP01 in Operating Permit AQ0088TVP05 as described in Table G.

Minor Permits

<u>Minor Permit No. AQ0088MSS01.</u> The Department issued Permit AQ0088MSS01 to the stationary source on January 23, 2006 to authorize the burning of used oil and limit the sulfur content of fuels burned to no more than 750 ppmw (0.075 percent S by weight). The permit contained requirements to protect ambient air quality and rescinded the used oil fuel blend requirements for EU IDs 9 - 11 in Condition 14 of Permit AQ0088TVP01. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0088TVP05 as described in Table H.

<u>Minor Permit No. AQ0088MSS02.</u> The Department issued Permit AQ0088MSS02 to the stationary source on March 23, 2006 to revise the equations used to estimate NO_x emissions and

correct emission factors for the Fairbanks Morse engines, EU IDs 1 - 6. This permit revised the equations for monthly NO_x emission rates for EU IDs 1 - 6 (Equations II – IV and VI – VIII) under Condition 9 of Construction Permit 088CP01. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0088TVP05 as described in Table I.

<u>Minor Permit No. AQ0088MSS03.</u> The Department issued Permit AQ0088MSS03 to the stationary source on November 17, 2011 to replace EU ID 7 rated at 900 kilowatts-electric and EU ID 8 rated at 800 kilowatts-electric with EU IDs 7B and 8B each rated at 1,476 hp. The permit allowed EU IDs 7B and 8B to burn 644,000 gallons per year (combined), limited sulfur content of diesel burned to 15 ppmw, and revised the sulfur content of fish oil burned to 50 ppmw. This permit also revised Condition 1 of Construction Permit 9825-AC011 and Condition 7 of Construction Permit 088CP01. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0088TVP05 as described in Table J.

<u>Minor Permit No. AQ0088MSS04.</u> The Department issued Permit AQ0088MSS04 to the stationary source on June 17, 2016 to revise Permit 9825-AC011. The permit reallocated NO_x emissions from EU ID 16 (Meal Plant Dryer No. 3 authorized in 1997 but never installed) to EU IDs 12 and 13, thus keeping total NO_x emissions the same and ensuring the ambient air quality is protected. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0088TVP05 as described in Table K.

Title V Operating Permits

<u>Permit No. AQ0088TVP01.</u> The Department received an application for an initial Title V operating permit on October 16, 1997 and issued the permit on March 28, 2001. This permit incorporated all stationary source specific requirements from Permit 9825-AC011.

- Revision No. 1: The Department administratively revised Permit AQ0088TVP01 on September 23, 2002 to update the emission fee condition to the standard permit condition for emission fees adopted by reference into 18 AAC 50, then effective May 3, 2002.
- Revision No. 2: The Department issued AQ0088TVP01 Revision 2 on October 14, 2003 to incorporate changes authorized by Permit 088CP01. The changes included:
 - The use of blended fuel in EU IDs 1 6, 23, and 24;
 - Inclusion of previously unpermitted boilers (EU IDs 23 and 24) and fuel storage tank (EU ID 22) in the emission unit inventory;
 - The new six-minute average opacity standard in 18 AAC 50, then effective May 3, 2002; and
 - The new standard condition for excess emissions and permit deviation reports in 18 AAC 50, then effective May 3, 2002.

<u>Permit No. AQ0088TVP02.</u> The Department received a complete application on September 15, 2005 and issued the permit on June 6, 2007. The permit carried forward the requirements in Permit AQ0088TVP01 Revision 2, Permit AQ0088MSS01 and Permit AQ0088MSS02.

<u>Permit No. AQ0088TVP03.</u> The Department received an incomplete application on January 11, 2012. The Department deemed the application complete on January 24, 2012 and issued the permit

on September 10, 2012. The permit incorporated the requirements in AQ0088MSS03 and carried forward all active requirements in AQ0088TVP02.

<u>Permit No. AQ0088TVP04.</u> The Department received a complete application on December 20, 2016. The applicant submitted more information on EU IDs 23 and 24 on February 9, 2017 on Department request. The Department included EU ID 25 (25 small residential boilers, hot water heaters, and hot water boilers) in the permit based on the new policy on emissions units used in housing units that support stationary sources. The Department carried forward all requirements in AQ0088TVP03 and AQ0088MSS04 into AQ0088TVP04.

• Revision No. 1: The Department issued AQ0088TVP04 Revision 1 on March 12, 2018 to revise Condition 22 to accurately reflect the stack height requirements from Condition 8 of Permit AQ0088MSS03. Based on the language in Minor Permit AQ0088MSS03, the Permittee was required to submit the as-built drawings and photographs in the operating report following completion of the installation of EU IDs 7B and 8B. These requirements were fulfilled when UniSea submitted the information required with the Facility Operating Report – Second Half 2012, dated February 1, 2013. Therefore, the Department revised Condition 22 to remove the annual certification requirement.

<u>Permit No. AQ0088TVP05.</u> The Department received a complete application on September 15, 2021 and received additional information on December 6, 2021 and March 14, 2023. The Department also added the fuel consumption limit for EU ID 17 that was missing from Operating Permit Nos. AQ0088TVP02 through AQ0088TVP04. The Department issued the permit on <DATE>. The permit incorporated terms and conditions of Construction Permit Nos. 9825-AC011, 088CP01, and Minor Permit Nos. AQ0088MSS01, AQ0088MSS02, AQ0088MSS03, and AQ0088MSS04.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1996. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations, indicates the stationary source had several violations on procedural aspects of monitoring, reporting, and recordkeeping, as well as violations on excess emissions/permit deviations. As of the processing of this permit, the Permittee has already addressed the compliance issues and taken corrective actions.

During the last five years, the Department conducted three off-site (reports completed June 28, 2018, May 20, 2020, and December 19, 2023) and one on-site (conducted April 25, 2022, report completed May 3, 2022) full compliance evaluations. During the most recent full compliance evaluation, the Department issued Enforcement Tracking No. 23-R0721-37-0001 on December 19, 2023 to address the non-compliance of NESHAP Subpart ZZZZ requirements for EU IDs 1 through 6 due to exceedance of maximum hours or more than a year between maintenances. The Permittee submitted permit deviations for the non-compliance findings on December 29, 2023. Therefore, the Department required no further action and closed the case following the issuance of the January 19, 2024 Compliance Letter.

APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS

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

Alaska's SIP includes the following types of preconstruction permits:

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

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation. These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ0088TVP05.

Table F through Table K below lists the currently applicable requirements carried into Operating Permit No. AQ0088TVP05 to ensure compliance with the preconstruction permit requirements.

9825-AC011 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
Exhibit A	Source Inventory	Table A	Updated emissions unit inventory based on current EUs at the source.
Condition 5 and Exhibits B.I.1a., B.V, & C.II.7	BACT Requirements for Nitrogen Oxide (EU IDs 1 – 6)	28	Carried over. Same requirements, except formatting for readability. Clarified determination of control of NO_x emissions for EU IDs 1 – 6 by adding "BACT".
Condition 3	Good Air Pollution Control Practices for EU IDs 14 and 15.	29	Carried over and revised to gap fill requirement specific to the operation of the seawater scrubber pumps.
Exhibit B.I.1.b-d	Performance based emission/operating limits	None	Not carried over. Requirements super seeded by Title I permits issued to the source.
Exhibit B.I.1.e	Fuel consumption limits	Table C	Fuel limits for EU IDs $9 - 11$, 14, 15, and 17 carried over. Fuel limits for EU IDs $1 - 6$, 7, 8, 12, 13, and 16 superseded by Title I permits issued to the source.
Exhibit B.I.2	Fuel sulfur content limit	None	Not carried forward. Superseded by more stringent sulfur limit.
Exhibit B.I.3 & 4	NO ₂ standards, monitoring, and compliance	None	Not carried forward. Requirements already fulfilled.
Exhibit B.I.5	Stack Modification for EU	None	Not carried forward. One-time

Table F - Comparison of Permit No. 9825-AC011 Conditions to Operating Permit No. AQ0088TVP05 Conditions¹

9825-AC011 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
	IDs 1 – 6.		requirement to raise stack heights fulfilled.
Exhibit C.II.1	Fuel consumption monitoring	None	Not carried forward. Superseded by Condition 5 of AQ0088CP01.
Exhibit C.II.2	Operating hours monitoring for EU IDs 1 - 6	26.1.a	Carried over by Condition 8.1 of AQ0088CP01.
Exhibit C.II.3	Kilowatt-hours monitoring for EU IDs 1 - 6	26.1.b	Carried over by Condition 8.2 of AQ0088CP01.
Exhibit C.II.4	Sulfur content recordkeeping for EUs that use diesel fuel.	17 and 18	Revised by Conditions 11.1 and 11.2 of AQ0088MSS03.
Exhibit C.II.5	Used Oil Blending Recordkeeping	25	Revised by Condition 6 of AQ0088CP01.
Exhibit C.II.6 and Exhibit D item 9	Seawater Scrubber Control Device Practices (EU IDs 14 – 15)	29.1 & 29.2	Carried over, added "by verifying the flow of water in the scrubber and verifying that the blower is operating" in parentheses for clarity on actions required to ensure proper operations in Condition 29.1. Added text in Condition 29.2.a to clarify operations during "scrubber downtime" that requires reporting. Added text to Condition 29.2.b to clarify when reporting malfunctions of seawater scrubbers is required.

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

Table G - Comparison of Permit No. 088CP01 Conditions to Operating Permit No. AQ0088TVP05 Conditions 1

088CP01	Description of	AQ0088TVP05	How Condition was Revised
Condition No.	Requirement	Condition No.	
3	Construction Source Inventory	Table A	Updated for subsequent source modifications. EU ID 22 has been replaced by EU IDs 22B. The EU is not in the table since it is an insignificant unit that has no specific requirements. EU IDs 23 and 24 is updated to "23B and 24B".

088CP01 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
4	Fairbanks Morse Stack Height Changes for EU IDs 1-6.	N/A	Not carried forward. One-time requirement to raise stack heights fulfilled.
5	EU IDs 23 and 24 fuel consumption limit.	Table C	Carried over for all fuel burning equipment with limits. Revised to accompany changes to emissions inventory as EU IDs "23B and 24B" respectively.
6	Use of diesel & fish oil blend for EU IDs $1 - 6$, 23, and 24.	25	Carried over. Added cross-references to allowed fuel types for combustion (Condition 22 and Table A) and corresponding MR&R requirements (Condition 24), for clarity. Updated to include changes in inventory as EU IDs " $1 - 6$, 23B, and 24B"
7	Sulfur content limits	None	Not carried over. Sulfur content limits for used oil replaced by Condition 11.2 of AQ0088MSS03.
8	NO _x Limit for EU IDs 1 – 6 and MR&R requirements.	26	Same limit and requirements, except added "to protect ambient air quality" for clarity and changed Source IDs to "EU IDs". Reorganized conditions for clarity and better readability. Changed "no less than once a month" to "by the end of each calendar month" and added "the previous calendar month's" in Condition 26.2 for clarity and specificity. Added "combined" in Condition 26.3.b for clarity.
9	NO _x emissions calculations methods and equations for EU IDs $1 - 6$.	27	Carried over Conditions 9.1 through 9.5 (sub-conditions and Equations I & V). Formatted for readability and appropriate cross-referencing. Equations II through IV, and VI through VIII were revised by AQ0088MSS02.
16	Records for EU ID 22 for NSPS Subpart Kb	None	Not carried over. Emissions unit (now EU ID 22B) under shield for NSPS Kb, from AQ0088TVP04.

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

Table H - Comparison of Minor Permit AQ0088MSS01 Conditions to Operating Permit No. AQ0088TVP05 Conditions¹

AQ0088	3MSS01	Description of	AQ0088TVP05	How Condition was Revised
Conditi	ion No.	Requirement	Condition No.	
1	1	Used Oil Fuel Blend Sulfur Concentration limits for EU IDs 9 – 11.	None	Not carried over. Sulfur content limits for used oil replaced by Condition 11.2 of AQ0088MSS03.

2	Used Oil Fuel Blend PM Emissions.	19	 For clarity: added the phrase "Except as provided in Condition 19.1.c" in Condition 19.1.a; and added footnote 10 to clarify grain loading equation derivation from Exhibit A in AQ0088MSS01 and formatted equations for readability.
3 through 5	Rescissions of conditions	None	Not carried forward. Permit actions are already completed.
6	Used Oil Sulfur and Ash Concentration and Reporting.	20	Same requirements. Formatted for readability and clarity. Cross- referenced conditions pertaining to applicable MR&R.
7	Used Oil Fuel Blend Monitoring and Reporting.	21	Same requirements. Formatted for readability and clarity. Cross- referenced conditions pertaining to applicable MR&R.

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

Table I - Comparison of Minor Permit AQ0088MSS02 Conditions to Operating Permit No. AQ0088TVP05 Conditions¹

AQ0088MSS02 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
1	NO _x emission rate equation for EU IDs 1, 4, and 6 (720 RPM units) with $P_{avg} \le$ 1,464 kW using diesel fuel.	27.1	Carried forward as Equation II, formatted equation and caption for readability/clarity.
2	NO _x emission rate equation for EU IDs 2, 3, and 5 (900 RPM units) with $P_{avg} >$ 1,495 kW using diesel fuel.	27.2	Carried forward as Equation III, formatted equation and caption for readability/clarity.
3	NO _x emission rate equation for EU IDs 2, 3, and 5 (900 RPM units) with $P_{avg} >$ 1,495 kW using diesel fuel.	27.2	Carried forward as Equation IV, formatted equation and caption for readability/clarity.
4	NO _x emission rate equation for EU IDs 1, 4, and 6 (720 RPM units) with $P_{avg} \le$ 1,464 kW using diesel/blended fuel.	27.3	Carried forward as Equation VI, formatted equation and caption for readability/clarity.
5	NO _x emission rate equation for EU IDs 2, 3, and 5 (900 RPM units) with $P_{avg} >$ 1,495 kW using diesel/blended fuel.	27.4	Carried forward as Equation VII, formatted equation and caption for readability/clarity.

AQ0088MSS02	Description of	AQ0088TVP05	How Condition was Revised
Condition No.	Requirement	Condition No.	
6	NO _x emission rate equation for EU IDs 2, 3, and 5 (900 RPM units) with $P_{avg} \le$ 1,495 kW using diesel/blended fuel.	27.4	Carried forward as Equation VIII, formatted equation and caption for readability/clarity.

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

Table J - Comparison of Minor Permit AQ0088MSS03 Conditions to Operating Permit No.AQ0088TVP05 Conditions1

AQ0088MSS03 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
			EU ID 16 (Meal Plant Dryer #3) not included in the table; the EU was never installed.
Table 1	Emissions Unit Inventory	Table A	EU IDs 18 – 22 (now EU ID 22B) not included in the table. These are insignificant EUs that have no EU- specific requirements.
2	Notifications related to installation of EU IDs 7B and 8B	None	Not carried forward. One-time notification requirements already completed.
3	Existing EU IDs 7 and 8 Operation and Removal from Service	None	Not carried forward. EU IDs 7 and 8 already removed from service, requirements are obsolete.
5.1	Stationary source's assessable potential to emit	65.1	Updated PTE amount from 884 TPY to 853.53 TPY, as calculated by the Department using information from the Title V permit renewal application.
8	Stack Height Requirements for EU IDs 7B and 8B.	22	Same stack height requirements. Reworded to indicate installation of the required stacks and submittal as- built drawings and photographs have been completed.
9	Fuel Consumption Limits for EUs 7B and 8B and MR&R.	24	Same limit and MR&R requirements, different format. Condition 24 also incorporates fuel consumption requirements for EU IDs 9 – 15, 23, and 24 (now EU IDs 23B and 24B), as carried over from Construction Permit No. 088CP01 and Minor Permit No. AQ0088MSS04.

AQ0088MSS03 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
11	Fuel sulfur content limits to protect AAAQS	16	Revised footnote 7 to clarify that EU IDs 7B and 8B are no longer subject to NSPS Subpart IIII ULSD fuel requirements. Therefore, the Department has added the MR&R requirements in Condition 17 instead of referencing NSPS Subpart IIII fuel requirements.
11.1	For EU IDs 7B and 8B, comply with NSPS Subpart IIII ULSD fuel requirements.	17	Instead of cross-referencing compliance with Subpart IIII, revised MR&R requirements to keep receipts certifying that the diesel fuel delivered is ULSD, or analyze a representative sample of the fuel to determine the fuel delivered is ULSD using appropriate ASTM Methods. See footnote 7.

AQ0088MSS03 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
11.2	Sulfur Content of Fuel Burned in EU IDs 1 – 6, 9 – 15, 17, 23 and 24.	18	Same limit. Revised Condition 18.1 by replacing "or an alternative method approved by the Department" with "or an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1)." The text "or an alternative method approved by the Department" was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review. Added Condition 18.2 to gap-fill MR&R for fish oil fuel. Added Condition 18.3.a and Equation 1 to provide clarity on how fuel blends can be calculated to monitor compliance with the 50 ppmw sulfur content limit. EU IDs range is revised to "1 – 6, 9 – 15, 17, 23B and 24B" to account for emissions inventory changes.
11.3	Report as a permit deviation any failure to meet a requirement of 11.1 or 11.2.	18.3 and 18.4.a	Same requirements, different format.
12.1, 12.2, 12.3	Initial VE compliance demonstration requirements for EU IDs 7B and 8B	None	One-time initial VE state standard compliance demonstration requirements not carried forward; already fulfilled. Subsequent MR&R requirements are incorporated using the SPC IX language in Conditions 1.1 and 2 - 4.

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

Table K - Comparison of Minor Permit AQ0088MSS04 Conditions to Operating Permit No. AQ0088TVP05 Conditions¹

AQ0088MSS04 Condition No.	Description of Requirement	AQ0088TVP05 Condition No.	How Condition was Revised
1.1	Combined annual fuel limit for Units #12 – 13 revised from 200,000 to 293,586 gallons	Table C	Carried over; no change.
1.2	Annual fuel limit for Unit #16 is revised from 160,500 to 0 gallons	None	Not carried over; EU ID 16 was not installed.
1.3	5,800,212 gallon "TOTAL" fuel limit is rescinded	None	Not carried over; rescinded condition.

Note:

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

NON-APPLICABLE REQUIREMENTS

This section discusses standard conditions that have not been included in the permit and other requirements that are not included for specific reasons.

- NSPS Subpart Kb: The capacities of the tanks at the stationary source are greater than 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kilopascals. Therefore, the tanks are exempt from NSPS Subpart Kb.
- 40 C.F.R. 64 Compliance Assurance Monitoring (CAM): None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.

The plant has emission units with control devices and emission limitations. The control devices are seawater scrubber, baghouse, and material transfer cyclones. The Department has previously determined the control devices and subsequent emission units are not applicable to compliance assurance monitoring according to 40 C.F.R. 64.2 because the devices are utilized as inherent process equipment rather than emission control devices.

Neither the seawater scrubber nor the baghouse are used to achieve compliance with emission limits or standards. The seawater scrubber is used to reduce seafood processing odors from operations at the meal plant. The baghouse is used to collect dust from the milling and bagging operations which mitigate scrubber contamination by dust. Finally, the material transfer cyclones are used to separate and transfer fish meal from one location to another. The transfer cyclones are essential to the performance of the fishmeal plant. Each of these emission units are inherent process equipment necessary for proper or safe functioning of processes as defined in 40 C.F.R. 64.2.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 C.F.R. 71, as specified in 18 AAC 50.040(j), to establish operating permit regulations. The EPA fully approved the Alaska Operating Permit

Program on November 30, 2001, as noted in Appendix A to 40 C.F.R. 70. This Statement of Basis, required under 40 C.F.R. 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0088TVP05. Additionally, and as required by 40 C.F.R. 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 4, Visible Emissions Standard and MR&R

Legal Basis: These conditions require 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 ID(s) 1 – 15, 17, 23B, and 24B are fuel-burning equipment.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 C.F.R. 52.70. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

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). MR&R requirements are listed in Conditions 2 through 4 of the permit. These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX.

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

The Permittee must establish by visual observations of emissions unit exhaust, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state emission standards for visible emissions.

These conditions detail a stepwise process for monitoring to determine compliance with the state's visible emissions standard for liquid fuel-burning equipment. Equipment types covered by these conditions are stationary internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emissions units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Liquid Fuel-Burning Equipment:

<u>Monitoring</u> – The emissions unit exhaust must be observed by either the Method 9 Plan or the Smoke/No Smoke Plan as detailed in Condition 2. Corrective actions such as maintenance

procedures or more frequent observations may be required depending on the results of the observations.

<u>Recordkeeping</u> - The Permittee is required to record the results of all observations of emissions unit exhaust and record any actions taken to reduce visible emissions.

<u>Reporting</u> - The Permittee is required to report emissions in excess of the state visible emissions standard and deviations from permit conditions. The Permittee is also required to include in the operating report a statement of which visible emissions plan was used for each emissions unit and copies of the results of all visible emission observations.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU ID 17 does not qualify as insignificant per 18 AAC 50.326(d)(1) because it is subject to an emissions unit-specific limits (see Conditions 18 and 24) and NESHAP Subpart ZZZZ requirements (see Conditions 44 through 48). As long as the emissions unit's actual emissions are below the significant emissions thresholds listed under 18 AAC 50.326(e), no visible emissions monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3. The Permittee must annually certify compliance under Condition 99 with the visible emissions standard based on reasonable inquiry.

Conditions 5 and 6 through 11, PM Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b).

• 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 – 15, 17, 23B, and 24B are fuel-burning equipment.

This PM standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 5 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 6 through 11 of the permit. These conditions have been adopted into regulation as SPC IX. The Department has modified these conditions, as follows:

- Added Condition 5.2 to address used fuel oil blend scenario by referencing MR&R requirements in Conditions 19 through 21.
- Added Condition 5.3 to address diesel fuel and/or fish oil scenario by referencing MR&R requirements in Conditions 9 through 11.

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

Liquid Fuel-Burning Equipment:

<u>Monitoring</u> – The Permittee is required to either take corrective action or conduct PM source testing, if opacity threshold values are exceeded. For liquid fuel-burning engines and turbines,

the Department set opacity threshold values of 15 percent for stack diameters less than 18 inches and 20 percent for stack diameters equal to or greater than 18 inches. These opacity thresholds are based on a study conducted by the Department in an effort to establish a correlation between opacity and PM. The data was collected from diesel engines of various stack sizes and the results are as follows:

- For stacks normalized to 21 inches -0.05 gr/dscf corresponds to 27% opacity
- For stacks normalized to 18 inches -0.05 gr/dscf corresponds to 23% opacity
- For stacks normalized to 12 inches -0.05 gr/dscf corresponds to 16.8 % opacity
- For stacks normalized to 10 inches -0.05 gr/dscf corresponds to 14.3 % opacity

This means that the trend line for the complete data set predicts that 20% opacity corresponds to a little less than the PM limit for an 18-inch stack. There may be engines that exceed the thresholds but the intent of the standard condition is not to guarantee that each engine that might exceed the PM standard will be tested. The Department expects few, if any, engines to actually be tested under this condition. What the Department does expect is that with the adopted condition in place, operators that find an opacity above or near the testing threshold will take corrective action necessary to reduce PM emissions. This would achieve the desired environmental outcome without the added cost of testing. The Department expects this to be the case with both thresholds.

The method is premised on the fact that a five percent difference in opacity is distinguishable. The conditions mean that if opacity readings as measured using Method 9 – with all of its limitations – exceed the threshold, the Permittee must either take corrective action or conduct a PM source test. The compliance conditions for PM do not draw a legal conclusion about whether the method shows compliance with the visible emissions standard.

<u>Recordkeeping</u> - The Permittee is required to record the results of PM source tests and visible emissions observations conducted during the source tests.

<u>Reporting</u> - The Permittee is required to report incidents when emissions in excess of the opacity threshold are observed and the results of PM source tests. The Permittee is also required to include copies of the results of all visible emission observations taken during PM source testing in the operating report.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU ID 17 does not qualify as insignificant per 18 AAC 50.326(d)(1) because it is subject to an emissions unit-specific limits (see Conditions 18 and 24) and NESHAP Subpart ZZZZ requirements (see Conditions 44 through 48). As long as the emissions unit's actual emissions are below the significant emissions thresholds listed under 18 AAC 50.326(e), no PM emissions monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3. The Permittee must annually certify compliance under Condition 90 with the PM emissions standard based on reasonable inquiry.

Conditions 12 through 14, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires compliance with the sulfur compound emissions standard under 18 AAC 50.055(c).

• 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. EU ID(s) 1 – 15, 17, 23B, and 24B are fuel-burning equipment.

The sulfur compound standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Permittee may not cause or allow the affected equipment to violate the applicable sulfur compound standard. Sulfur dioxide comes from the sulfur in the fuel (e.g., coal, natural gas, fuel oils).

Liquid Fuels:

Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g., diesel or No. 2 fuel oil). Fuel sulfur testing will verify compliance. Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard. For the liquid fuel-burning equipment, the Department did not use the MR&R conditions in SPCs XI and XII because the affected EUs are subject to EU-specific requirements that would more adequately meet the requirements of 18 AAC 50.055(c). To protect the SO₂ ambient air quality standards, the Permittee is required to limit sulfur contents of diesel fuel burned in the emissions units to concentrations lower than necessary to comply with the SO₂ state emission standard in Condition 12, as shown in Condition 18 (for EU IDs 1-6, 9-15, 17, 23B, 24B) and Condition 17 (for EU IDs 7B and 8B). Therefore, the MR&R requirements in Conditions 13 and 14 for compliance with the state SO₂ standard in Condition 12 have been streamlined based on the more stringent fuel sulfur content limits of 50 ppmw (Condition 18) and 15 ppmw for ULSD (Condition 17), rather than have two sets of MR&R.

Condition 15, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. 18 AAC 50.050(a) and 50.055 are contained in the federally-approved SIP. The Department also added permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The condition requires insignificant emissions units to comply with the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions. Insignificant emissions units are not generally listed in operating permits unless specific monitoring, recordkeeping, and reporting are necessary to ensure compliance with the state emission standards. However, the Permittee may not cause or allow insignificant emissions units at the stationary source to violate these standards whether or not they are listed in the operating permit.

For informational purposes, EU ID 25 is included in Table B of this permit. EU ID 25 consists of 25 small residential boilers, hot water boilers, and hot water heaters each with a rating below the significant threshold in 18 AAC 50.326(g). Therefore, the Department included EU ID 25 as an affected insignificant emissions unit under Condition 15.

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

Condition 15.4.a requires certification that the insignificant emissions units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution, based on reasonable inquiry.

The Department used the language in SPC V, adopted by reference under 18 AAC 50.346(b)(4), for the permit condition.

Conditions 17 through 29, Preconstruction Permit Requirements

Legal Basis: The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate (PTO) issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT), limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: Conditions 17 through 29 reflect the emissions unit- or stationary sourcespecific requirements that are in effect from Title I Construction Permit 9825-AC011 and Minor Permit AQ0088MSS01 through AQ0088MSS04. Table F through Table K to the SOB describes which emission units were authorized and how the terms and conditions have been revised, rescinded, and replaced in the Title I permits issued for the stationary source and if they are carried forward into the Title V permit. The stationary source emits more than 250 TPY of NO_x and has been under review for PSD. The NO_x emission increases due to facility modifications since August 7, 1980, exceed the 40 TPY NO_x PSD applicability threshold. Therefore, the Department required the Permittee to use BACT during issuance of Permit 9825-AC011.

The pre-construction requirements imposed on the facility were 1) a fuel consumption limit for the fuel burning equipment³, 2) a power generation limit on some of the diesel engines, 3) fuel injection timing retardation as BACT for the Fairbanks-Morse engines, and 4) stack height requirements for EU IDs 7B and 8B.

Conditions 17 through 21 are MR&R requirements that pertain to using either diesel fuel, fish oil, or any combination of the two (for EU IDs 1 - 6, 9 - 15, 17, 23B and 24B) and ULSD (for EU IDs 7B and 8B) carried over from AQ0088MSS03 (Conditions 17 and 18); and used oil fuel blend allowed for EU IDs 9 - 11 carried over from AQ0088MSS01 (Conditions 19 through 21) to protect the AAAQS.

Condition 22 sets the stack height requirements for EU IDs 7B and 8B, carried over from AQ0088MSS03.

Conditions 22 - 25 contains the characteristics and amount of fuel the emission units burn. EU IDs 1 - 6, 9 - 15, 23B and 24B must burn diesel fuel, fish oil, or any combination of those fuels and EU IDs 7B and 8B must burn only ULSD.

To protect ambient air quality, Condition 26 limits NO_x emissions to 624.4 TPY per 12 month rolling period. The emission factors for the FM generators (EU IDs 1 – 6) are based on source

³ The fuel consumption limit of 5,712 gal/yr for EU ID 17 (from Title I Construction Permit 9825-AC011) that was omitted from Operating Permit Nos. AQ0088TVP02 through AQ0088TVP04 is included in this permit. See Table C.

test results, operating the engines on different fuels. The Permittee is allowed to use diesel oil or diesel blended fuel in the FM generators. To calculate the monthly NO_x emissions, equations as set out in Condition 27 are used. The emission factors for these equations are based on the Department approved source test results from the FM generators (July 2002) as updated in AQ0088MSS02. Since the FM generators have two operational modes, (loads greater than 65% or loads less than or equal to 65%), two formulas are required for each fuel type for the 720 RPM units (EU IDs 1, 4, & 6) and the 900 RPM units (EU IDs 2, 3, & 5).

In order to demonstrate compliance with Conditions 27.1 - 27.5, the average load can be interpreted as the average load for the entire month, regardless of fuel types consumed during that month.

The Permittee shall evaluate and certify the BACT fuel injecting timing requirement in Condition 28 once per year. This requirement is carried over from Permit No. 9825-AC011.

Condition 29 is based on Permit No. 9825-AC011, Parameter 6 of Exhibit C "Seawater Scrubbers" which states: The Permittee shall record a physical verification that seawater scrubber pumps are on and operating property immediately before fish meal plant startup and at least once each work shift during fish meal plant operation. The sweater scrubber control device is necessary to help mitigate fish odor.

Conditions 30 through 34, NSPS Subpart A Requirements

Legal Basis: The EPA approved Alaska's Part 70 Program granted on November 30, 2001 (40 C.F.R. 70 Appendix A). The Department is the permitting authority for the Part 70 program. As the permitting authority, the Department requires compliance with all permit conditions. Although the EPA has not delegated to the Department the authority to administer the New Source Performance Standard (NSPS) program, NSPS requirements are included in the definition for "applicable requirement" under 40 C.F.R. 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The NSPS provisions under Subparts Dc and IIII apply to the stationary source. Therefore, the Department requires compliance with those standards in a Part 70 permit issued under the approved program. However, the Department is unable to change the actual wording of the relevant standard to substitute "the Department" for "the Administrator" in those standards. Since the Department expects access to any permit-related information provided by the Permittee to the EPA, the Department will act on its responsibility as the permitting authority to determine compliance with the standard. To reflect this relationship and for the purposes of this permit, the Department has defined "the Administrator" to mean the "EPA and the Department" for conditions implementing the federal emission standards under Section 5.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 9 and 10 are subject to NSPS Subpart Dc and EU IDs 7B and 8B are subject to NSPS Subpart IIII. These emission units are therefore subject to Subpart A.

Conditions 30.1 through 30.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU ID(s) 9 and 10. However, the Permittee is

still subject to these requirements in the event of a new NSPS affected facility⁴ or in the event of a modification or reconstruction of an existing facility⁵ into an affected facility. EU IDs 7B and 8B are not subject to 40 C.F.R. 60.7(a)(1) - (4).

Conditions 30.4 through 30.6 - The requirements to notify the EPA and the Department of the date of a continuous monitoring system (CMS) performance demonstration, no less than 30 days before demonstration commences (40 C.F.R. 60.7(a)(5) - (7)) are applicable to EU IDs 9 and 10 only if CMS is installed as an NSPS requirement. This requirement does not apply to EU ID(s) 7B and 8B.

Condition 30.7 - The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 31 - The requirements in 40 C.F.R. 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to all NSPS affected facilities subject to Subpart A except those that have an equivalent required in the NSPS Subpart which they are subject to. At this stationary source, EU IDs 7B and 8B are not subject to 40 C.F.R. 60.7(b) because NSPS Subpart IIII contains an equivalent requirement.

Condition 32 - Most NSPS affected facilities subject to Subpart A must comply with good air pollution control practices in 40 C.F.R. 60.11. EU IDs 9 and 10 are subject to 40 C.F.R. 60.11. EU IDs 7B and 8B are not subject to 40 C.F.R. 60.11 because NSPS Subpart IIII contains an equivalent requirement.

Condition 33 - States that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards for EU IDs 9 and 10. EU IDs 7B and 8B are not subject to 40 C.F.R. 60.11 because NSPS Subpart IIII contains an equivalent requirement.

Condition 34 - Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 7B, 8B, 9, and 10.

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

Conditions 35 through 37, NSPS Subpart Dc Requirements

Legal Basis: The NSPS applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. EU IDs 9 and 10 were constructed in 1990 and have maximum design heat input capacities of 13.4 MMBtu/hr (400 bhp); and are therefore subject to NSPS Subpart Dc.

EU IDs 9 and 10 when burning distillate fuel oil, are subject to the standard for SO_2 in 40 C.F.R. 60.42c(d), but are not subject to the PM standard in 40 C.F.R. 60.43c because the

⁴ *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.

⁵ *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.

emissions units' maximum design heat input is less than 30 MMBtu/hr. In accordance with 40 C.F.R. 60.42c(h)(1), compliance with the emission limit or oil sulfur content limit for EU IDs 9 and 10 may be demonstrated by certification from the fuel supplier.

Factual Basis: The conditions require the Permittee to comply with the Subpart Dc sulfur standard. The Permittee may not cause or allow EU IDs 9 and 10 to violate the standard. The Permittee has two options for complying with SO_2 emissions: one is to comply with a sulfur emission limit and the other is to comply with a fuel sulfur limit.

<u>Monitoring</u> - The condition describes monitoring required in the event that the owner seeks to demonstrate compliance with the SO_2 standard based on fuel supplier certification under 40 C.F.R. 60.46c(f). This condition also requires testing of fuels if no fuel supplier certification is available such as for fish oils and used oil fuels.

Conditions 38 through 42, 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 ICEs are manufactured after April 1, 2006 for non-fire pump engines.

EU IDs 7B and 8B are non-emergency CI ICE. These EUs meet the applicability criteria of Subpart IIII under 40 C.F.R. 60.4200(a)(2)(i).

Factual Basis: These conditions incorporate the current (as amended through March 27, 2023) NSPS Subpart IIII requirements applicable to the existing stationary CI ICE, EU IDs 7B and 8B. The Permittee may not cause or allow these emissions units to violate these standards. Because the stationary source location meets the definition of "remote areas of Alaska" in 40 C.F.R. 60.4219, the applicable standards and MR&R requirements for EU IDs 7B and 8B are rooted from the provisions under 40 C.F.R. 60.4216 that specifically address engines used in remote areas of Alaska. In particular, 40 C.F.R. 60.4216(c) allows the Permittee to comply with the applicable emission standards for emergency engines in 40 C.F.R. 60.4201 and 60.4204, whether the unit is operated as emergency or non-emergency CI ICE. Therefore, EU IDs 7B and 8B are subject to EPA Tier 2 emission standards for nonroad CI engines as specified in Table 2 to Appendix I to Part 1039.

EU IDs 7B and 8B are exempt from NSPS Subpart IIII ULSD requirements in accordance with 40 C.F.R. 60.4216(d). The provisions of 40 C.F.R. 60.4216(f), which allows owners and operators of stationary CI ICE located in remote areas of Alaska to use fuels mixed with used lubricating oil, are not included in this permit because EU IDs 7B and 8B are subject to ULSD grade fuel in Condition 17 as part of the requirements to protect AAAQS.

For EU IDs 7B and 8B, the Permittee must comply with the emission standards in Appendix I to 40 C.F.R. 1042, Table 2 and comply with the not-to-exceed requirements in 40 C.F.R. 60.4212(c) if a performance test is conducted on them. The Permittee shall keep documentation confirming that the engines meet the emission standards in Condition 40.

The Department added Conditions 41.4 and 41.5 to gap-fill and recordkeeping and reporting requirements to fulfill the provisions of 40 C.F.R. 71.6(a)(3)(ii) & (iii).

The NSPS GAPCP requirements provided in 40 C.F.R. 60.4211(a), as reflected in Condition 39, suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). MR&R requirements are provided in Condition 41. Provisions for importing or installing stationary CI ICE in previous model years required under 40 C.F.R. 60.4208 are provided in Condition 42.

The provisions of NSPS Subpart IIII listed in Conditions 38 through 42 are current as amended through March 27, 2023. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Condition 43, NESHAP Subpart A Requirements

Legal Basis: Most sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements are subject to NESHAP Subpart A. This stationary source is subject to 40 C.F.R. 63 Subparts ZZZZ and JJJJJJJ, and therefore is subject to the general provisions of Subpart A as specified in the provisions for the applicability of NESHAP Subpart A in Table 8 to NESHAP Subpart ZZZZ and in Table 8 to NESHAP Subpart JJJJJJ.

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

Conditions 44 through 48, NESHAP Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Dutch Harbor Seafood Processing Plant is an area source that owns and operates RICE units, EU IDs 1 - 6, and 17, subject to NESHAP Subpart ZZZZ.

Factual Basis: These conditions incorporate the current (as amended through May 30, 2023) NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 1-6, and 17. Dutch Harbor Seafood Processing Plant is an area source of HAP emissions not accessible by the Federal Aid Highway System and subject to the NESHAP Subpart ZZZZ for existing RICE (EU IDs 1-6, and 17) whose construction commenced before June 12, 2006. EU IDs 1-6 and 17, listed in Table A, are existing stationary RICE that commenced construction before June 12, 2006. EU IDs 7B and 8B are also subject to NESHAP Subpart ZZZZ but will comply with NESHAP Subpart ZZZZ by complying with NSPS Subpart IIII.

Per 40 C.F.R. 63.6603(b)(1), existing non-emergency RICE rated greater than 300 hp located at area sources not accessible by the Federal Aid Highway System do not have to meet the numerical CO emission limitations (therefore, no operational limitations apply as well) under NESHAP Subpart ZZZZ but must meet the work and management practices for stationary non-emergency CI RICE with a rating of less than or equal to 300 hp as specified in Table 2d item, 1 (Condition 46). Continuous compliance is demonstrated through work or management practices as described in Subpart ZZZZ Table 6, item 9 (Condition 45.2).

The applicable work and management practices standards for EU IDs 1 - 6, and 17 are provided in Conditions 46.1 (for EU IDs 1 - 6), 46.2 (for EU ID 17), 46.3 through 46.5, and

46.6 (for EU ID 17). The NESHAP Good Air Pollution Control Practices and maintenance requirements in 40 C.F.R. 63.6605(b), 63.6625(e), and 63.6625(i), as reflected in Condition 45 suffice the State Good Air Pollution Control Practices requirement under 18 AAC 50.346(b)(5).

For the emergency engine, EU ID 17, the Permittee is required to install a non-resettable hour meter for accurate recording and monitoring to demonstrate compliance with the management practice requirements and operational hour limitations set out for emergency RICE (Condition 46.6). EU ID 17 is allowed to operate up to 100 hours per calendar year for maintenance checks and readiness testing unless federal, state, or local standards require beyond 100 hours per year for the same purpose. The Permittee is also allowed to operate the emergency RICE in non-emergency situations for up to 50 hours per calendar year, as allowed under 40 C.F.R. 63.6640(f). The 50 hours allowed for non-emergency situations are counted towards the 100 hours per year provided for maintenance and testing. There is no time limit on the use of emergency stationary RICE in emergency situations. If EU ID 17 no longer meets the criteria for an emergency engine, as defined in 40 C.F.R. 63.6675, the emissions unit will need to meet all applicable requirements for non-emergency engines.

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e) & (f), 63.6625(i), and 63.6660, as set out in Condition 47. The reporting requirements are provided in Condition 48. The Permittee is required to include reports of deviations from NESHAP Subparts A and ZZZZ requirements with the semiannual operating reports, per 40 C.F.R. 63.6650(f). The Department also added an excess emissions and permit deviation gap-fill reporting requirement in Condition 48.2.

The Permittee is exempt from the subpart's fuel requirements per 40 C.F.R. 63.6604(d), and from the notification requirements per 40 C.F.R. 63.6645(a)(5), since none of the affected emissions units are subject to numerical emission standards.

The provisions of NESHAP Subpart ZZZZ listed in Conditions 43.1 and 44 through 48 are current as amended through May 30, 2023. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Conditions 49 through 54, NESHAP Subpart JJJJJJ

Legal Basis: NESHAP Subpart JJJJJJ is a federal rule that took effect on May 20, 2011. This subpart applies to owners and operators of industrial, commercial, or institutional boiler as defined in 40 C.F.R. 63.11237 that is located at, or is part of, an area source of HAP emissions. The Dutch Harbor Seafood Processing Plant is an area source of HAP emissions that operates boilers (EU IDs 9 – 13, 23B and 24B) subject to the provisions of NESHAP Subpart JJJJJJ under 40 C.F.R. 63.11194(a), (b), and (c) for existing industrial boilers (EU IDs 9 – 13) whose construction or reconstruction commenced on or before June 4, 2010 and new industrial boilers (EU IDs 23B and 24B) that commenced construction after June 4, 2010 and meets the applicability criteria at the time construction was commenced.

Factual Basis: These conditions incorporate the Subpart JJJJJJ work or management practices applicable to EU IDs 9 - 13, 23B and 24B. The Permittee is required to operate and maintain the emissions units according to the manufacturer's emission-related operation and maintenance instructions which provides for the maintenance and operation of the emissions

units in a manner consistent with good air pollution control practice for minimizing emissions. The Generally Available Control Technology (GACT) work or management practice standard applicable to EU IDs 9 - 13, 23B and 24B are those of existing and new oil-fired units with a heat input capacity of less than 5 MMBtu/hr, greater than 5 MMBtu/hr, and greater than 10 MMBtu/hr, as set forth in Condition 51. As such, five-year tune-ups for EU IDs 23B and 24B (less than 5 MMBtu/hr), biennial tune-ups for EU IDs 9 - 13 (greater than 5 MMBtu/hr) and a one-time energy assessment for EU IDs 9 - 11 (greater than 10 MMBtu/hr) are required.

The initial tune-ups on EU IDs 9 - 13 as required in 40 C.F.R. 63.11196(a)(1) were completed before March 21, 2014. The one-time energy assessments required in 40 C.F.R. 63.11196(a)(3) and Table 2 (item 16) for EU IDs 9 - 11 (existing oil-fired boilers with heat input capacity of 10 MMBtu/hr and greater) were completed before March 21, 2014. The corresponding Notice of Compliance Status as required under 40 C.F.R. 63.11214(b) for each of EU IDs 9 through 13 has been submitted to EPA and the Department. Therefore, these one-time requirements are not included in this renewal permit. For EU IDs 23B and 24B, new boilers subject to a requirement to conduct a tune-up, the Permittee is not required to prepare and submit a Notification of Compliance Status for the tune-up, per 40 C.F.R. 63.11225(a)(4).

The Permittee has completed the most recent required biennial tune-ups in February 2023 for EU IDs 9-11, and on March 19, 2022 for EU IDs 12 and 13. Subsequent biennial performance tune-ups are to be conducted no more than 25 months after the previous tune-up.

Five-year tune-ups for EU IDs 23B and 24B were completed in October 2023. Subsequent five-year performance tune-ups are to be conducted no more than 61 months after the previous tune-up.

Recordkeeping and reporting requirements that apply to EU IDs 9 through 13, 23B, and 24B are provided in Conditions 53 and 54.

The provisions of NESHAP Subpart JJJJJJ listed in Conditions 43.2 and 49 through 54 are current as amended through September 14, 2016. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Condition 55, Asbestos NESHAP

Legal Basis: The requirements of 40 C.F.R. 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the "applicable requirement" definition under 40 C.F.R. 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M and associated general provisions under Subpart A, as adopted by reference under 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. ADEC received delegation for §61.145 and §61.154 of Subpart M (Asbestos), along with other sections and appendices which are referenced in §61.145, as §61.145 applies to sources required to obtain an operating permit under Alaska's regulations. ADEC has not received delegation for Subpart M for sources not required to obtain an operating permit under Alaska's regulations.

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 56, Chemical Accident Prevention Provisions

Legal Basis: This condition applies because the Permittee has more than a threshold quantity of a regulated substance in a process, as determined by 40 C.F.R. 68.115.

Factual Basis: The Permittee utilizes greater than 10,000 pounds of anhydrous ammonia as refrigerant.

Conditions 57 through 59, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: The requirements of 40 C.F.R. 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the "applicable requirement" definition under 40 C.F.R. 71.2.

Condition 57 requires compliance with the applicable requirements in 40 C.F.R. 82, as adopted by reference under 18 AAC 50.040(d). The requirements apply if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants in 40 C.F.R. 82, Subpart F.

Conditions 58 and 59 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 58 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 59 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements. The Dutch Harbor Seafood Processing Plant 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. 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 require compliance with this federal regulation.

Condition 60, NESHAP Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAP, 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 EPA if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 C.F.R. 63 and to keep records of applicability determinations and make those records available to the Department.

Conditions 61 through 63, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e)-(g). As stated in 18 AAC 50.326(j)(3), the standard permit conditions of 18 AAC 50.345 replace the provisions of 40 C.F.R. 71.6(a)(5) - (7).

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

Condition 64, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400-403. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

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

Conditions 65 and 66, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410-420. The regulations specify the time period for the assessable emissions and the methods the Permittee may use to calculate assessable emissions. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Except as noted in the last paragraph, the Department used the language in SPC I, adopted by reference under 18 AAC 50.346(b), for the permit. SPC I requires the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date. The assessable emissions are the lesser of the stationary source's potential or projected emissions of each air pollutant.

SPC I also allows the Permittee to recalculate the stationary source's assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

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

As indicated in Condition 66.3, if the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit a waiver letter certified by the responsible official under 18 AAC 50.205 indicating that the assessable emissions for the source is zero for the previous fiscal year.

The Department has modified Condition 65 by deleting the phrase "in quantities 10 tons per year or greater" to match the revision made in 18 AAC 50.410 effective September 7, 2022. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 67, Good Air Pollution Control Practice

Legal Basis: This condition requires compliance with the requirements in 18 AAC 50.346(b)(5) and applies to all emissions units, **except** those subject to an emission standard in 40 C.F.R. 60, 61, or 63, those subject to continuous emission or parametric

monitoring requirements, and insignificant emissions units; i.e., except EU IDs 1 - 6, 7B, 8B, 9 - 13. 17, 23B, and 24B.

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 SPC VI pursuant to AS 46.14.010(e). Records kept in accordance with Condition 67.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 84 even if a unit is no longer subject to this condition.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that an adequate maintenance schedule is not maintained.

Condition 68, Dilution

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

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

Condition 69, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). The listed emission units and activities in Table 7 are: 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 Department used the language in SPC X for the permit. The condition requires the Permittee to take reasonable action to prevent particulate matter from being emitted into the ambient air in accordance with 18 AAC 50.045(d).

Condition 70, Stack Injection

Legal Basis: This condition reiterates 18 AAC 50.055(g), which 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). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

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

Condition 71, Air Pollution Prohibited

Legal Basis: This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in SPC II for the permit. This condition spells out how to monitor, record, and report prohibited air pollution. While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

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

Condition 72, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if unavoidable emergency, malfunction, or non-routine repair activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 88. Excess emission reporting under Condition 88 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 88.

Condition 73, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 18 AAC 50.065 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: The Permittee may conduct open burning by following the provisions of 18 AAC 50.065 and by following the Department guidelines posted at the website <u>http://dec.alaska.gov/air/air-permit/open-burn-info</u>. Condition 73.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 90.

Condition 74, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. This requirement is under 18 AAC 50.220(a) and 50.345(k), which are included in the SIP approved by EPA.

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a). Compliance is demonstrated through the submission of the required source test plan and report.

Conditions 75 through 77, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 75 and 77 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition 76 specifies source test methods, as required by 40 C.F.R. 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 75 through 77.

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

Condition 78, Test Exemption

Legal Basis: This condition incorporates the source test exemption in 18 AAC 50.345(a) regarding visible emissions observations. 18 AAC 50.345(a) is included in the SIP approved by EPA.

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

Conditions 79 through 82, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Condition 79 contains the requirement in 18 AAC 50.345(1), while Conditions 80 through 82 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o). The requirements in 18 AAC 50.345(1) through (o) are included in the SIP approved by the EPA. These requirements constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 50.345(a). Additionally, these requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

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

Condition 83, Particulate Matter Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f), which is included in the SIP approved by EPA. It applies when the Permittee tests for compliance with the particulate matter standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. The Permittee must use the equation given in this condition to calculate the particulate matter emission concentration from the source test results. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 84, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 C.F.R. 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4). It also incorporates the general NSPS recordkeeping requirement under 40 C.F.R. 60.7(f), which the Department adopted by reference under 18 AAC 50.040(a)(1).

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 evidence of compliance with this requirement.

40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part while 40 C.F.R. 71.6(a)(3)(ii) requires at least five years of records retention. The five-year records retention requirement in Condition 84 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 85, Certification

Legal Basis: All operating permits must contain a requirement to certify permit applications, reports, affirmations, or compliance certification, per 18 AAC 50.345(j). The requirement is a part of the SIP approved by EPA.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). 18 AAC 50.345(j) allows the excess emissions reports to be certified with the operating report. However, the Department reminds the Permittee that excess emissions reports must be submitted according to the applicable deadline given in Condition 88 and must not be

withheld from the Department until the deadline for submittal of an operating report. This condition supplements the reporting requirements of this permit. The certification statement through electronic signature and options for submittal provide paperless options for reporting without compelling Permittees to any specific means of submission.

Condition 86, Submittals

Legal Basis: This condition applies because the Permittee is required to send reports to the Department and supplements the standard reporting and notification requirements of this permit.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. This condition lists the Department's appropriate address for reports and written notices. This condition states that the Department requires one certified copy of submitted reports (except as otherwise required by the Department or other conditions of the permit) and provides an allowance for either electronic or hard copy document submittals. The condition also directs the Permittee to refer to the submission instructions on the Department's Standard Permit Conditions webpage for additional information regarding document submittals (e.g., the appropriate Department address).

Condition 87, Information Requests

Legal Basis: All operating permits must include a condition that requires the Permittee to furnish certain information upon request, per 18 AAC 50.345(i). The requirement is part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(i) is a standard condition that must be included in each operating permit, as specified in 18 AAC 345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 88 and Section 13, Excess Emission and Permit Deviation Reports and Notification Form

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). 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.

Except as noted in the last paragraph, the Department used the language in SPCs III and IV, adopted by reference under 18 AAC 50.346(b)(2), for the permit condition. The Department used the Notification Form in SPC IV adopted by reference under 18 AAC 50.346(b)(3), for the notification requirements (see Section 13).

The Department has modified Condition 88.3 and the Notification Form in Section 13 to reflect the electronic submittal requirements in 18 AAC 50.270 using the Department's online form to submit notification of excess emissions and permit deviations beginning September 7, 2023. The electronic notification form is found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee

Portal option. Submittal through other methods may be allowed only upon written Department approval. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 89, Operating Reports

Legal Basis: The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) which the Department has adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The Department used the language in SPC VII, adopted by reference under 18 AAC 50.346(b)(6), for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements identified elsewhere in the permit.

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports: one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 90, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 C.F.R. 71.6(c)(5), which the Department adopted by reference under 18 AAC 50.040(j).

Factual Basis: This condition specifies the periodic compliance certification requirements and specifies a due date for the annual compliance certification.

Condition 90.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified. The Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports: one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required report electronically at their discretion.

Condition 91, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources to the EPA as required under 40 C.F.R. 51.15 and 51.321. The federal emission inventory requirement applies to sources defined as point sources in 40 C.F.R. 51.50. Under 18 AAC 50.275, the state also requires reporting of emissions triennially for stationary sources

with an air quality permit, regardless of permit classification. This includes sources that do not meet the federal emission thresholds in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A. The state must report emissions data as described in 40 C.F.R 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A to EPA.

Factual Basis: Except as noted in the last paragraph, the Department used the language in SPC XV, as adopted by reference under 18 AAC 50.346(b)(8), for the permit condition.

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1)). Permittees have until April 30th to compile and submit the data to the Department. To expedite the Department's process of transferring data into EPA's electronic reporting system, the Department encourages Permittees to submit the emission inventory through the Department's electronic emission inventory submission system in the Permittee Portal the Department's Online Services webpage on Air http://dec.alaska.gov/Applications/Air/airtoolsweb/. A myAlaska account and profile are needed to gain access to the Permittee Portal. Other options are to submit the emission inventory via mail, email, or fax.

Detailed instructions on completing and submitting the emission inventory and the report form are available at the Point Source Emission Inventory page <u>http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory</u> by clicking the Emission Inventory Instructions button. The emission inventory instructions and report form may also be obtained by contacting the Department.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, stationary sources with air quality permits are required to submit with each report emissions data described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A, as applicable. Title V stationary sources with potential annual emissions greater than or equal to any of the emission thresholds for Type A (large) sources, as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every year for the previous calendar year (also known as the inventory year). For triennial inventory years, Type A sources only need to submit one report, not both an annual report and a separate triennial report.

Stationary sources, excluding owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230, that do not meet any of the emission thresholds for Type A (large) sources are required to report emission inventory data every third year (i.e., triennially) for the previous inventory year based on the schedule set by the EPA in 40 C.F.R. 51.30(b)(1). That is, the triennial emission inventory report for 2023 is due April 30, 2024; for 2026 the triennial emission inventory report is due April 30, 2027; etc. As of the issue date of this permit, the Dutch Harbor Seafood Processing Plant is required to report once every three years under Condition 91.

The Department has modified the triennial reporting requirements under Condition 91 by including stationary sources' PTEs that are below the thresholds for annual reporting required by Type A (large) sources, instead of pollutant-specific thresholds for attainment and non-attainment areas. Thus, all stationary sources regardless of permit classification (excluding ORLs and PAELs) are covered under this condition, to capture the new requirements found in 18 AAC 50.275, effective September 7, 2022. Because the stationary source's PTE for criteria pollutants are below the thresholds for every-year emissions inventory reporting, the Department

has streamlined SPC XV to include only triennial reporting requirements. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 92, Consistency of Reporting Methodologies

Legal Basis: Condition 92 is from 18 AAC 50.275(a) and requires all stationary sources, regardless of permit classification (with the exception of owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230), to report actual emissions to the state so that the state can meet its obligation under 40 C.F.R. 51. Condition 92.1 is from 18 AAC 50.275(b) and requires consistency on the stationary sources' actual emissions reports submitted for NEI and the state's assessable emissions.

Factual Basis: The regulation was added to 18 AAC 50 on September 7, 2022 so as to include all stationary sources required to report actual emissions for the purpose of federal emissions inventory and to avoid inconsistencies in actual emissions reports submitted. When reporting actual emissions under Condition 91 or assessable emissions under Condition 65.1, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

Condition 93, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Department a copy of each report submitted to EPA as required for emissions units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). Appendix A to 40 C.F.R. 70 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 94, Permit Applications and Submittals

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

Factual Basis: The Department used the language in SPC XIV, adopted by reference under 18 AAC 50.346(b)(7), for the permit condition. The condition directs the applicant to send a copy of each application for modification or renewal of this permit to the EPA. The information may be submitted in electronic format, if practicable. Condition 94.2 lists the methods, in EPA's preferred order, to which the applicant may submit the application documents, as specified in the EPA's February 12, 2024 memorandum guidance for Submitting Air Permits to EPA Region 10. This condition shifts the burden of compliance with 40 C.F.R. 71.10(d)(1) from the Department to the Permittee as allowed under 40 C.F.R. 71.10(d)(1).

Conditions 95 through 97, 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 C.F.R. 71.6(a)(8), (12), and (13), incorporated by reference under 18 AAC 50.040(j), require that these provisions be included in operating permits.

Factual Basis: 40 C.F.R. 71.6(a)(12) and (13), as reflected in Conditions 96 and 97, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 95) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 95.

Condition 98, 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 accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 C.F.R. 71.5(a) - (c), adopted by reference in 18 AAC 50.040(j)(3), and 18 AAC 50.326(c).

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 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 40 C.F.R. 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 remits 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, as long as an application has been submitted within the timeframe specified 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.

Conditions 99 through 102, General Compliance Requirements and Schedule

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in 18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

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

Conditions 105 and 106, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 C.F.R. 71.6(f), which the Department has adopted by reference under 18 AAC 50.040(j)(4). These

requirements apply because the Permittee has requested that the Department shield the stationary source from specific non-applicable requirements listed under this condition.

Factual Basis:

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
19–22B	40 C.F.R. 60 Subpart Kb – Standards of Performance (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Capacity greater than 75 m ³ but less than 151 m ³ storing a liquid with a maximum true vapor pressure less than 15.0 kilopascals
7B, 8B	40 C.F.R. 60.4207 Subpart IIII – NSPS for Stationary Compression Ignition Internal Combustion Engines	40 C.F.R. 60.4216(d) exempts pre-2014 engines in remote Alaska from the fuel requirements under 40 C.F.R. 60.4207.
1 - 7B, 8B, 17	40 C.F.R. 60 Subpart JJJJ – NSPS for Stationary Spark Ignition Internal Combustion Engines	EU IDs 1 - 8B and 17 do not meet the definition of spark ignition internal combustion engines.
1 – 6, 17	40 C.F.R. 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines 40 C.F.R. 63.6604	40 C.F.R. 63.6604(d) exempts existing CI stationary RICE in remote Alaska from fuel requirements.
	40 C.F.R. 63.6625(g)	Per 40 C.F.R. 63.6625(g), existing CI engines in remote Alaska are exempted from crankcase requirements.
	40 C.F.R. 63.6640, Table 2d	Per 40 C.F.R. 63.6603(b), existing stationary non-emergency CI RICE with a site rating of more than 300 HP located in remote Alaska is exempted from CO limits requirements.
9 – 13	40 C.F.R. 63 Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	The Dutch Harbor Plant is not a major source of HAPs emissions.
25	40 C.F.R. 63 Subpart JJJJJJ – NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources	Hot water heaters, as defined in 40 C.F.R. 63.11237, are not subject to 40 C.F.R. Subpart JJJJJJ, per 40 C.F.R. 63.11195(f). Each of the individual emission units included in EU ID 25 (25 oil-fired hot water residential boilers with total rating of 8.2 MMBtu/hr) is rated less than 1.6 MMBtu/hr and therefore meets the definition of "hot water heater."

of Operating Permit No. AQ0088TVP05 shows the permit shield that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permits, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.