



PUBLIC NOTICE

NORTHWEST CLEAN AIR AGENCY DRAFT AIR OPERATING PERMIT RENEWAL

NOTICE IS HEREBY given that the Northwest Clean Air Agency (NWCAA) will take action on and seeks comments on the Air Operating Permit (AOP) renewal for the following facility:

Chemtrade Solutions LLC - Anacortes Works
8579 North Texas Rd
Anacortes, WA 98221

This action is issuance of a draft renewal of the existing Chemtrade Solutions LLC AOP. The existing AOP was previously finalized on April 9, 2021.

Chemtrade Solutions LLC operates the Anacortes Works facility, located near Anacortes, WA. The facility consists of a sulfur recovery unit and sulfuric acid plant which process refinery acid gas and spent acid into product sulfuric acid and elemental sulfur. The Anacortes Works is required to obtain an air operating permit (AOP) because it has the potential to emit more than 100 tons per year of sulfur dioxide. Sulfur dioxide is included as a regulated pollutant in Chapter 173-401 of the Washington Administrative Code (WAC). In addition, Chemtrade is also required to have an AOP because the sulfur recovery unit is considered part of the neighboring Tesoro Anacortes Refinery and, therefore, is subject to the AOP program.

The AOP compiles existing air quality requirements and permits into one comprehensive document and establishes monitoring, recordkeeping and reporting procedures to assure compliance. The AOP does not, in itself, approve any emission increases nor require emission decreases. The AOP must be renewed every 5 years. This action is a renewal of the existing AOP. For more information, see <https://nwcleanairwa.gov/public-notices/>.

Copies of the draft AOP and supporting documents are available from the NWCAA offices, or online at www.nwcleanair.org under "Public Notices." Written comments relating to the issuance of this AOP must be sent within 30 days of this notice, by close of business May 11, 2026, to:

Crystal Rau
Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273
crystalr@nwcleanairwa.gov

NWCAA may hold a public hearing if the agency determines that there is significant public interest. Requests for a public hearing must be submitted within the comment period. Any such requests must indicate the interest of the person or organization filing the request, and describe why a public hearing is necessary.

NWCAA is publishing this notice pursuant to the Washington State Clean Air Act (RCW 70.94). The AOP is issued pursuant to Chapter 173-401 WAC and Title V of the federal Clean Air Act Amendments of 1990.

Contact Crystal Rau with any questions about this notice at the addresses above or at 360-419-6771.



Serving Island, San Juan, Skagit and Whatcom Counties

Air Operating Permit—DRAFT AOP 009R3

Chemtrade Solutions LLC

Anacortes, Washington

April 10, 2026



PERMIT INFORMATION
Chemtrade Solutions LLC, Anacortes Works
8579 North Texas Road, Anacortes, Washington

Responsible Official

Howard Powell, Regional
Manufacturing Manager
8570 North Texas Road
Anacortes, WA 98221
(360) 293-2171

Inspection Contact

Ricky Gaethle, Plant Manager
8579 North Texas Road
Anacortes, WA 98221
(360) 293-2171

Northwest Clean Air Agency

1600 South Second Street
Mount Vernon, WA 98273-5202
(360) 428-1617

Prepared by

Crystal Rau
Air Quality Scientist
(360) 419-6771

Expires: TBD

Renewal Application Due: TBD

ATTEST

This permit is issued in accordance with the provisions of Section 322 of the Regulation of the Northwest Clean Air Agency and the provisions of Chapter 173-401 Washington Administrative Code.

Pursuant to Section 322 of the Regulation of the Northwest Clean Air Agency and Chapter 173-401 Washington Administrative Code, Chemtrade Solutions LLC is authorized to operate the Anacortes Works subject to the terms and conditions of this permit.

Northwest Clean Air Agency Approval:

Date:

Crystal Rau
Air Quality Scientist

Date:

Agata McIntyre, P.E.
Engineering Manager

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SECTION 1 EMISSION UNIT DESCRIPTIONS

This table lists emission units and activities included in the Air Operating Permit (AOP) that are located at Chemtrade Solutions LLC, hereinafter referred to as Chemtrade, the facility, owner, operator, or the permittee. The information presented here in Section 1 is for informational purposes only.

Table 1-1 Emission Units

Process Area	Emission Point Description	Constructed/Modified	Comments
Sulfuric Acid Plant (SAP)	Sulfuric Acid Plant Units (SPUs) 1, 2, and 3 with Abatement Units 10 and 11 venting to a common stack	Unit 1: 1957 Unit 2: 1964 Unit 3: 1973 (construction), 1975 (startup), 1993 (modified)	Combined design production capacity of 566 tons of sulfuric acid per day (OAC 458d, PSD 94-01 Amendment 1, NWCAA Section 465, 40 CFR 60 Subpart H)
	SPU3 Startup Heater	2004	9.2 MMBtu/hr, natural gas fired (OAC 880c)
	Abatement Unit 10 and 11 Process Heaters	1971	2 @ 6.61 MMBtu/hr each, John Zinc, natural gas fired
	Sulfuric Acid Product Tanks	TK-6302: 1958 TK-6403: 1981 TK-6404: 1964 TK-6305: 1958 TK-6306: 1995 TK-6307: 1978	TK-6302: 66,835 gallons TK-6403: 9,923 gallons TK-6404: 13,333 gallons TK-6305: 66,835 gallons TK-6306: 158,758 gallons TK-6307: 66,835 gallons
	Spent Acid Storage Tanks	TK-6108 : 1980 TK-6109 : 1980	158,000 gallons each
	Swing Acid Storage Tanks (storing product or spent)	TK-6301: 1958 TK-6110: 1995	TK-6301: 66,835 gallons TK-6110: 158,700 gallons
Sulfur Recovery Unit (SRU)	SRU with Shell Claus Off-gas Treating (SCOT) Unit and incinerator stack and emergency flare with bypass	1986 / 1998	Maximum production capacity of 50.6 tons molten sulfur per day (OAC 650d, 40 CFR 60 Subpart J, 40 CFR 63 Subpart UUU). The emergency flare design capacity is 10,839 MMBtu/yr
	Components in VOC Service	1986 / 1998	(40 CFR 60 Subpart GGG)
	SRU Auxiliary Boiler (B-501)	Replaced in 2025	Physically derated to a maximum heat input capacity of 9.9 MMBtu/hr, natural gas fired (40 CFR 63 Subpart DDDDD)
Gasoline Dispensing Facility (GDF)	GDF	Pre-1990	300 gallon above-ground fixed roof storage tank (NWCAA 580.6, Chapter 173-491 WAC, 40 CFR 63 Subpart CCCCCC)

SECTION 2 STANDARD TERMS AND CONDITIONS

Terms and conditions in this section are administrative requirements or requirements that have no ongoing compliance monitoring from the Federal Clean Air Act (FCAA), Washington Administrative Code (WAC), or Northwest Clean Air Agency (NWCAA) regulations. Some requirements have been paraphrased for brevity. The language of the cited regulation takes precedence over a paraphrased requirement.

In accordance with WAC 173-401-625(2) (11/4/1993), citations in Section 2 designated "State Only" are not enforceable by the EPA Administrator or by citizens under the FCAA. They are not in the current Washington State Implementation Plan (SIP) approved by the Environmental Protection Agency (EPA) as listed in 40 CFR 52.2470(c) Tables 1 or 5, and are not WAC Title 173 Chapter 401 requirements delegated to NWCAA by the Washington Department of Ecology (Ecology).

"State Only" WAC citations in effect as of March 15, 2025 are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1 as amended July 10, 2025. All other terms and conditions are enforceable by NWCAA, EPA and citizens under the authority of the FCAA.

Requirements labeled "*Directly Enforceable*" are legally enforceable requirements added into the AOP by NWCAA under either "gap-filling" authority (WAC 173-401-615(1)(b) & (c), (10/17/2002)) or "sufficiency monitoring" authority (WAC 173-401-630(1), (3/5/2016)) as cited in each permit term.

2.1. **Compliance Requirements**

2.1.1. **Duty to Comply**

2.1.1.1. WAC 173-401-620(2)(a) (3/15/2025)

The permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of RCW 70A.15 and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

2.1.1.2. State Only: NWCAA 322.3 (7/10/2025)

It shall be unlawful for any person to cause or allow the operation of any source subject to the requirements of chapter 173-401 WAC without complying with the provisions of chapter 173-401 WAC and any permit issued under its authority.

2.1.2. **Civil and Criminal Penalties**

2.1.2.1. State Only: WAC 173-400-230(2), -240 (3/15/2025), NWCAA Section 131, 132, & 133 (7/10/2025), and Section 113 of the FCAA

Any person who violates any of the provisions of RCW 70A.15 or 70A.25, violates any of the rules in force under such chapters, including the Regulation of the NWCAA, fails to take action as specified by an order issued pursuant to this chapter, or who commits or omits an act which procures, aids, or abets in the violation may incur a civil penalty in an amount as set forth in RCW 70A.15.3160 and NWCAA Section 133.

Persons in violation of RCW 70A.15, or any ordinance, resolution, or regulation in force pursuant thereto, may be subject to the criminal penalty provisions of RCW 70A.15.3150 and NWCAA Section 132.

At least 30 days prior to commencement of any formal enforcement action under RCW 70A.15.3150, RCW 70A.15.3160, or NWCAA Sections 132 or 133, the NWCAA shall serve written notice of violation to the alleged violator. The notice shall specify the provisions, orders, rules,

or regulations alleged to be violated, and the facts alleged to constitute a violation thereof. The notice may also include an order pursuant to NWCAA Section 121 directing that necessary corrective action be taken within a reasonable time, or the NWCAA may require the alleged violator appear before the Pollution Control Hearings Board (PCHB) for a hearing pursuant to NWCAA Section 120. The notice shall offer the opportunity to meet with the NWCAA prior to commencement of enforcement action.

The NWCAA may require the alleged violator to respond in writing or in person within 30 days of the notice and specify the corrective action being taken. Failure to respond shall constitute a prima facie violation of this Regulation and the NWCAA may initiate action pursuant to NWCAA Sections 132, 133, 134, and 135.

2.1.2.2. State Only: WAC 173-400-250 (9/20/1993) and NWCAA 133.2 (7/10/2022)

Penalties, decisions, and orders issued may be appealed to the PCHB within 30 days after notice of violation is served.

2.1.3. Need to Halt or Reduce Activity Not a Defense

WAC 173-401-620(2)(b) (3/15/2025)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.

2.1.4. Duty to Provide Information

WAC 173-401-620(2)(e) (3/15/2025)

The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. The permitting authority shall maintain confidentiality of such information in accordance with RCW 70A.15.2510.

2.1.5. Confidential Information

State Only: NWCAA Section 114 (7/10/2025)

Whenever any records or other information other than ambient air quality data or emission data furnished to or obtained by the Agency, relates to processes or production unique to the owner or operator, or are likely to affect adversely the competitive position of such owner or operator if released to the public or to a competitor, and the owner or operator of such processes or production so certifies, such records or information shall be only for the confidential use of the NWCAA.

Nothing herein shall be construed to prevent the use of records or information by the NWCAA in compiling or publishing analyses or summaries relating to the general condition of the outdoor atmosphere: provided, that such analyses or summaries do not reveal any information otherwise confidential under the provisions of this section: provided further, that emission data furnished to or obtained by the Board shall be correlated with applicable emission limitations and other control measures and shall be available for public inspection during normal business hours at the office of the NWCAA.

2.1.6. Inspection and Entry

WAC 173-400-105(3) (9/20/1993) and WAC 173-401-630(2) (3/5/2016)
State Only: WAC 173-400-105(3) (3/15/2025) and NWCAA Sections 110 & 111 (7/10/2025)

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow Ecology, NWCAA or an authorized representative to:

- (i) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (ii) Have access to and copy, at reasonable times, any records that must be kept under the condition of the permit;
- (iii) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (iv) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

No person shall willfully interfere with or obstruct the Control Officer or any NWCAA employee and/or assigned agent in carrying out any lawful duty.

2.1.7. Investigation and Studies

State Only: NWCAA Section 110 (7/10/2025)

The Control Officer and/or his qualified agents may make any reasonable investigation or study which is necessary for the purpose of standards or any amendments thereto on reducing the amount or kind of contaminant.

When investigating conditions specific to the control, recovery or release of air contaminants, the Control Officer or his duly authorized representatives shall have the power to enter at reasonable times upon any private or public property, except non-multiple unit private dwellings housing two families or less.

If an authorized employee of the Agency, during the course of an inspection desires to obtain a sample of air contaminant, he shall notify the owner or lessee of the time and place of obtaining a sample so the owner or lessee has the opportunity to take a similar sample at the same time and place. A receipt shall be given to the owner or lessee for the sample obtained.

2.1.8. Source Testing

2.1.8.1. WAC 173-400-105(4) (9/20/1993)

To demonstrate compliance, NWCAA may conduct or require that a test be conducted of the source using approved EPA methods from 40 CFR 60 Appendix A which are adopted by reference, or approved procedures contained in the "Source Test Manual – Procedures for Compliance Testing," state of Washington, Department of Ecology, as of July 12, 1990, on file at Ecology. The operator of a source may be required to provide the necessary platform and sampling ports to perform a test of an emissions unit. NWCAA shall be allowed to obtain a sample from any emissions unit. The operator of the source shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

2.1.8.2. State Only: WAC 173-400-105(4) (3/15/2025)

To demonstrate compliance, the required test must be conducted using approved EPA methods from 40 CFR Parts 51, 60, 61 and 63 (in effect on February 12, 2025) or procedures contained in "Source Test Manual – Procedures for Compliance Testing," state of Washington, department

of ecology, as of February 12, 2025, on file at ecology. All other language is the same as 2.1.8.1.

2.1.8.3. State Only: NWCAA Section 367 and Appendix A (7/10/2025)

Source tests required by NWCAA to assess compliance with an air emission standard shall be conducted according to the following provisions:

- (i) A source test plan shall be submitted by email to the NWCAA at sourcetest@nwcleanairwa.gov for approval for all compliance source tests at least 30 days prior to scheduled testing. A summary of the test shall accompany the test plan and be submitted on a template provided by the NWCAA.
- (ii) Once a test plan has been approved, any changes in test dates or methodology shall require NWCAA approval.
- (iii) Results of required source tests must be submitted by email to sourcetest@nwcleanairwa.gov within 60 days of completion of the test unless prior approval is granted by NWCAA.

2.1.9. Testing and Sampling

2.1.9.1. NWCAA 360.1 (2/14/1973)

Any person operating or using any article, machine, equipment or other contrivance shall provide and maintain such sampling and testing facilities as specified in the Order of Approval to Construct or an Air Operating Permit.

2.1.9.2. State Only: NWCAA Section 367 and Appendix A (7/10/2025)

All ambient monitoring, compliance testing, continuous monitoring systems and continuous opacity monitoring systems required by a regulation, order of approval or permit issued by the NWCAA shall comply with the applicable requirements of Section 367 and Appendix A of the NWCAA Regulation. The applicable requirements of Section 367 and Appendix A of the NWCAA Regulation are in addition to any monitoring, testing, calibration or quality assurance/quality control requirements that otherwise apply.

Any person operating an air operating permit source may, at any time, be required to monitor the ambient air, process emissions or conduct emission tests as deemed necessary by the Control Officer.

The Control Officer may take such samples and perform any tests and investigations deemed necessary to determine the accuracy of the monitoring reports and tests submitted to the Agency, and evaluate the validity of the data. The owner or operator may also be required by the Control Officer to take a sample using an approved procedure and submit the results thereof within a reasonable period of time.

Once initiated, a compliance test shall be completed unless interrupted by severe weather, test equipment failure or other conditions beyond control of the facility. Failure to complete a test shall be a violation of the requirement to test, and, in cases where the initial data indicate a non-compliance of the applicable emission standard, the results may be considered a violation of that standard.

2.1.10. Ambient Air and Continuous Emission Monitoring

2.1.10.1. NWCAA 365.1 (2/8/1989)

Any person operating an air contaminant source or an air operating permit source may, at any time, be required to monitor the ambient air, process emissions or conduct emission tests as deemed necessary by the Control Officer under the following provisions:

The Board or Control Officer may require any person operating any source to conduct a monitoring program on site or adjacent off site for emissions, ambient air concentrations or any other pertinent special studies deemed necessary.

All monitoring data shall be submitted in a form which the Board or Control Officer may require. Averaging time and collection periods will be determined by the Control Officer. Failure to record and/or report data as specified in the "Guidelines for Industrial Monitoring Equipment and Data Handling" may be cause for a Notice of Violation to be issued.

All data and records shall be kept for a period of at least one year and made available to the Control Officer upon request.

All required continuous emission monitors or required opacity monitors used to monitor compliance and all instruments used for special studies must meet appropriate EPA performance specifications (40 CFR 60, Appendix B) and shall be calibrated and maintained in accordance with the "Guidelines for Industrial Monitoring Equipment and Data Handling" procedures approved by the Control Officer.

The Control Officer may take such samples and make any tests and investigations deemed necessary to determine the accuracy of the monitoring reports and tests submitted to the NWCAA, and evaluate the validity of the data. The owner or operator may also be required by the Control Officer to take a sample using an approved procedure and submit the results thereof within a reasonable period of time.

The Board or the Control Officer may require additional reasonable monitoring be undertaken at any appropriate time to insure compliance with the NWCAA Regulation.

2.1.10.2. State Only: NWCAA Section 367 and Appendix A (7/10/2025)

All ambient air monitors shall be operated and maintained as required by the appropriate Sections of 40 CFR Parts 50 and 58.

A Quality Assurance (QA) manual and station logbook shall be kept for all stations. Written calibration and precision/span check procedures shall be included in the QA manual. A station audit shall be conducted by the NWCAA at least once per year.

Unless subject to acid rain regulations (40 CFR Part 72 and 75), all continuous emissions monitoring systems (CEMS) shall be capable of meeting appropriate EPA performance specifications using procedures outlined in 40 CFR Part 60 Appendix B. CEMS subject to acid rain regulations shall be capable of meeting the specifications outlined in the appropriate section of 40 CFR Part 75.

All CEMS shall be operated in accordance with the appropriate section of 40 CFR Part 60 Appendix F, and the operator shall assess the operation of each CEMS daily.

Continuous opacity monitors shall be maintained according to "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/1-86-10) and the manufacturer's procedures. All gaseous CEMS shall be maintained using the QA criteria of 40 CFR Part 60 Appendix F and the manufacturer's procedures.

Auditing of opacity monitors shall be conducted according to recommended procedures. Data accuracy assessments shall be conducted at least once every calendar quarter for gaseous monitors and at appropriate periodic intervals. Relative Accuracy Test Audits (RATAs), Relative Accuracy Audits (RAAs) and Cylinder Gas Audits (CGAs) shall be employed as described in 40 CFR Part 60 (or 40 CFR Part 75 if the facility is subject to acid rain regulations).

Strip charts and approved data acquisition systems shall be used to capture and store data. All data must be retained for a period of at least five years and be available to the NWCAA upon request.

CEMS are required to maintain greater than 90% data availability on a monthly basis. A supplemental report shall be submitted if during any calendar month a CEMS fails to produce 90% data availability stating the reasons for the low data availability.

The following data shall be submitted to the NWCAA on a monthly basis or according to the applicable standard:

- (i) Time, date, magnitude, and cause of all emissions or temperatures which exceed the applicable standard(s).
- (ii) The cause and time periods of any bypass of the air pollution control equipment.
- (iii) The cause and time periods of CEM downtime not associated with routine QA or maintenance operations.
- (iv) Data availability for each CEM, listed by unit and parameter.
- (v) Supplemental report for system with $\leq 90\%$ monthly data availability.
- (vi) Other data or information as required by the Control Officer.

2.1.11. Credible Evidence

40 CFR 51.212(c), 40 CFR 52.12, and 40 CFR 52.33 (2/24/1997)

For the purpose of compliance certifications or establishing whether or not a person has violated or is in violation of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

2.2. Permit Terms

2.2.1. Permit Expiration and Renewal

WAC 173-401-610 (11/4/1993) and WAC 173-401-710 (10/17/2002)

This permit is issued for a fixed term of five years from date of issuance. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted. A complete permit renewal application shall be submitted to the NWCAA no later than the date established in the permit.

2.2.2. Permit Actions

WAC 173-401-620(2)(c) (3/15/2025)

This permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

2.2.3. Emissions Trading

WAC 173-401-620(2)(g) (3/15/2025)

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

2.2.4. Emission Reduction Credits

WAC 173-400-131 and WAC 173-400-136 (4/1/2011)
State Only: WAC 173-400-136 (12/29/2012)

An emission reduction credit may be issued and used in accordance with the applicable regulations listed above.

2.2.5. Severability

WAC 173-401-620(2)(h) (3/15/2025)

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

2.2.6. Permit Appeals

WAC 173-401-620(2)(i) and WAC 173-401-735 (3/15/2025)

This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the NWCAA within thirty days of receipt. This provision for appeal is separate from and in addition to any federal rights to petition and review under section 505(b) of the FCAA.

2.2.7. Permit Continuation

WAC 173-401-620(2)(j) (3/15/2025)

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. If a timely and complete application has been submitted, an application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied.

2.2.8. Reopening for Cause

WAC 173-401-730 (11/4/1993)

The permit shall be reopened and revised under any of the following circumstances:

- (i) Additional requirements become applicable to the source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j),
- (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the EPA Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit,
- (iii) The NWCAA or the EPA Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit, or
- (iv) The NWCAA or the EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.2.9. Changes Not Requiring Permit Revisions/Off-Permit Changes

WAC 173-401-722 and WAC 173-401-724 (3/15/2025)

The permittee may make the changes described in WAC 173-401-722 and WAC 173-401-724 without revising this permit, provided that the changes satisfy the criteria set forth in those sections.

2.2.10. Permit Modifications

WAC 173-401-720 (3/15/2025) and WAC 173-401-725 (11/4/1993)

This permit may be revised as provided in WAC 173-401-720 (administrative permit amendments) and 173-401-725 (permit modifications).

2.2.11. Property Rights

WAC 173-401-620(2)(d) (3/15/2025)

This permit does not convey any property rights of any sort, or any exclusive privilege.

2.2.12. Definitions

NWCAA Section 200 (4/11/2019)

State Only: NWCAA Section 200 (8/8/2024)

Particular references to terms not otherwise defined in this permit or the associated Statement of Basis have the meaning assigned to them in the specific regulation being cited.

2.2.13. Compliance Schedule

WAC 173-401-630(3) and WAC 173-401-510(2)(h)(iii) (3/5/2016)

The permittee shall continue to comply with all applicable requirements with which the source was in compliance as of the date of permit issuance. The permittee shall meet on a timely basis any applicable requirements that become effective during the permit term.

2.2.14. Permit Fees

2.2.14.1. WAC 173-401-620(2)(f) (3/15/2025)

The permittee shall pay fees as a condition of this permit in accordance with the NWCAA fee schedule.

2.2.14.2. State Only: NWCAA 322.4 (7/10/2025)

The NWCAA shall assess and collect annual air operating permit fees for sources in its jurisdiction that are required to have Title V Air Operating Permits (excluding sources regulated by WDOE directly). The total fees required to administer the program shall be determined by a workload analysis conducted by NWCAA staff and approved annually by the NWCAA Board of Directors.

2.2.15. Transfer or Permanent Shutdown

2.2.15.1. NWCAA Section 325 (2/14/1973)

Approval to construct a stationary source is not to be transferable from one location to another (outside the plant boundary), from one piece of equipment to another, or from one person to another, except portable sources may retain the same registration so long as they remain within the jurisdiction of the NWCAA.

2.2.15.2. State Only: NWCAA Section 325 (7/10/2025)

Approval to construct a stationary source is not to be transferable from one location to another (outside the plant boundary), from one piece of equipment to another, or from one person to another, except portable sources may retain the same registration so long as they remain within the jurisdiction of the NWCAA and they comply with NWCAA Section 300.

The registered owner or operator shall report the transfer of ownership or permanent shutdown of a registered source to the NWCAA within ninety (90) days of shutdown or transfer. The new owner of a registered source shall file a written report with the NWCAA within ninety (90) days of completing transfer of ownership and/or assuming operational control.

In the case of a permanent shutdown, process and pollution control equipment may remain in place and on site, but shall be rendered incapable of generating emissions to the atmosphere.

Upon permanent shutdown, the source no longer has authorization to operate and any associated Orders become invalid. Prior to resumption of operation after a permanent shutdown, the source shall obtain, as applicable, a new Order of Approval as a new source and re-register.

2.3. **Permit Shield**

2.3.1. **Shield Requirement**

WAC 173-401-640(1) (11/4/1993)

Compliance with a permit condition shall be deemed compliance with the applicable requirements upon which that condition is based, as of the date of permit issuance. The permit shield does not apply to any insignificant emissions unit or activity so designated under WAC 173-401-530.

2.3.2. **Inapplicable Requirements**

WAC 173-401-640(2) (11/4/1993)

As of the date of permit issuance, the requirements listed in the Inapplicable Requirements section of this permit do not apply to the permittee. The permit shield applies to all requirements so identified.

2.3.3. **Exclusions**

WAC 173-401-640(4) (11/4/1993)

Nothing in this section or in this permit shall alter or affect the following:

- (i) Provisions of Section 303 of the FCAA (emergency orders), including the authority of the EPA Administrator under that section,
- (ii) Liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance,
- (iii) Ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA, or,
- (iv) Ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in RCW 70A.15.2330.

2.3.4. Reasonably Available Control Technology

2.3.4.1. WAC 173-401-605(3) (11/4/1993)

Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance shall be considered RACT for purposes of permit issuance or renewal.

2.3.4.2. WAC 173-400-040 (9/20/1993)

All emissions units are required to use RACT which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC. Where current controls are determined to be less than RACT, Ecology or the NWCAA shall, as provided in section 8, chapter 252, Laws of 1993, define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

2.3.4.3. State Only: WAC 173-400-040(1) (3/15/2025)

All emissions units are required to use RACT which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC. Where current controls are determined to be less than RACT, the permitting authority shall, as provided in RCW 70A.15.2230, define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

2.3.4.4. State Only: NWCAA Section 309 (7/10/2025)

Reasonably Available Control Technology (RACT) is required for all existing sources except as otherwise provided in RCW 70A.15.3000. Where current controls are determined by the NWCAA to be less than RACT, the NWCAA shall define RACT for that source or source category and issue a rule or an order under NWCAA Section 121 requiring the installation of RACT. Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance shall be considered RACT for purposes of operating permit issuance or renewal.

2.4. Recordkeeping and Reporting

2.4.1. Compliance Certification

2.4.1.1. WAC 173-401-630(5) (3/5/2016)

The permittee shall submit ongoing certifications of compliance with permit terms and conditions. The first such certification shall cover the period from the last compliance certification until issuance of this permit. The following compliance certification shall cover the period from permit issuance to the end of the calendar year. Subsequent compliance certifications shall be made on a yearly basis. Each certification shall include:

- (i) Identification of each term and condition of the permit that is the basis of the certification,
- (ii) Compliance status,
- (iii) Whether the compliance was continuous or intermittent, and,
- (iv) Methods used for determining the compliance status of the source, currently and over the reporting period. These methods must be consistent with the permit Monitoring, Recordkeeping, and Reporting requirements.

All compliance certifications shall be submitted to EPA Region 10 and the Northwest Clean Air Agency at the following addresses by February 28 for the previous calendar year:

U.S. EPA, Region 10,

Mail Stop: 20-C04

Attn: Clean Air Act Compliance Manager

Northwest Clean Air Agency

Preferred:

facilityreports@nwcleanairwa.gov

1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Alternative:
Air Operating Permits
1600 South Second Street
Mount Vernon, WA 98273-5202

2.4.1.2. WAC 173-401-520 (11/4/1993)

Any application form, report or compliance certification that is submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

2.4.1.3. WAC 173-401-615 (10/17/2002) and -630 (3/5/2016)
Directly enforceable under WAC 173-401-615(1)(b) & (c) (10/17/2002)

All required monitoring reports must be certified by a responsible official consistent with WAC 173-401-520. Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only to be submitted once every six months, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents subject to the certification.

The semiannual certifications shall cover the calendar months of January through June, and July through December.

2.4.1.4. WAC 173-401-530(2)(d) (10/17/2002)

Where a permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance of an insignificant emission unit during the reporting period. Where an underlying OAC requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, the permittee may certify continuous compliance when the testing, monitoring and recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented or known instances of noncompliance during the reporting period.

2.4.2. False and Misleading Oral Statement: Unlawful Reproduction or Alteration of Documents

State Only: NWCAA Section 112 (7/10/2025)

No person shall willfully make a false or misleading oral statement to the Board, Control Officer, or their duly authorized representatives as to any matter within the jurisdiction of the Board.

No person shall reproduce or alter or cause to be reproduced or altered any order, registration certificate, or other paper issued by the Agency if the purpose of such reproduction or alteration is to evade or violate any provision or Regulation of this Agency, or any other law.

2.4.3. Required Recordkeeping

2.4.3.1. WAC 173-401-615(2) (10/17/2002)

Records of required monitoring information shall include, where applicable, the following:

- (i) Date, time, and location of sampling or measurements;
- (ii) Operating conditions existing at the time of sampling or measurement; and
- (iii) If analyses were performed, the date, company or entity performing the analyses, the analytical techniques or methods used, and the results of such analyses.

A record shall be kept describing changes made that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

Records of all required monitoring data and support information shall be retained for a period of five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

2.4.3.2. WAC 173-401-615 (10/17/2002) and -630 (3/5/2016)
Directly enforceable under WAC 173-401-615(1)(b) & (c) (10/17/2002)

Monitoring and associated recordkeeping are not required when an emission unit is not operating and there are no emissions to the atmosphere unless such monitoring is specifically required by the NWCAA. The facility must record the time periods that a unit is shut down and not monitored, and include the time periods and a summary of why the emission unit was shut down in the periodic report of monitoring required by WAC 173-401-615(3)(a).

2.4.4. Pollutant Disclosure - Reporting by Air Contaminant Sources

2.4.4.1. NWCAA Section 150 (9/8/1993) and WAC 173-400-105(1) (9/20/1993)

The permittee shall file annually at a time determined by the NWCAA and on forms furnished by the NWCAA a report setting forth:

- (i) The nature of the enterprise,
- (ii) A list of process materials which are potentially significant sources of emissions used in, and incidental to, its manufacturing processes, including any by-products and waste products, and,
- (iii) An estimated annual total production of wastes discharged into the air in units and contaminants designated by the NWCAA that may include stack and fugitive emissions of particulate matter, PM₁₀, sulfur dioxide, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, and other contaminants.

Annual emission reports shall be submitted to the NWCAA within 105 days after the end of the previous calendar year. If the emission report is not submitted by the required date and the emissions are used to determine operating permit fees as described in NWCAA 324.126 then potential to emit will be used to determine said fees.

The permittee shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards.

2.4.4.2. State Only: WAC 173-400-105(1) (3/15/2025)

In addition to the requirements of 2.4.4.1, the permittee shall report PM_{2.5}, oxides of nitrogen, and ammonia on forms available from the NWCAA or Ecology. Emission estimates may be based on the most recent published EPA emission factors or other information available to the source, whichever is the better estimate.

The owner or operator must submit the calendar year annual emissions inventory no later than April 15th after the end of the calendar year for which the emissions inventory was requested. If April 15th falls on a weekend, then the deadline to file shall be the next business day.

2.4.4.3. State Only: NWCAA Section 150 (7/10/2025)

Every person operating a registered air contaminant source or a Chapter 401 source, as defined in WAC 173-401-200, which includes portable sources, shall file annually and on forms furnished by the NWCAA a report setting forth:

- (i) The nature of the enterprise,

- (ii) A list of process materials which are potentially significant sources of emissions used in, and incidental to, its manufacturing processes, including any by-products and waste products, and,
- (iii) The estimated calendar year emissions which may include each criteria air pollutant, hazardous air pollutant, toxic air pollutant, and volatile organic compounds. Every person filing an annual emissions inventory shall retain at the facility the calculations, associated production data, and emission factors used to obtain the estimates.

Annual emission reports shall be submitted to the NWCAA no later than April 15 of the following calendar year, unless otherwise specified by NWCAA. If the emission report is not submitted by the required date and the emissions are used to determine operating permit fees as described in NWCAA 322.4, then potential to emit may be used to determine said fees.

Every person operating any source or sources which directly or indirectly emits or contributes air contaminants within the jurisdictional area of the NWCAA may be required to report to the Control Officer, at a time or times selected by the Control Officer, production rates, sales or other data (including quantities of products used or any other information) as may be required to estimate the emissions from the various air contaminant sources.

2.4.5. Greenhouse Gas (GHG) Reporting

2.4.5.1. State Only: WAC 173-441-030(1), (2), (5), and (6) (3/12/2022)

Beginning with the 2022 emissions year reported in 2023, GHG reporting is mandatory for:

- (i) An owner or operator of any facility listed in WAC 173-441-120 that emits 10,000 metric tons CO₂e or more per calendar year in total GHG emissions as calculated according to WAC 173-441-030(1)(b), and,
- (ii) An owner or operator of any supplier with total GHG emissions in Washington that exceed 10,000 metric tons of CO₂e or more per calendar year as calculated according to WAC 173-441-030(2)(b).

A person may choose to voluntarily report to Ecology GHG emissions that are not required to be reported under WAC 173-441-030(1) or (2). Persons voluntarily reporting GHG emissions must use the methods established in WAC 173-441-120(3), and 173-441-122(1)(c) to calculate any voluntarily reported GHG emissions.

Once a reporter is subject to the requirements of this chapter, the person must continue for each year thereafter to comply with all requirements of this chapter, including the requirement to submit annual GHG reports, even if the reporter does not meet the applicability requirements in WAC 173-441-030(1) or (2) of this section in a future year, except as provided in WAC 173-441-030(6)(a)-(c).

2.4.5.2. State Only: WAC 173-441-050 (1/3/2025)

Follow the procedures for emission calculation, monitoring, quality assurance, missing data, recordkeeping, and reporting that are specified in each relevant section of WAC 173-441.

Beginning calendar year 2012 for existing reporters, the annual GHG report shall contain the information required per WAC 173-441-050(3) and (4) and be submitted to Ecology no later than March 31st of each calendar year for GHG emissions in the previous calendar year if the facility is required to report or is voluntarily reporting GHG emissions under WAC 173-441-030.

For any reporter that becomes subject to this rule because of a physical or operational change that is made after January 1, 2012, report emissions for the first calendar year in which the change occurs according to WAC 173-441-050(2)(b)(iii)(A) through (C).

Retain all required records for at least 10 years in a form that is suitable for expeditious inspection and review, including a GHG monitoring plan per WAC 173-441-050(6)(e).

2.4.5.3. State Only: WAC 173-441-060 and -070 (3/12/2022)

Each such submission shall be signed by a representative designated in accordance with WAC 173-441-060 and 40 CFR 3.10 as adopted on October 13, 2005 and shall include the following certification statement signed by the designated representative or any alternate designated representative:

"I am authorized to make this submission on behalf of the owners and operators of the reporter, as applicable, for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

Each GHG report and certificate of representation for a facility or supplier must be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology.

2.4.5.4. State Only: WAC 173-441-100 (3/12/2022)

All requests, notifications, and communications to Ecology pursuant to this chapter, must be submitted in a format as specified by Ecology to either of the following:

- (i) Greenhouse Gas Reporting, Air Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
- (ii) ghgreporting@ecy.wa.gov

2.4.6. Reporting to Verify Emissions from Potential PSD Sources

State Only: WAC 173-400-720(4)(b)(iii)(G) (1/19/2023)

The owner or operator shall monitor the emissions of any regulated pollutants from all projects for which PSD applicability was determined according to the provisions of 40 CFR 52.21(b)(41)(ii)(a) through (c) and calculate and maintain a record of annual emissions on a calendar year basis.

The owner or operator shall submit a report to NWCAA within 60 days after the end of the year during which records must be generated under paragraph 40 CFR 52.21 (r)(6)(iii) setting out the unit's annual emissions, as monitored pursuant to 40 CFR 52.21 (r)(6)(iii), during the calendar year that preceded submission of the report. The report shall include the emissions in tons per year for the project, the baseline actual emissions and the pre-construction projected emissions.

2.4.7. Reporting of Deviations from Permit Conditions

WAC 173-401-615(3)(b) (10/17/2002)

Directly enforceable under WAC 173-401-615(1)(b) & (c) (10/17/2002)

Prompt Reporting of Deviations: The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in this permit. The report shall include a description of the probable cause of such deviations, if known, and any corrective actions or preventive measures taken. Prompt means reporting according to the shortest time period listed below which applies to the situation:

- (i) In the case where the deviation represents a potential threat to human health or safety “prompt” means as soon as possible, but in no case later than twelve hours after the deviation is discovered. A follow-up report on the deviation shall be included in the next monthly report.
- (ii) For all other deviations, the deviation shall be reported as part of the next routine monitoring report, but no later than 30 days after the end of the month during which the deviation is discovered, whichever is sooner.

2.4.8. Report of Breakdown and Upset

2.4.8.1. NWCAA 340.1, 340.2 and 340.3 (10/13/1994)

If a breakdown or upset condition occurs which results in or may have resulted in an emission and/or ambient air quality standard being exceeded, the owner or operator of the source shall take the following actions:

- (i) The upset or breakdown shall be reported as promptly as possible and in no event later than 12 hours to the NWCAA.
- (ii) The person responsible shall, upon the request of the Control Officer, submit a full report within 10 days including the known causes, corrective measures taken, and preventive measures to be taken to minimize or eliminate a recurrence.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with all the requirements of the NWCAA Regulation nor from the resulting liabilities for failure to comply.

It shall be prima facie evidence of violation of the NWCAA Regulation if any control equipment or other equipment creating emissions to the atmosphere is turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under NWCAA 340.1.

2.4.8.2. State Only: NWCAA 340.1, 340.2 and 340.3 (7/10/2025)

If a breakdown or upset condition occurs which results in or may have resulted in an exceedance of an emission and/or ambient air quality standard established by this Regulation or an emission release to the air that requires NWCAA notification as specified in 40 CFR 302 (CERCLA) or 40 CFR 355 (SARA), the owner or operator of the source shall take the following actions:

- (i) The upset or breakdown shall be reported as promptly as possible and in no event later than 12 hours to the NWCAA.
- (ii) The responsible official or his designee shall submit a full report on forms provided by the NWCAA within 30 days after the end of a calendar month in which the upset occurred and must include as a minimum the known causes, corrective action taken, preventive measures put in place to reduce the possibility of or eliminate a recurrence, and an estimate of the quantity of emissions above the applicable limit caused by the event.

It shall be prima facie evidence of violation of the NWCAA Regulation if:

- (iii) Any control equipment is turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under Section 340.1, or
- (iv) Any other equipment creates new or increased emissions to the atmosphere as the result of being turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under NWCAA 340.1.

2.4.9. Report of Shutdown or Startup

2.4.9.1. NWCAA Section 341 (9/8/1993)

If the permittee schedules a total or partial shutdown or startup of control or process equipment which may result in emissions or any additional emissions to the atmosphere which may temporarily exceed the emission standards of this Regulation, the permittee shall notify the NWCAA prior to the shutdown or startup.

Prompt notification shall be made and in no event less than 24 hours before the scheduled shutdown or startup. The permittee shall submit a general schedule of steps to be taken to minimize the release of air contaminants to the atmosphere including the reasons for and duration of the proposed shutdown or startup, the nature of the action to be taken, the date and time for the action and an estimate of the anticipated rate and concentration of emission.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with the requirements of this Regulation nor from the resulting liabilities for failure to comply.

2.4.9.2. State Only: NWCAA Section 341 (7/10/2025)

If the permittee schedules a total or partial shutdown or startup of control or process equipment that the source reasonably believes would result in emissions which may temporarily exceed an emission standard of this Regulation, the operator or owner of the source shall notify the NWCAA in advance of the shutdown or startup.

The advanced notification shall include a general schedule of steps to be taken to minimize the release of air contaminants to the atmosphere including the reasons for and duration of the proposed shutdown or startup, the nature of the action to be taken, the date and time for the action and an estimate of the anticipated rate and concentration of emission.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with the requirements of this Regulation nor from the resulting liabilities for failure to comply.

Excess emissions due to shutdown or startup shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that the excess emissions could not have been prevented through careful planning and design, the emissions did not result in a violation of an ambient air quality standard and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

The responsible official or their designee shall submit a full report no later than 30 days after the end of the calendar month in which the shutdown or startup occurred that resulted in an exceedance of an ambient or emission standard of this Regulation. The report shall be submitted on forms provided by the NWCAA and must include, at minimum, the known causes, corrective action taken, preventive measures put in place to reduce the possibility of or eliminate a recurrence, and an estimate of the quantity of emissions above the applicable limit caused by the event.

2.4.10. Operation and Maintenance

2.4.10.1. NWCAA Section 342 (9/8/1993)

Keep all process and/or air pollution control equipment in good operating condition and repair. If a breakdown or upset condition occurs and is determined by the Control Officer to be due to poor operating and maintenance procedures, the Control Officer may take any legal steps necessary to prevent a recurrence of the breakdown or upset condition.

Operation and maintenance instructions and schedules for process and/or control equipment must be available and may be required to be posted on the site. This section is specifically

applicable to the operation of equipment where untrained personnel may operate or otherwise have access to or use the equipment.

If a breakdown or violation occurs and is due to the improper operation or maintenance of equipment, the owner or operator of the source will, in addition to filing a report of breakdown under NWCAA Section 340, submit a report if requested by the Control Officer on what measures will be taken in training or re-orienting personnel to prevent a recurrence of the breakdown.

2.4.10.2. State Only: NWCAA Section 342 (7/10/2025)

All air contaminant stationary sources are required to keep any process and/or air pollution control equipment in good operating condition and repair.

Operating instructions and maintenance schedules for process and/or control equipment must be available on site.

2.5. **Excess Emissions**

2.5.1. **Excess Emissions**

2.5.1.1. WAC 173-400-107 (9/20/1993)

The permittee shall have the burden of proving to Ecology or the NWCAA or the decision-making authority in an enforcement action that excess emissions were unavoidable. Excess emissions determined to be unavoidable under the procedures and criteria of this section shall be excused and not subject to penalty.

Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to the NWCAA as soon as possible. Other excess emissions shall be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by Ecology or the NWCAA, the permittee shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

Excess emissions due to scheduled maintenance shall be considered unavoidable provided the source reports as required and adequately demonstrates that the excess emissions could not have been prevented through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

Excess emissions due to upsets shall be considered unavoidable provided the source reports as required and adequately demonstrates that:

- (i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

The permittee took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

2.5.1.2. WAC 173-400-108 and -109 (State Only – 9/16/2018)

The permittee shall:

- (i) Notify the permitting authority. When excess emissions represent a potential threat to human health or safety, the owner or operator must notify the permitting authority by phone or electronic means as soon as possible, but not later than 12 hours after the excess emissions were discovered. For all other excess emissions, the owner or operator must notify the permitting authority in a report as provided in subsection (ii) of this section.
- (ii) Report. The owner or operator must report all excess emissions to the permitting authority as provided in WAC 173-401-615(3) and subsection (iii) of this section.
- (iii) For an excess emission event that the owner or operator claims was unavoidable under WAC 173-400-109, the report must also include the following information:
 - a. Properly signed contemporaneous records or other relevant evidence documenting the owner or operator's actions in response to the excess emissions event;
 - b. Information on whether installed emission monitoring and pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and
 - c. All additional information required under WAC 173-400-109(5) supporting the claim that the excess emissions were unavoidable.

Excess emissions determined to be unavoidable under the procedures and criteria in this section are violations of the applicable statute, rule, permit, or regulatory order. The permitting authority determines whether excess emissions are unavoidable based on the information supplied by the source and the criteria in WAC 173-400-109(5).

Excess emissions determined by the permitting authority to be unavoidable are a violation subject to WAC 173-400-230 (3), (4), and (6) but not subject to civil penalty under WAC 173-400-230(2).

The owner or operator of a source shall have the burden of proving to the permitting authority in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under WAC 173-400-109(5).

WAC 173-400-109 does not apply to an exceedance of an emission standard in 40 C.F.R. Parts 60, 61, 62, 63, and 72, or a permitting authority's adoption by reference of these federal standards.

Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under WAC 173-400-109(5).

Excess emissions due to an upset or malfunction will be considered unavoidable provided the source reports as required by WAC 173-400-108 and adequately demonstrates to the permitting authority that:

- (iv) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (v) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (vi) When the operator knew or should have known that an emission standard or other permit condition was being exceeded, the operator took immediate and appropriate corrective action in a manner consistent with safety and good air pollution control

practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action. Actions taken could include slowing or shutting down the emission unit as necessary to minimize emissions;

- (vii) If the emitting equipment could not be shutdown during the malfunction or upset to prevent the loss of life, prevent personal injury or severe property damage, or to minimize overall emissions, repairs were made in an expeditious fashion;
- (viii) All emission monitoring systems and pollution control systems were kept operating to the extent possible unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;
- (ix) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible; and
- (x) All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality.

2.5.2. Excess Emissions Due to Breakdowns, Upsets, Startup, or Shutdown

State Only: NWCAA 340.4 and 341.4 (7/10/2025)

Excess emissions due to breakdowns and upsets shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that:

- (i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (iii) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice; and
- (iv) The emissions did not result in a violation of an ambient air quality standard.

Excess emissions due to shutdown or startup shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that the excess emissions could not have been prevented through careful planning and design, the emissions did not result in a violation of an ambient air quality standard and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

2.6. Duty to Supplement or Correct Information

WAC 173-401-500(6) (3/15/2025)

Upon becoming aware that the source failed to submit any relevant facts in a permit application or that information submitted in a permit application is incorrect, the source shall promptly submit such supplementary facts or corrected information.

2.7. Prohibitions

2.7.1. Concealment and Masking

2.7.1.1. *WAC 173-400-040(7) (9/20/1993)*

State Only: WAC 173-400-040(8) (3/15/2025)

No person shall cause or permit the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of this chapter.

2.7.1.2. State Only: NWCAA Section 540 (7/10/2025)

It shall be unlawful for any person to willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminant which would otherwise violate the emission standards of this Regulation.

It shall be unlawful for any person to cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which causes detriment to health, safety, or welfare of any person.

2.7.2. Adjustment for Atmospheric Conditions

WAC 173-400-205 (3/22/1991)

The permittee shall not vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant except as directed according to air pollution episode regulations.

2.7.3. Outdoor Burning

2.7.3.1. WAC 173-425-036 (10/18/1990) and WAC 173-425-045 (1/3/1989), WAC 173-435-050(2) (1/3/1989) Although SIP-Approved, WAC 173-425-036, -045, and -055 (referenced below) have been repealed.

No person shall conduct outdoor burning during an air pollution episode or a declared period of impaired air quality. Except as provided in WAC 173-425-055, the following materials shall not be burned in any open fire: garbage, dead animals, asphaltic products, waste petroleum products, paints, rubber products, plastics, treated wood, and any substance, other than natural vegetation, which normally emits dense smoke or obnoxious odors.

2.7.3.2. State Only: WAC 173-425-040, 050, and 060 (4/13/2000), NWCAA Section 502 (7/10/2025)

No person shall conduct outdoor burning except in accordance with the applicable regulations listed above. Outdoor burning shall be conducted under a valid fire permit and shall not contain prohibited materials, unless specifically exempted. Emissions from burning shall not create a nuisance and/or interfere with visibility on any public road.

2.7.4. Asbestos

2.7.4.1. State Only: NWCAA Section 570 (7/10/2025)

The permittee shall conduct all renovation or demolition projects in accordance with the applicable asbestos control standards listed in NWCAA Section 570.

2.7.4.2. 40 CFR 61.145 (4/7/1993), 61.148 (11/20/1990), and 61.150 (9/18/2003)

The permittee shall comply with 40 CFR Subparts 61.145, 61.148 and 61.150 when conducting any renovation or demolition at the facility.

2.7.5. Stratospheric Ozone and Climate Protection

2.7.5.1. 40 CFR 82 Subpart F (3/11/2020)

The permittee shall comply with the standards for recycling and emissions reduction in accordance with the requirements listed in 40 CFR 82 Subpart F.

2.7.5.2. State Only: RCW 70A.15.6410 (1991 c 199 § 602)

A person who services, repairs or disposes of a motor vehicle air conditioning system; commercial or industrial air conditioning, heating, or refrigeration system; or consumer appliance shall use refrigerant extraction equipment to recover regulated refrigerant that would

otherwise be released into the atmosphere. This subsection does not apply to off-road commercial equipment.

The willful release of regulated refrigerant from a source listed in this section is prohibited.

2.7.6. Display of Orders, Certificates and Other Notices: Removal or Mutilation Prohibited

State Only: NWCAA Section 124 (7/10/2025)

Any order, registration certificate, or other certificate obtained by the Regulations of the NWCAA shall be available on the premises designated on the order or certificate. If the NWCAA requires a notice to be displayed, it shall be posted. No one shall mutilate, obstruct or remove any notice unless authorized to do so by the NWCAA.

2.7.7. Obstruction of Access

State Only: RCW 70A.15.2500 (1987 c 109 § 38)

The permittee shall not obstruct, hamper or interfere with any authorized representative of the NWCAA who requests entry for the purposes of inspection and who presents appropriate credential; nor shall any person obstruct, hamper, or interfere with any such inspection.

2.7.8. False Statement, Representation or Certification

State Only: WAC 173-400-105(6) (3/15/2025)

No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70A.15 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

2.7.9. Inaccurate Monitoring

State Only: WAC 173-400-105(8) (3/15/2025)

No person shall render inaccurate any monitoring device or method required under chapter 70A.15 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

2.7.10. Prevention of Accidental Release

40 CFR 68 (12/3/2018)

This stationary source, as defined in 40 CFR Section 68.3, is subject to Part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by the date specified in section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR Part 70.

2.7.11. Cutback Asphalt Paving

NWCAA 580.7 (4/14/1993)

The application of cutback asphalt in paving during the months of June, July, August and September is limited to use as prime coatings and patch mixes, or when the temperature is less than 50°F.

2.7.12. Creditable Stack Height and Dispersion Techniques

WAC 173-400-200 (2/10/2005)

For stacks for which construction or reconstruction commenced, or for which major modifications were carried out, after December 31, 1970, no source may use dispersion techniques or excess stack height to meet ambient air quality standards or PSD increment limitations.

2.8. **Notice of Construction and Application for Approval/New Source Review**

2.8.1. Minor New Source Review (NSR)

2.8.1.1. NWCAA Sections 300 (4/11/2019), 324.2 (10/13/1994), WAC 173-400-111 (7/1/2016), and -113 (12/29/2012)

A Notice of Construction application must be filed by the owner or operator, all fees paid, and an Order of Approval issued by the NWCAA prior to beginning actual construction of any new source or making any modification, except for those emissions units exempt under NWCAA 300.3 or 300.4, a temporary source operating under NWCAA 300.17, or an emissions unit covered under a General Order of Approval and operating in accordance with NWCAA 300.16.

2.8.1.2. State Only: WAC 173-460-010 through -030 (6/20/2009), -040 (12/23/2019), -050 through -071 (6/20/2009), -080 (12/23/2019), -090 and -100 (6/20/2009), -140 (9/18/1991), -150 (12/23/2019), NWCAA Sections 300, 303, and 324.2 (7/10/2025)

A Notice of Construction application must be filed by the owner or operator and an Order of Approval issued by the NWCAA prior to beginning actual construction of any new source or making any modification, except for those emissions units that are exempt under NWCAA 300.3 or 300.4, or any emissions unit covered under a General Order of Approval and operating in accordance with NWCAA 300.16. For purposes of this section "establishment" shall mean to "begin actual construction" as that phrase is defined in NWCAA Section 200, and "new source" shall include any "modification" to an existing "stationary source" as those terms are defined in NWCAA Section 200.

When actual construction has begun on a new source or modification for which a Notice of Construction is required and a final Order of Approval has not been issued, the control officer may conduct an investigation as part of the Notice of Construction application review. An investigation fee, in addition to the fees of NWCAA 324.2, may be assessed.

2.8.2. Nonroad Engines

State Only: NWCAA Section 304 (7/10/2025)

This section applies to nonroad engines, as defined in NWCAA Section 200. Nonroad engines are not subject to new source review, control technology determinations, or emission limits set by the state implementation plan, or WAC 173-460.

Nonroad engines must use ultra-low sulfur diesel or ultra-low sulfur bio-diesel, gasoline, natural gas, propane, liquefied petroleum gas, hydrogen, ethanol, methanol, or liquefied/compressed natural gas.

For each nonroad engine as specified in this section greater than 500 brake horsepower (bhp), the owner or operator must notify NWCAA within 15 calendar days prior to surpassing the engine remaining at a facility for 12 consecutive months. This notification must include the make, model, serial number, rating, fuel type, date the engine was brought to the facility, and engine function or purpose.

2.8.3. General Order

2.8.3.1. NWCAA 121.4 (11/15/1988)

Any orders issued by NWCAA are subject to appeal.

2.8.3.2. State Only: WAC 173-400-560 (12/29/2012) NWCAA 121.4 (7/10/2025)

An owner or operator may apply for an applicable general order for approval to construct certain specified sources as defined in WAC 173-400-560. A general order of approval shall identify criteria by which an emission unit or source may qualify for coverage under a general order of approval and shall include terms and conditions for installing and/or operating the source.

2.8.4. Requirements to Comply

NWCAA 300.13 (4/11/2019)

State Only: NWCAA 300.13 (7/10/2025)

It shall be unlawful for an owner or operator of a source or emission unit to not abide by the operating and reporting conditions in the Order of Approval.

2.8.5. Prevention of Significant Deterioration (PSD)

WAC 173-400-117 (12/29/2012)

State Only: WAC 173-400-700 (4/1/2011), WAC 173-400-710 (7/1/2016), -720 (1/19/2023), -730 (7/1/2016), -740 (3/15/2025), -750 (12/29/2012)

A Prevention of Significant Deterioration (PSD) permit application must be filed by the owner or operator and a PSD permit issued by Ecology prior to the establishment of any new source in accordance with the cited regulations. No major stationary source or major modification as defined in the cited regulation shall begin actual construction without having received a PSD permit. Allowable emissions from the proposed major stationary source or major modification shall not cause or contribute to a violation of any ambient air quality standard.

An applicant for a PSD permit must submit an application that provides complete information for Department of Ecology to determine compliance with all PSD program requirements. Detailed procedures for submitting a complete application, for public review and involvement, and for revisions to an existing PSD permit are provided in the cited regulations (WAC 173-400-700 through 750).

2.8.6. Replacement or Substantial Alteration of Control Technology at an Existing Source

State Only: NWCAA 300.25 (7/10/2025)

Any person proposing to replace or substantially alter emission control technology installed on an existing stationary source or emission unit shall file a Notice of Construction application with the NWCAA.

2.8.7. Major Stationary Source and Major Modification in a Nonattainment Area

WAC 173-400-800 (4/1/2011), -810 (7/1/2016), -820 (12/29/2012), -830 (7/1/2016), -840 (7/1/2016), -850 (7/1/2016), and -860 (4/1/2011)

WAC 173-400-800 through 173-400-860 apply statewide except where a permitting authority has a permitting program for major stationary sources in a nonattainment area incorporated into the Washington state implementation plan as replacement for these sections.

These requirements apply to any new major stationary source or major modification of an existing major stationary source located in a designated nonattainment area that is major for

the pollutant or pollutants for which the area is designated as not in attainment of one or more national ambient air quality standards.

2.9. **Greenhouse Gas Regulation**

State Only: WAC 173-401-200 (19) & (35) (3/15/2025)

Greenhouse gases (GHGs), the air pollutant defined in 40 CFR 86.1818-12(a) as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation under this chapter unless, as of January 2, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tpy CO₂ equivalent emissions and the source is otherwise required to have an operating permit.

The term "tpy (tons per year) CO₂ equivalent emissions" (CO_{2e}) shall represent an amount of GHGs emitted, and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of 40 CFR Part 98 - Global Warming Potentials, and summing the resultant value for each to compute a tpy CO_{2e}.

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the FCAA, or a nationally applicable regulation codified by EPA in subchapter C of 40 CFR chapter 1 (in effect on October 6, 2010), that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity.

SECTION 3 STANDARD TERMS AND CONDITIONS FOR NSPS AND NESHAP

Standard terms and conditions are administrative and/or other requirements that typically have no ongoing compliance monitoring requirements. The permittee must comply with the requirements listed below for specific “affected facilities” as defined in the New Source Performance Standards (NSPS) in 40 CFR Part 60.2, “affected sources” defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR Part 63.2, and owners or operators of any stationary source for which a standard is prescribed under 40 CFR Part 61. The affected facilities, affected sources, and stationary sources subject to these requirements are identified in Section 5 of the permit. The conditions in this section do not apply generally to all emission units at the facility. Some requirements from the regulations cited in this section of the permit have been paraphrased for brevity. For all conditions in this section, the language of the cited regulation takes precedence over a paraphrased requirement.

The EPA delegates NSPS and NESHAP implementation and enforcement authority to NWCAA on a periodic basis. Some conditions in this section cite the NSPS delegation letter or the NESHAP delegation letter from EPA Region 10 to NWCAA because the letter clarifies certain Federal requirements. For example, the delegation letters state that NWCAA shall be the recipient of all notifications and reports and be the point of contact for questions and compliance issues regarding delegated standards. The delegation letters also specify the extent of NSPS and NESHAP delegation to the NWCAA. Current delegation letters are available for review on the NWCAA website and at the NWCAA office.

Some of the terms and conditions cited below refer to the “Administrator”. For delegated NSPS and NESHAP requirements, “Administrator” means NWCAA; for NSPS and NESHAP requirements that have not been delegated to NWCAA, “Administrator” means the Administrator of the United States Environmental Protection Agency.

All of the federal regulations listed in Section 3 in effect as of October 18, 2023 have been adopted by reference in Section 104.2 of the NWCAA Regulation. NWCAA 104.2 was last amended by the agency on July 10, 2025.

3.1. Part 60 – New Source Performance Standard Requirements

3.1.1. Address for Reports, Notifications, and Submittals

40 CFR 60.4(a) and (b) (4/25/1975) (as amended by Delegation Letter dated 1/7/2025 from Krishna Viswanathan, Director of the Office of Air and Radiation, EPA Region 10 to Mark Buford, Director of NWCAA)

Notifications, reports, and applications for delegated New Source Performance Standards (NSPS) shall be sent to the NWCAA at the following address:

Preferred: facilityreports@nwcleanairwa.gov

Alternative:

Northwest Clean Air Agency
1600 S. Second Street
Mount Vernon, WA 98273-5202

Notifications, reports, and applications under NSPS authorities that have been excluded from delegation shall be submitted to the EPA at the following address:

Clean Air Act Compliance Manager
US EPA Region 10, Mail Stop: 20-C04
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

3.1.2. Notification

40 CFR 60.7(a) (2/12/1999)

Furnish written notification to the Administrator of the following:

- (i) The date construction (or reconstruction as defined by 40 CFR 60.15) of an affected facility commenced postmarked no later than 30 days after such date.
- (ii) Notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (iii) Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- (iv) Notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
- (v) Notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall be postmarked not less than 30 days prior to such date.
- (vi) Notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

3.1.3. Startup, Shutdown, and Malfunction Records

3.1.3.1. 40 CFR 60.7(b) (2/12/1999)

Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

3.1.3.2. 40 CFR 60.8(c) (8/30/2016)

Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

3.1.4. Excess Emission Records

3.1.4.1. 40 CFR 60.7(c) and (d) (2/12/1999)

Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (as defined in applicable subparts) and/or summary report form (see 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required in any subpart; or the Administrator determines that more frequent reporting is necessary. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the information in 40 CFR 60.7(c)(1) through (4).

3.1.5. Maintenance of Records

40 CFR 60.7(f) (2/12/1999)

Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as described in 60.7(f)(1) through (3).

Note: Under WAC 173-401-615(2), records of required monitoring data and support information shall be retained for a period of five years from the date of the monitoring sample, measurement, report, or application.

3.1.6. Performance Tests

40 CFR 60.8(a), (d), (e), and (f) (8/30/2016)

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s), except as specified in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section.

The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

The owner or operator of an affected facility shall provide performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility.
- (ii) Safe sampling platform(s).
- (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.

Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include:

- (v) Facility mailing address, physical address, owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

- (vi) Applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.
- (vii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.
- (viii) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.
- (ix) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.
- (x) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.

3.1.7. Test Method Performance Audit

40 CFR 60.8(g) (8/30/2016)

Performance testing shall include a test method performance audit (PA) during the performance test, as specified in 40 CFR 60.8(g).

The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. See 40 CFR 60.8(g)(1) for a list of test methods excluded from this requirement.

If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, <https://www.epa.gov/emc/emc-technical-support#audit>, to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test.

The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP.

3.1.8. Compliance with Opacity Standards

40 CFR 60.11(b) and (c) (10/17/2000) (as amended by Delegation Letter dated 1/7/2025 from Krishna Viswanathan, Director of the Office of Air and Radiation, EPA Region 10 to Mark Buford, Director of NWCAA)

Compliance with opacity standards in 40 CFR Part 60 shall be determined by EPA Method 9 in Appendix A. For purposes of determining initial compliance, the minimum total time of observations shall be three hours (30 six-minute averages) for the performance test. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

3.1.9. Operation and Maintenance

40 CFR 60.11(d) (10/17/2000)

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

3.1.10. Credible Evidence

40 CFR 60.11(g) (10/17/2000)

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

3.1.11. Circumvention

40 CFR 60.12 (3/8/1974)

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

3.1.12. Monitoring Requirements for Continuous Monitoring Systems

40 CFR 60.13 (6/30/2016) (as amended by Delegation Letter dated 1/7/2025 from Krishna Viswanathan, Director of the Office of Air and Radiation, EPA Region 10 to Mark Buford, Director of NWCAA)

For all continuous monitoring systems subject to 60.13, conduct a performance evaluation of the continuous emission monitoring system (CEMS) during any performance test required under 60.8 or within 30 days thereafter in accordance with the applicable performance specification in 40 CFR Part 60 Appendix B, or at such other times as may be required by the Administrator. Furnish the Administrator a written report of the results of the performance evaluation within 60 days of completion.

The owner or operator of an affected facility shall conduct a performance evaluation of the continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, or at such other times as may be required by the Administrator under section 114 of the Act. The owner or operator of an affected facility shall furnish the Administrator within 60 days of completion a written report of the results of the performance evaluation.

Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero and span calibration drifts at least once daily in accordance with a written procedure and adjust the zero and span when either exceeds the applicable performance specification (PS) in 40 CFR Part 0 Appendix B. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required, continuously operate all continuous monitoring systems for measuring emissions. For

CEMS, complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

Install all continuous monitoring systems or devices such that representative measurements of emissions or process parameters from the affected facility are obtained. Use the procedures for location of continuous monitoring systems in the applicable PS of 40 CFR 60 Appendix B.

Install a monitoring system on each effluent or combined effluent released to atmosphere subject to the same emission standards. If two or more sources are not subject to the same emission standards, install a monitoring system on each effluent. If effluent is released to atmosphere through multiple points, continuous monitoring systems must be installed on each effluent unless the use of fewer systems is approved by EPA.

For excess emissions, after conversion into units of the standard as specified in the applicable subpart, data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

Written application for a monitoring alternative considered a 'major change to monitoring/ as defined in 40 CFR 63.90 must be submitted to the EPA. Written application for a minor change to monitoring may be submitted to the Administrator. An alternative to the relative accuracy (RA) test specified in PS 2 of 40 CFR 60 Appendix B may be requested from the Administrator as detailed in 60.13(j)(1). The Administrator may rescind the RA alternative according to 60.13(j)(2).

3.1.13. Modification

40 CFR 60.14 (10/17/2000)

Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

3.2. Part 63 – National Emission Standard for Hazardous Air Pollutant Requirements

3.2.1. Applicability

40 CFR 63.1 (1/7/2025)

Requirements apply to both HAP major and area sources, as noted in each relevant subpart. Major and area sources are defined in 40 CFR 63.2. Each relevant subpart in 40 CFR 63 identifies explicitly whether each provision of Subpart A is, or is not, included in such relevant standard.

A major source may become an area source at any time upon reducing its emissions of and potential to emit HAP to below the major source thresholds established in 40 CFR 63.2, unless, as listed in 40 CFR 63.1(c)(6)(iii), after September 10, 2024 the source is subject to one of the following 40 CFR 63 subparts: F, G, H, I, L, R, X CC, GG, II, JJ, KK, MM, EEE, JJJ, LLL, MMM, RRR, UUU, FFFF, JJJJ, MMMM, PPPP, ZZZZ, CCCCC, DDDDD, FFFFF, IIIII, LLLLL, YYYYY, JJJJJ, EEEEEEE. The area source is subject to the standards, compliance dates and notification requirements specified in 40 CFR 63.1(c)(6)(i)(A).

3.2.2. Prohibited Activities and Circumvention

40 CFR 63.4 (4/5/2002)

No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance is not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under Section 112(i)(4) of the Act.

No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to –

- (i) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
- (ii) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.

Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

3.2.3. Requirements for Existing, Newly Constructed, and Reconstructed 40 CFR Part 63 NESHAPs Sources

40 CFR 63.5(b)(1), (3), (4), (6) (4/5/2002)

A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

After the effective date of any relevant standard under this part, no person may construct or reconstruct an affected source or a major source such that it becomes an affected source that is major-emitting and subject to such standard without obtaining written approval in advance from the Administrator in accordance with the application procedures in 63.9(b).

After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

3.2.4. Operation and Maintenance

3.2.4.1. O&M for Part 63 NESHAP Sources 40 CFR 63.6(e)(1)(i),(ii), and (iii) (3/11/2021)

Operate and maintain any affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the greatest extent possible at all times, including periods of startup, shutdown, and malfunction. This does not require achieving emission levels that

would be required by the applicable standard at other times nor reducing emissions if levels required by the applicable standard have been achieved. The Administrator will determine compliance with this general duty to minimize emissions.

Malfunctions must be corrected as soon as practicable after their occurrence.

Operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in relevant standards.

3.2.4.2. O&M for 40 CFR 63 Subpart UUU
40 CFR 63.6(e)(1)(iii) (3/11/2021); 40 CFR 63.1570(c) (12/1/2015)

Operate and maintain any affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. This does not require reducing emissions if levels required by the applicable standard have been achieved. The Administrator will determine compliance with this general duty to minimize emissions.

Operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in relevant standards.

3.2.4.3. O&M for 40 CFR 63 Subpart DDDDD (Boiler MACT)
40 CFR 63.7500(a)(3) (10/6/2022)

Operate and maintain any affected source as defined in 63.7490, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The Administrator will determine compliance with this general duty to minimize emissions.

3.2.5. Compliance With Nonopacity Emission Standards

Nonopacity emission standards for Part 63 NESHAP Sources
40 CFR 63.6(f)(1) (3/11/2021)

The non-opacity emission standards set forth in this part shall apply at all times except as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements. The Administrator will determine compliance with non-opacity emission standards, design, equipment, work practice or operational standards.

3.2.6. Compliance With Opacity and Visible Emission Standards

Compliance with opacity and visible emission standards for Part 63 NESHAP Sources
40 CFR 63.6(h)(1) (3/11/2021)

The opacity and visible emission standards set forth in this part must apply at all times except as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

3.2.7. Extension of Compliance for Early Reductions and Other Reductions

40 CFR 63.6(i) (3/11/2021) and 63.9(c) (9/10/2024), 63.7565 (11/20/2015)

Until a compliance extension has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with this part's applicable requirements. A compliance extension may be possible if a request for extension of compliance meets 63.6(i)(3) through 63.6(i)(6).

40 CFR 63 Subpart DDDDD facilities may also request extensions of compliance for the installation of combined heat and power, waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this subpart.

3.2.8. Notification of Performance Tests

3.2.8.1. Notification of Performance Tests for Part 63 NESHAP Sources 40 CFR 63.7(b) (11/14/2018) and 63.9(e) (9/10/2024)

The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under 40 CFR 63.7(c), if requested by the Administrator, and to have an observer present during the test.

3.2.8.2. Notification of Performance Tests for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources 40 CFR 63.1574(a)(2) (11/19/2020)

The requirements for notification of performance tests for Subpart UUU affected sources are the same as noted in AOP Term 3.2.9.1 with the following clarifications, exceptions, or differences:

The notification of intent to conduct a performance test required in 63.7(b) must be submitted at least 30 days before the performance test is scheduled to begin (instead of 60 days).

3.2.9. Conduct of Performance Tests

3.2.9.1. Conduct of Performance Tests for Part 63 NESHAP Sources 40 CFR 63.7 (11/14/2018), 63.9(e) (9/10/2024)

If required to do performance testing, perform such tests within 180 days of the compliance date for such source and under conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source.

The owner or operator of an affected facility shall provide performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility.
- (ii) Safe sampling platform(s).
- (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.

Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

Report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard. Include the analysis of samples, determination of emissions, and raw data. Include a test method performance audit (PA) during the performance test, as specified in 40 CFR 63.7(c)(2)(iii).

Obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. See 40 CFR 63.7(c)(2)(iii)(A) for a list of test methods excluded from this requirement. If the source owner, operator, or representative cannot find an audit sample for a specific method, consult <https://www.epa.gov/emc/emc-technical-support#audit>, to confirm whether there is a source that can supply an audit sample for that method.

The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. See 40 CFR 63.7(c)(2)(iii)(A) for a list of test methods excluded from this requirement.

If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, <https://www.epa.gov/emc/emc-technical-support#audit>, to confirm whether there is a source that can supply an audit sample for that method.

The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

3.2.10. Operation and Maintenance of Continuous Monitoring Systems (CMS)

3.2.10.1. O&M of CMS for Part 63 NESHAP Sources (except as modified by Subpart UUU; no SSMP is required for Subpart DDDDD) 40 CFR 63.8(c)(1),(2),(3),(4) and (6) (11/14/2018)

The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

- (i) The owner or operator of an affected source must maintain and operate each CMS as specified in 63.6(e)(1).
- (ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

All CMS must:

- (iii) be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).
- (iv) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (v) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (vi) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

The owner or operator of a CMS which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified.

3.2.10.2. O&M for CMS for Part 63 Subpart UUU Affected Sources
40 CFR 63.1572 (11/26/2018)

The language in 63.8(c)(3) applies except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.

3.2.11. Continuous Monitoring Systems (CMS) Out of Control Periods

3.2.11.1. CMS Out of Control Periods for Part 63 NESHAP Sources
40 CFR 63.8(c)(7) and (8) (11/14/2018)

A CMS is out of control if—

- (i) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or
- (ii) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit.

When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The

end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in 63.10(e)(3).

3.2.12. Continuous Monitoring Systems (CMS) Quality Control Program

3.2.12.1. CMS Quality Control Program for Part 63 NESHAP Sources (except for no written procedures required for CMS under Subpart UUU) **40 CFR 63.8(d) & (e) (11/14/2018), 63.9(g)(1) (9/10/2024)**

The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

- (i) Initial and any subsequent calibration of the CMS;
- (ii) Determination and adjustment of the calibration drift of the CMS;
- (iii) Preventive maintenance of the CMS, including spare parts inventory;
- (iv) Data recording, calculations, and reporting;
- (v) Accuracy audit procedures, including sampling and analysis methods; and
- (vi) Program of corrective action for a malfunctioning CMS.

The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation

schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under 63.7 in accordance with the applicable performance specification as specified in the relevant standard. If a performance test is not required, or the requirement for a performance test has been waived under 63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in 63.7(1), or as otherwise specified in the relevant standard.

The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation containing the information specified in §63.7(g)(2)(i) through (vi) simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard.

3.2.13. Continuous Monitoring Systems (CMS) Data Reduction

3.2.13.1. CMS Data Reduction for Part 63 NESHAP Sources (except for Subpart UUU) 40 CFR 63.8(g) (11/14/2018)

The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant).

All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

3.2.13.2. CMS Data Reduction for Part 63 Subpart UUU Affected Sources 40 CFR 63.1572(a) and (c) (11/26/2018)

You must install, operate, and maintain each continuous emission monitoring system according to the requirements in paragraphs (i) through (iv) of this section.

- (i) You must install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 of this subpart.
- (ii) If you use a continuous emission monitoring system to meet the NSPS CO or SO₂ limit, you must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 63.8 and Table 40 of this subpart. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.
- (iii) As specified in 63.8(c)(4)(ii), each continuous emission monitoring system must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- (iv) Data must be reduced as specified in 63.8(g)(2).

Except for flare monitoring systems, you must install, operate, and maintain each continuous parameter monitoring system according to the requirements in paragraphs (v) through (ix) of this section. For flares, you must install, operate, calibrate, and maintain monitoring systems as specified in 63.670 and 63.671.

- (v) You must install, operate, and maintain each continuous parameter monitoring system according to the requirements in Table 41 of this subpart. You must also meet the equipment specifications in Table 41 of this subpart if pH strips or colormetric tube sampling systems are used. You must meet the requirements in Table 41 of this subpart for BLD systems. Alternatively, before August 1, 2017, you may install, operate, and maintain each continuous parameter monitoring system in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.
- (vi) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).
- (vii) Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated, except for BLD systems.
- (viii) Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day, except for BLD systems. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous, except for BLD systems.
- (ix) Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

You must monitor and collect data according to the requirements in paragraphs (x) and (xi) of this section.

- (x) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected source is operating.
- (xi) You may not use data recorded during required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments) for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. You must use all the data collected

during all other periods in assessing the operation of the control device and associated control system.

3.2.14. Address for Reports, Notifications and Submittals

40 CFR 63.9(a) (9/10/2024), 63.10(a), 63.12(c), 63.13 (10/31/2024), (as amended by Delegation Letter dated 1/7/2025 from Krishna Viswanathan, Director of the Office of Air and Radiation, EPA Region 10 to Mark Buford, Director of NWCAA)

Notifications, reports, and applications for delegated Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAPs) shall be sent to the NWCAA at the following address:

Preferred: facilityreports@nwcleanairwa.gov

Alternative:

Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273-5202

Notifications, reports, and applications under NESHAP authorities that have been excluded from delegation shall be submitted to the EPA at the following address:

Director, Office of Air Quality
US EPA Region 10
1200 Sixth Avenue, (OAQ-107)
Seattle, WA 98101

All information required to be submitted to the EPA under this part also shall be submitted to the appropriate state agency of any state to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain federal or state reporting requirement. Any information required to be submitted electronically by this part via the EPA's CEDRI may, at the discretion of the delegated authority, satisfy the requirements of this paragraph. The Administrator may permit all or some of the information to be submitted to the appropriate state agency only, instead of to the EPA and the state agency with the exception of federal electronic reporting requirements under this part. Sources may not be exempted from federal electronic reporting requirements.

3.2.15. Notification

3.2.15.1. Notification Requirements for New or Reconstructed Part 63 NESHAP Sources (except as modified by Subpart UUU)
40 CFR 63.9(b)(4) (9/10/2024)

The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under 63.5(d) must provide the following information in writing to the Administrator:

- (i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in 63.5(d)(1)(i); and
- (ii) A notification of the actual date of startup of the source delivered or postmarked within 15 calendar days after that date.

3.2.15.2. Notification Requirements for New or Reconstructed Part 63 Subpart UUU (Refinery MACT II) Affected Sources 40 CFR 63.1574(c) (11/19/2020)

The requirements for notification of startup of new or reconstructed affected sources for Subpart UUU affected sources are the same as noted in AOP Term 3.2.16.1 with the following clarifications, exceptions, or differences:

If the new or reconstructed affected source is started up after April 11, 2002, initial notification must be submitted no later than 120 days after the source becomes subject to Subpart UUU.

3.2.16. Recordkeeping

3.2.16.1. Recordkeeping for Part 63 NESHAP Sources (except for Subpart UUU, and for Subpart DDDDD where 63.10(b)(3) does not apply) 40 CFR 63.10(b)(1) and (3) (11/19/2020)

The owner or operator of an affected source shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

If an owner or operator determines that his or her existing or new stationary source is in the source category regulated by a standard established pursuant to section 112 of the Act, but that source is not subject to the relevant standard (or other requirement established under this part) because of enforceable limitations on the source's potential to emit, or the source otherwise qualifies for an exclusion, the owner or operator must keep a record of the applicability determination. The applicability determination must be kept on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part), whichever comes first if the determination is made prior to January 19, 2021. The applicability determination must be kept until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part) if the determination was made on or after January 19, 2021. The record of the applicability determination must be signed by the person making the determination and include an emissions analysis (or other information) that demonstrates the owner or operator's conclusion that the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make an applicability finding for the source with regard to the relevant standard or other requirement. If applicable, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112 of the Act, if any.

3.2.16.2. Recordkeeping for Part 63 Subpart UUU Affected Sources 40 CFR 63.1576 (11/26/2018)

You must keep the records specified in paragraphs (i) through (iii) of this section.

- (i) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that you submitted, according to the requirements in 63.10(b)(2)(xiv).
- (ii) The records specified in paragraphs (a) through (d) of this section.

- a. Record the date, time, and duration of each startup and/or shutdown period for which the facility elected to comply with the alternative standards in 63.1564(a)(5)(ii) or 63.1565(a)(5)(ii) or 63.1568(a)(4)(ii) or (iii).
 - b. In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time and duration of each failure.
 - c. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
 - d. Record actions taken to minimize emissions in accordance with 63.1570(c) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- (iii) Records of performance tests, performance evaluations, and opacity and visible emission observations as required in 63.10(b)(2)(viii).

For each continuous emission monitoring system and continuous opacity monitoring system, you must keep the records required in paragraphs (iv) through (viii) of this section.

- (iv) Records described in 63.10(b)(2)(vi) through (xi).
- (v) Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 63.6(h)(7)(i) and (ii).
- (vi) The performance evaluation plan as described in 63.8(d)(2) for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, you must keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 63.8(d)(2).
- (vii) Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 63.8(f)(6)(i).
- (viii) Records of the date and time that each deviation started and stopped.

You must keep the records in 63.6(h) for visible emission observations.

You must keep records required by Tables 6, 7, 13, and 14 of this subpart (for catalytic cracking units); Tables 20, 21, 27 and 28 of this subpart (for catalytic reforming units); Tables 34 and 35 of this subpart (for sulfur recovery units); and Table 39 of this subpart (for bypass lines) to show continuous compliance with each emission limitation that applies to you.

You must keep a current copy of your operation, maintenance, and monitoring plan onsite and available for inspection. You also must keep records to show continuous compliance with the procedures in your operation, maintenance, and monitoring plan.

You also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

Your records must be in a form suitable and readily available for expeditious review according to 63.10(b)(1).

As specified in 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

3.2.17. Startup, Shutdown, and Malfunction Recordkeeping and Reports

3.2.17.1. SSM Recordkeeping and Reports for Part 63 NESHAP Sources (except Subpart DDDDD) **40 CFR 63.10(b)(2) and (d)(5) (11/19/2020)**

The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

- (i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;
- (ii) The occurrence and duration of each malfunction of operation (i.e. , process equipment) or the required air pollution control and monitoring equipment;
- (iii) All required maintenance performed on the air pollution control and monitoring equipment;
- (iv) Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected:
- (v) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (vi) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - a. This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.
 - b. This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.
 - c. The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the Administrator or the delegated authority determines

these records are required to more accurately assess the compliance status of the affected source.

- (vii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- (viii) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (ix) All CMS calibration checks;
- (x) All adjustments and maintenance performed on CMS;
- (xi) All documentation supporting initial notifications and notifications of compliance status under §63.9.

3.2.17.2. SSM Reports for 40 CFR 63 Subpart DDDDD (Boiler MACT) Affected Sources 40 CFR 63.7555(d)(7) (10/6/2022) and 63.7550(c)(5)(xiii) and (xviii) (11/20/2015)

The requirements for startup, shutdown and malfunction reports for Subpart DDDDD affected sources are the same as noted in AOP Term 3.2.16.1 above with the following exceptions:

- (i) Keep records of actions taken during periods of malfunction to minimize emission in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (ii) Report all malfunctions that occurred during the reporting period. The report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.
- (iii) Report each instance of startup and shutdown, including the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d).

3.2.17.3. SSM Recordkeeping & Reports for Part 63 Subpart UUU Affected Sources 40 CFR 63.1575(d) and (e) (11/26/2018)

For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation or work practice standard in this subpart, the semiannual compliance report must contain the information in (i) through (iv) of this section.

- (i) The total operating time of each affected source during the reporting period and identification of the sources for which there was a deviation.
- (ii) Information on the number, date, time, duration, and cause of deviations (including unknown cause, if applicable).
- (iii) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).
- (iv) The applicable operating limit or work practice standard from which you deviated and either the parameter monitor reading during the deviation or a description of how you deviated from the work practice standard.

For each deviation from an emission limitation occurring at an affected source where you are using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation, you must include the information in (v) through (xvii) of this section.

- (v) [Reserved]
- (vi) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (vii) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in 63.8(c)(8).
- (viii) An estimate of the quantity of each regulated pollutant emitted over the emission limit during the deviation, and a description of the method used to estimate the emissions.
- (ix) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.
- (x) A breakdown of the total duration of the deviations during the reporting period and into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (xi) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period.
- (xii) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.
- (xiii) An identification of each HAP that was monitored at the affected source.
- (xiv) A brief description of the process units.
- (xv) The monitoring equipment manufacturer(s) and model number(s).
- (xvi) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.
- (xvii) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.

3.2.18. Reports

3.2.18.1. Report Requirements for Part 63 Subpart UUU Affected Sources 40 CFR 63.1575(a) & (b) and Table 43 (11/26/2018)

You must submit each report in Table 43. Unless the Administrator has approved a different schedule, you must submit each report by the date in Table 43 of this subpart and according to the requirements in paragraphs (i) through (v) of this section.

- (iv) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in 63.1563 and ending on June 30 or December 31,

whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your affected source in 63.1563.

- (v) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 63.1563.
- (vi) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (vii) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (viii) For each affected source that is subject to permitting regulations pursuant to part 70 or 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (i) through (iv) of this section.

3.2.18.2. Compliance Report Requirements for Part 63 Subpart DDDDD Affected Sources
40 CFR 63.7550 and Table 9 (11/20/2015)

You must submit each report in Table 9 to this subpart that applies to you.

Unless the EPA Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (i) through (iv) of this section. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (i) through (iv) of this section, instead of a semi-annual compliance report.

- (i) The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in 63.7495. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 63.7495 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in 63.7495.
- (ii) The first semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 63.7495. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.
- (iii) Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.
- (iv) Each subsequent semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the

semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.

- (v) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (i) through (iv) of this section.

A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs (vi) through (x) of this section.

- (vi) Company and Facility name and address.
- (vii) Process unit information, emissions limitations, and operating parameter limitations.
- (viii) Date of report and beginning and ending dates of the reporting period.
- (ix) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (x) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

Submit all reports required by Table 9 of this subpart electronically via CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in 63.13. Begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

3.2.19. Deviation Reporting

Deviation Reporting Requirements for 40 CFR 63 Subpart UUU Affected Sources 40 CFR 63.1570(f) (12/1/2015), 63.1575(a)-(g), (i) & (K) (11/26/2018) and Table 43 (11/26/2018)

Report each instance in which each emissions limit and each operating limit was not met. This includes periods of startup, shutdown, and malfunction. Also, report each instance in which the work practice standards that apply were not met. These instances are deviations from the emission limitations and work practices.

Submit compliance reports covering the semiannual reporting period from January 1 through June 30 and from July 1 through December 31.

The compliance report must contain the following:

- (i) The company name and address;
- (ii) A statement by a responsible official with the official's name, title, and signature, certifying the accuracy of the content of the report; and
- (iii) The date of the report and the beginning and ending dates of the reporting period.

If there are no deviations, the report must contain a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

If there were deviations during the reporting period, the report must contain the information in 40 CFR 63.1575(d) and/or (e).

Include a copy of any performance test done during the reporting period as per 40 CFR 63.1575(f). The test results shall be submitted electronically to EPA's Central Data Exchange (www.cdx.epa.gov) within 60 days of test completion in accordance with 63.1575(k). Also report if there is any requested change in the applicability of an emission standard.

Reports required by other regulations may be submitted in place of or as part of the compliance report if they contain the required information.

3.2.20. Recordkeeping Requirements for Sources with Continuous Monitoring Systems

3.2.20.1. CMS Recordkeeping for Part 63 NESHAP Sources (except for Subpart UUU: except for Subpart DDDDD where 63.10(c)(10), (11) & (15) do not apply) **40 CFR 63.10(c) (11/19/2020)**

In addition to complying with the requirements specified in paragraphs (b)(1) and (2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of:

- (i) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);
- (ii) [Reserved]
- (iii) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
- (iv) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);
- (v) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;
- (vi) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;
- (vii) [Reserved]
- (viii) The nature and cause of any malfunction (if known);
- (ix) The corrective action taken or preventive measures adopted;
- (x) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;
- (xi) The total process operating time during the reporting period; and
- (xii) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

3.2.20.2. Recordkeeping Requirements for CMS for Part 63 Subpart UUU Affected Sources
40 CFR 63.1576(b) (11/26/2018)

For each continuous emission monitoring system and continuous opacity monitoring system, you must keep the records required in paragraphs (i) through (v) of this section.

- (i) Records described in 63.10(b)(2)(vi) through (xi).
- (ii) Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 63.6(h)(7)(i) and (ii).
- (iii) The performance evaluation plan as described in 63.8(d)(2) for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, you must keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 63.8(d)(2).
- (iv) Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 63.8(f)(6)(i).
- (v) Records of the date and time that each deviation started and stopped.

3.2.21. Notification of Compliance Status (NCS)

3.2.21.1. NCS for Part 63 NESHAPs Sources (except Subpart DDDDD)
40 CFR 63.9(h) (9/10/2024)

Each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list:

- (i) the methods that were used to determine compliance;
- (ii) the results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
- (iii) the methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
- (iv) the type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
- (v) if the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);
- (vi) a description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and,
- (vii) a statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

After the applicable requirements are incorporated into the affected source's title V permit, the owner or operator of such source shall comply with all requirements for compliance status

reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

The NCS must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

3.2.21.2. NCS for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources
40 CFR 63.1574(a)(3) & (d) (11/19/2020) and Table 42 (2/9/2005)

The requirements for Notifications of Compliance Status for Subpart UUU affected sources are the same as noted in AOP Term 3.2.22.1 with the following clarifications, exceptions, or differences:

If a performance test, performance evaluation, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration is required, a Notification of Compliance Status is required. This information can be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, a separate Notification of Compliance Status is not required, just refer to earlier submissions instead of duplicating and resubmitting the previously submitted information.

For each initial compliance demonstration that does not include a performance test, the Notification of Compliance Status must be submitted no later than 30 calendar days following completion of the initial compliance demonstration.

For each initial compliance demonstration that includes a performance test, the Notification of Compliance Status, including the performance test results, must be submitted no later than 150 calendar days after the specified compliance date.

The initial Notification of Compliance Status shall include, as applicable, the information listed in 40 CFR 63 Subpart UUU Table 42.

3.2.21.3. NCS for 40 CFR 63 Subpart DDDDD (Boiler MACT) Affected Sources
40 CFR 63.7545(a), (e), (e)(1), and (e)(6) (10/6/2022)

The requirements for Notifications of Compliance Status for Subpart DDDDD affected sources are the same as noted in 3.2.22.1 with the following clarifications, exceptions, or differences:

The NCS shall be submitted by close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). It shall include a signed certification that all the work practice standards have been met. Also, it should include a description of the affected units including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart,

description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the compliance demonstration.

The NCS must include the following certification(s) of compliance, as applicable, and be signed by a responsible official:

"This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)." and "This facility has had an energy assessment performed according to §63.7530(e)."

SECTION 4 GENERALLY APPLICABLE REQUIREMENTS

The cited requirements in the "Citation" column and incorporated herein by reference are applicable plant-wide at the source, including insignificant emission units. These requirements are federally enforceable unless identified as "State Only". A requirement designated "State Only" is enforceable only by the NWCAA, and not by the EPA or through citizen suits. "State Only" WAC citations in effect as of July 10, 2025 are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended July 10, 2025. All of the federal regulations in effect as of July 10, 2025 listed in Section 4 have been adopted by reference in NWCAA 104.2, as amended July 10, 2025.

The "Description" column is a brief description of the applicable requirements for informational purposes only and is not enforceable. Periodic or continuous monitoring requirements (including testing) are specified in the "Monitoring, Recordkeeping and Reporting" column, which identifies monitoring, recordkeeping and reporting (MR&R) obligations the source must perform as required by the underlying requirement or by WAC 173-401-605(1) or -615. MR&R obligations do not apply to insignificant emission units.

The requirements in the MR&R column labeled as "*Directly Enforceable*" are legally enforceable requirements added under either the NWCAA's "gap-filling" authority (WAC 173-401-615(1)(b) & (c), (10/17/2002)), or the NWCAA's "sufficiency monitoring" authority (WAC 173-401-630(1), (3/5/2016)), as cited in each permit term. Other requirements not labeled "*Directly Enforceable*" are brief descriptions of the regulatory requirements for information purposes, and are not enforceable. Unless the text of the MR&R column is specifically identified to be directly enforceable, the language of the cited regulation takes precedence over a paraphrased requirement.

MR&R requirements noted as "CAM" are part of the Compliance Assurance Monitoring (CAM) Plan for the specified unit(s) as required by 40 CFR 64.6(c) (10/22/1997). The CAM plan submitted by the facility per 40 CFR 64.4 is included in the Statement of Basis document accompanying this permit.

Table 4-1 Generally Applicable Requirements

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.1 General	WAC 173-401-615(3) (10/17/2002) WAC 173-401-630(1) (3/5/2016) WAC 173-401-520 (11/4/1993) 40 CFR 60 Subpart A 60.19(c) (2/12/1999) 40 CFR 63 Subpart A 63.10(a)(5) (11/19/2020)	<u>Required Monitoring Reports</u> Submit reports of any required monitoring to the NWCAA at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports.	<i>Directly Enforceable:</i> Monthly reports shall cover a calendar month, quarterly reports shall cover a calendar quarter, six-month reports shall cover January through June and July through December, and annual reports shall cover a calendar year. The reports shall be submitted within 30 days after the close of the period that the reports cover, except when the reporting deadline is specified in a permit term including, but not necessarily limited to; Term 2.1.8.3 - Source testing Term 2.4.1.1 - Annual AOP certification Term 2.4.4.3 - Annual emissions inventory Term 2.4.5.2 - Annual GHG emissions Term 2.10 - GHG Clean Air Rule All required reports must be certified by a responsible official consistent with WAC 173-401-520. If the report submittal deadline falls on a weekend, then the deadline to submit shall be the next business day.
4.2 General	NWCAA Section 342 (9/8/1993) NWCAA Section 342 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Operation and Maintenance</u> Sources are required to keep any process and/or air pollution control equipment in good operating condition and repair.	Operating instructions and maintenance schedules for process and/or control equipment must be available on site. <i>Directly Enforceable:</i> Monitor, keep records and report in accordance with the terms of this permit.

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.3 Nuisance	NWCAA Section 530 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>General Nuisance</u> No person shall discharge from any source quantities of air contaminants, with the exception of odors, in sufficient amounts and of such characteristics and duration as is likely to be injurious or cause damage to human health, plant or animal life, or property; or which unreasonably interferes with enjoyment of life and property. An air contaminant is defined as "dust, fumes, mist, smoke, other particulate matter, vapor gas, odorous substance, or any combination thereof.	<i>Directly Enforceable:</i> Upon receiving an air contaminant complaint from the NWCAA or the public, all possible sources of the nuisance emissions at the facility shall be checked for proper operation. Problems identified shall be repaired or corrected as soon as practicable. If the problems identified cannot be repaired or corrected within four hours, action shall be taken to minimize emissions until repairs can be made and the NWCAA shall be notified within 12 hours with a description of the complaint and action being taken to resolve the problem. The results of the investigation, identification of any malfunctioning equipment or aberrant operation, and the date and time of repair or mitigation shall be recorded. A log of these records shall be maintained for inspection. Receipt of a nuisance complaint in itself shall not necessarily be a violation.
4.4 Nuisance	WAC 173-400-040(5) (3/22/1991) WAC 173-400-040(6) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission Detrimental to Persons or Property</u> No person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	
4.5 Odor	NWCAA Section 535 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Odor Control Measures</u> Appropriate practices and control equipment shall be installed and operated to reduce odor-bearing gases emitted into the atmosphere to a reasonable minimum. Any person who shall cause the generation of any odor from any source which may reasonably interfere with any other property owner's use and enjoyment of their property must use recognized best practices and control equipment to reduce these odors to a reasonable minimum. No person shall cause or permit the emission of any odorous air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.6 Odor	WAC 173-400-040(5) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Odors</u> Source may not generate odors which may unreasonably interfere with property use and must use recognized good practice and procedures to reduce odors to reasonable minimum.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.3.
4.7 PM	NWCAA Section 550 (4/14/1993) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Preventing Particulate Matter from Becoming Airborne</u> Best Available Control Technology (BACT) is required to prevent the release of fugitive matter to the ambient air. Nuisance particulate fallout is prohibited.	
4.8 PM	NWCAA Section 550 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Preventing Particulate Matter from Becoming Airborne</u> The owner or operator of a source or activity that generates fugitive dust, including, but not limited to, material handling, building construction or demolition, abrasive blasting, roadways, and lots, shall employ reasonable precautions to prevent fugitive dust from becoming airborne and must maintain and operate the source or activity to minimize emissions. It shall be unlawful for any person to cause or allow the emission of particulate matter which becomes deposited upon the property of others in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.	
4.9 PM	WAC 173-400-040(3) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Fallout</u> Source may not generate the emission of particulate matter to be deposited beyond the property line in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.10 PM	WAC 173-400-040(3)(a) (3/22/1991) WAC 173-400-040(4) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Fugitive Emissions</u> Take reasonable precautions to prevent the release of air contaminants from an emissions unit engaging in materials handling, construction, demolition, or other operation which is a source of fugitive emissions. If the emissions unit has been identified as a significant contributor to the nonattainment status of a designated nonattainment area, the owner or operator shall be required to use reasonable and available control methods, which shall include any necessary changes in technology, process, or other control strategies to control emissions of the air contaminants for which nonattainment has been designated.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.3.
4.11 PM	WAC 173-400-040(8)(a) (3/22/1991) WAC 173-400-040(9) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Fugitive Dust</u> Reasonable precautions to prevent release of fugitive dust required. Maintain and operate source to minimize emissions. The owner or operator of any existing source or activity that generates fugitive dust that has been identified as a significant contributor to a PM ₁₀ or PM _{2.5} nonattainment area is required to use reasonably available control technology to control emissions. Significance will be determined by the criteria found in WAC 173-400-113(4) (2/12/2025 State Only).	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.12 VE	NWCAA 451.1 10/13/1994) NWCAA 451.1 (7/10/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission of Air Contaminant - Visual Standard</u> No person shall cause or permit the emission, for any period aggregating more than three minutes in any one hour, of an air contaminant from any source which, at the point at emission, or within a reasonable distance of the point of emission, exceeds 20% opacity except: When there is valid data to show that the opacity is in excess of 20% as a result of the presence of condensed water droplets, and that the concentration of the particulate matter, as shown by a source test approved by the Control Officer, is less than 0.10 (0.23 g/m ³) grain/dscf.	<i>Directly Enforceable:</i> At least once during each calendar month that an emission unit operates, conduct qualitative visual observations on each stack while operating to determine whether there are visible emissions (VE). If, at any time, visible emissions are observed, take one or more of the following actions within 24 hours or it will be considered prima facie evidence that all applicable opacity limits have been exceeded. • Complete action that returns visible emissions to a non-visible level. • Shutdown the unit until appropriate corrective action can be taken. • Observe and record VE using a certified observer in accordance with EPA Method 9 (six consecutive minutes). If any single reading is greater than an applicable numerical opacity limit, the certified observer shall determine opacity in accordance with the appropriate method for each opacity limit applicable to that emission unit. A certified observer shall determine opacity on a daily basis according to each applicable opacity limit until visible emissions are determined to be in compliance with each opacity limit. For each qualitative VE observation, record the date and time of the observation, emission unit(s) observed, and name of observer. For stacks with visible emissions, record any related equipment or operational failure, failure dates and times, duration of visible emissions, and corrective actions taken. The periodic VE observation frequency may be reduced from monthly to quarterly if no visible emissions are observed for six consecutive months. If visible emissions are observed, the observation frequency shall revert back to monthly. Compliance with this MR&R does not excuse an exceedance of the underlying opacity standard.
4.13 VE	WAC 173-400-040(1) (3/22/1991) WAC 173-400-040(2) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Visible Emissions</u> No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds 20 percent opacity (Ecology Method 9A) except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed twenty percent.	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.14 PM	NWCAA 455.1 (4/14/1993) NWCAA 455.1 (7/10/2025 State Only) WAC 173-401-630(1) (3/5/2016)	<u>Emission of Particulate Matter</u> No person shall cause or permit emission of particulate matter in excess of 0.10 grain/dry standard cubic foot (dscf) (0.23 g/m ³) (combustion emissions shall be corrected to 7% O ₂) except: from all gaseous and distillate fuel burning equipment, emissions shall not exceed 0.05 grain/dscf (0.11 g/m ³) corrected to 7% oxygen.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.12.
4.15 PM	WAC 173-400-060 (11/25/2018) WAC 173-400-060 (2/12/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission Standards for General Process Units</u> Particulate emissions greater than 0.1 grain/dscf prohibited.	
4.16 PM	WAC 173-400-050(1) and (3) (9/16/2018) WAC 173-400-050(1) & (3) (2/12/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission Standards for Combustion and Incineration Units</u> Particulate emissions from combustion units greater than 0.1 grains/dscf corrected to 7% oxygen prohibited. The permitting authority may determine that an alternate oxygen correction factor is more representative of normal operations such as the correction factor included in an applicable NSPS or NESHAP, actual operating characteristics, or the manufacturer's specifications for the emission unit.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.12.
4.17	NWCAA 460 (7/10/2025 State Only) WAC 173-401-630(1)(3/5/2016)	<u>Ambient SO₂</u> Install, calibrate, maintain, and operate the following monitoring equipment in accordance with the provisions of NWCAA 367: • At least one continuous recording meteorological station equipped to record wind speed and direction • At least one SO₂ ambient station.	<i>Directly Enforceable</i> Continuously operate and maintain an ambient SO ₂ air monitor and report to the NWCAA as per the requirements in NWCAA Regulations Appendix A (7/14/2005).

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.18 SO ₂	NWCAA Section 462 (10/13/1994) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , shall not exceed 1,000 ppmvd averaged for a 60 consecutive minute period. For combustion emissions, the exhaust gas volume shall be corrected to 7% oxygen. This requirement is not violated if reasonable evidence is presented that concentrations will not exceed ambient standards and the permittee demonstrates that no practical method of reducing the concentration exists.	<i>Directly Enforceable:</i> Monitor and record the concentration of stack SO ₂ , or alternatively fuel gas H ₂ S and/or total sulfur (TS), in accordance with the applicable permit terms listed in AOP Section 5.
4.19	NWCAA Section 462 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , shall not exceed 1,000 ppmvd averaged for a 60 consecutive minute period. For combustion emissions, the exhaust gas volume shall be corrected to 7% oxygen. This requirement is not violated if reasonable evidence is presented that concentrations will not exceed ambient standards and the permittee demonstrates that no practical method of reducing the concentration exists.	
4.20 SO ₂	WAC 173-400-040(6) first paragraph only (3/22/1991) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Sulfur Dioxide</u> SO ₂ emissions shall not exceed 1,000 ppmvd, corrected to 7% oxygen for combustion sources, based on the average of any 60 consecutive minute period.	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.21 SO ₂	NWCAA 520.1, 520.11, 520.12, 520.13, and 520.15 (4/14/1993) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Sulfur Compounds in Fuel</u> Prohibited to burn, sell, or make available for sale for burning in fuel burning equipment within the jurisdiction of the NWCAA, fuel containing sulfur in excess of the following for a time period not to exceed 30 days in a 12-month period: • #1 distillate – 0.3 wt% • #2 distillate – 0.5 wt% • other fuel oils – 2.0 wt% • solid fuels – 2.0 wt%	<i>Directly Enforceable:</i> Retain fuel specifications and purchase records verifying that fuel combusted has a sulfur content below the allowable limits. Fuel testing for sulfur content shall be conducted in accordance with ASTM D-4294 (Industrial and Marine Fuel Oils) or ASTM D-2622 (Distillate Fuel Oil).
4.22 SO ₂	NWCAA 520.1, 520.11, 520.12, 520.13, 520.14, 520.15, 520.2 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/2002)	<u>Sulfur Compounds in Fuel</u> Prohibited to burn, sell, or make available for sale for burning in fuel burning equipment within the jurisdiction of the NWCAA, fuel containing sulfur in excess of the following for a time period not to exceed 30 days in a 12-month period: • #1 distillate – 0.3 wt% • #2 distillate – 0.5 wt% • other fuel oils – 2.0 wt% • gaseous fuels - 50 gr/100 scf (412 ppm at standard conditions) • solid fuels – 2.0 wt% Ocean-going vessels are exempt.	

SECTION 5 SPECIFICALLY APPLICABLE REQUIREMENTS

The cited requirements in the "Citation" column and incorporated herein by reference are applicable to emission units specified in the header of the table. These requirements are federally enforceable unless identified as "State Only". A requirement designated "State Only" is enforceable only by the state or the NWCAA, and not by the EPA or through citizen suits. "State Only" WAC citations in effect as of July 10, 2025 are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended July 10, 2025. All of the federal regulations in effect as of July 10, 2025 listed in Section 5 have been adopted by reference in NWCAA 104.2, as amended July 10, 2025.

The "Description" column is a brief description of the applicable requirements for informational purposes only and is not enforceable. Periodic or continuous monitoring requirements, including testing, are specified in the "Monitoring, Recordkeeping and Reporting" (MR&R) column, which identifies MR&R obligations the source must perform as required by WAC 173-401-605(1) and 615(1) and (2) or the underlying requirement. MR&R obligations do not apply to insignificant emission units. The test method cited or any credible evidence may be used to determine compliance.

The requirements in the MR&R column labeled "Directly Enforceable" are legally enforceable requirements added under either the NWCAA's "gap-filling" authority (WAC 173-401-615(1)(b) & (c), (10/17/2002)), or the NWCAA's "sufficiency monitoring" authority (WAC 173-401-630(1), (3/5/2016)), as cited in each permit term. Other requirements not labeled "Directly Enforceable" are brief descriptions of the regulatory requirements for information purposes, and are not enforceable. Unless the text of the MR&R column is specifically identified to be directly enforceable, the language of the cited regulation takes precedence over a paraphrased requirement.

MR&R requirements noted as "CAM" are part of the Compliance Assurance Monitoring (CAM) Plan for the specified unit(s) as required by 40 CFR 64.6(c) (10/22/1997). The CAM plan submitted by the facility per 40 CFR 64.4 is included in the Statement of Basis document accompanying this permit.

The provisions of federally approved NWCAA Sections 365, 366 and the "Guidelines for Industrial Monitoring Equipment and Data Handling" have been replaced in this section by NWCAA Section 367 and Appendix A – "Ambient Monitoring, Emission Testing, and Continuous Emission and Opacity Monitoring". NWCAA Section 367 was adopted on July 10, 2025 and Appendix A was adopted on July 14, 2005 with a provision that applicable sources would be allowed one year from the date of adoption to achieve compliance with Appendix A. The new regulations are "State Only" until incorporated into the State Implementation Plan.

A few federal standards in the following tables refer to other standards, which, in turn, refer to yet other standards. For example, in AOP Term 5.2.9, the citation for 60.590-60.593 of 40 CFR 60 Subpart GGG refers to 60.482-60.487 of 40 CFR 60 Subpart VV. The symbol "→" is used in place of "which refers to."

Table 5-1 Sulfuric Acid Plant

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
Sulfuric Acid Plant [40 CFR 60 General Provisions included in AOP Section 3 apply to this affected facility]			
5.1.1	PSD 94-01 Amendment 1 Condition 6 (1/14/98)	Develop and follow operating and maintenance manuals for all equipment that has the potential to affect emissions to the atmosphere. Emissions that result from a failure to follow the requirements of the manuals may be considered proof that the equipment was not properly operated and maintained.	Keep copies of the manuals available to NWCAA and Ecology.
5.1.2	PSD 94-01 Amendment 1 Conditions 4 & 5 (1/14/98)	CEMS and process data shall be reported in written form to NWCAA at least monthly, within 30 days of the end of each calendar month.	Include in the monthly report: • Monthly average, in units of the standard for each pollutant monitored; • Duration of CEM downtime, due to: ○ Monitor equipment malfunction, ○ Non-monitor equipment malfunction, ○ Quality assurance calibration, ○ Other causes, and ○ Percentage of time the monitor was not operating as compared to the total source operating time; • Results of any monitor audits or accuracy checks; • Results of any stack tests. For each occurrence of monitored emissions in excess of the standard, in the monitoring report include: • The time of the occurrence; • Magnitude of the excess emission or process parameter; • Duration of the excess emissions; • Probable cause, including startup/shutdown, control equipment problems, process equipment problems, other causes and the percentage of time of excess emissions as compared to total operating time; • Corrective actions taken or planned; and • Any other agency contacted.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.3 SO ₂	40 CFR 60 Subpart H 60.82(a) (6/14/74) and 60.84(a)-(c), & (e) (2/27/14) NWCAA 465.11, 465.23, & 465.24 (4/14/93 State Only) WAC 173-401-630(1) (3/5/16)	Sulfuric acid plant emissions shall not exceed 4 lb SO ₂ /ton of sulfuric acid produced (production expressed as 100% H ₂ SO ₄). Establish a conversion factor to convert the SO ₂ monitoring data into units of the standard (lb SO ₂ /ton of sulfuric acid produced). The conversion factor shall be determined, at a minimum, three times daily by measuring the concentration of SO ₂ entering the converter using suitable methods and calculating the appropriate conversion factor for each eight-hour period as follows: $CF = k[(1.000 - 0.015r)/(r - s)]$ where: CF=conversion factor (lb/ton per ppm) k=0.1306 (constant derived from material balance) r=%vol SO ₂ entering the gas converter s=%vol SO ₂ to the atmosphere determined by the CEMS Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the standard.	Install, calibrate, operate and maintain a continuous monitoring system to measure SO ₂ . The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 60.13(d) shall be SO ₂ . The span value shall be set at 1000 ppm SO ₂ . Record all conversion factors and values from which they were computed. <i>Directly Enforceable:</i> The monitoring equipment required to be installed shall comply with the equipment and performance specifications and reporting requirements in NWCAA Section 367. Conduct annual performance tests to demonstrate compliance with the standard according to 40 CFR 60 Appendix A, Test Methods 1-4 and 6 or 6C.
5.1.4 SO ₂	PSD 94-01 Amendment 1 Condition 1 (1/14/98) WAC 173-401-630(1) (3/5/16)	Do not exceed 315 ppmvd SO ₂ on a 3-hour average or 59.9 lb SO ₂ /hr on a 3-hour average, from the acid plant common stack, whichever is more stringent.	Compliance shall be determined by a CEMS. The CEMS used to measure SO ₂ emissions shall, at a minimum, conform with 40 CFR 60 Appendix B Performance Specifications. The CEMS quality control plan conforming to 40 CFR 60 Appendix F may be required to be periodically updated. <i>Directly Enforceable:</i> Conduct annual performance tests to demonstrate compliance with the standard according to 40 CFR Part 60 Appendix A, Test Methods 1-4 and 6 or 6C.

5.1.5 H₂SO₄	OAC 458d Conditions (1) & (3) (6/25/15) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Sulfuric acid mist emissions from the acid plant common stack shall not exceed 1.5×10^{-6} lb/dscf hourly average expressed as 100% H₂SO₄. In addition, sulfuric acid mist emissions from the stack shall not exceed 0.105 pounds per ton of sulfuric acid produced on an hourly average.	Determine compliance using the arithmetic average of three one-hour test runs conducted during annual performance testing. Performance tests shall be performed according to 40 CFR 60 Appendix A Method 8. <i>Directly Enforceable:</i> Daily sulfuric acid production on a facility-wide basis may be a suitable method to determine production rate of 100% H₂SO₄ for each test run. <i>CAM:</i> Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with the date, time, and reader initials. A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H₂O for Abatement Unit 10 or 0.4" H₂O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained
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Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
			initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.
5.1.6 H ₂ SO ₄	40 CFR 60 Subpart H 60.83(a)(1) (10/6/75) and 60.85(a) & (b) (2/14/89) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Sulfuric acid plant emissions shall not contain acid mist, expressed as H ₂ SO ₄ , in excess of 0.15 lb/ton of acid produced (production expressed as 100% H ₂ SO ₄). Acid mist means sulfuric acid mist, as measured by Method 8.	Monitor in accordance with MR&R for AOP Term 5.1.7
5.1.7 H ₂ SO ₄	NWCAA 465.12 (4/14/93 State Only) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Sulfuric acid mist emissions (including sulfur trioxide) from the sulfuric acid plant shall not exceed 0.15 lb/ton of sulfuric acid produced, expressed as 100% sulfuric acid.	Monitor in accordance with MR&R for AOP Term 5.1.7

5.1.8 H₂SO₄	40 CFR 60 Subpart H 60.83(a)(2) (10/6/75) and 60.85(a) & (b)(4) (2/14/89) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Sulfuric acid plant tailgas emissions shall not exhibit 10% opacity or greater using Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16. <i>CAM:</i> Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with date, time, and reader initials. A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H₂O for Abatement Unit 10 or 0.4" H₂O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented.
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Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
			Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.
5.1.9 H ₂ SO ₄	OAC 458d Condition (2) (6/25/15) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Visible emissions from the acid plant common stack shall not exceed an average of ten percent opacity in any consecutive six-minute period as determined by 40 CFR 60 Appendix A Method 9.	<i>Directly Enforceable:</i> Monitor in accordance with MR&R for AOP Term 5.1.8.
5.1.10 H ₂ SO ₄	PSD 94-01 Amendment 1 Condition 2 (1/14/98) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Opacity from the acid plant common stack shall not exceed 10 percent for more than six minutes in any one-hour period as measured by EPA Method 9.	<i>Directly Enforceable:</i> Monitor in accordance with MR&R for AOP Term 5.1.8.
5.1.11 H ₂ SO ₄	NWCAA 465.13 (4/14/93 State Only) 40 CFR 64.3(b); 64.6(c); 64.7(c), (d) & (e); and 64.9(a) & (b) (10/22/97) (CAM) WAC 173-401-630(1) (3/5/16)	Visible emissions from the sulfuric acid plant shall not exceed 10% opacity or greater for three minutes.	<i>Directly Enforceable:</i> Monitor in accordance with MR&R for AOP Term 5.1.8.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.12 VE	NWCAA 451.1 (10/13/94) NWCAA 451.1 (11/8/07 State Only) WAC 173-401-630(1) (3/5/16)	<u>Emission of Air Contaminant - Visual Standard</u> No person shall cause or permit the emission, for any period aggregating more than 3 minutes in any 1 hour, of an air contaminant from any source which, at the point at emission, or within a reasonable distance of the point of emission, exceeds 20% opacity (Ecology Method 9A) except: When there is valid data to show that the opacity is in excess of 20% as a result of the presence of condensed water droplets, and that the concentration of the particulate matter, as shown by a source test approved by the Control Officer, is less than 0.10 (0.23 g/m ³) grain/dscf.	<i>Directly Enforceable:</i> Monitor in accordance with MR&R for AOP Term 5.1.8.
5.1.13 VE	WAC 173-400-040(1) (9/20/93) WAC 173-400-040(2) (9/16/18 State Only) WAC 173-401-630(1) (3/5/16)	<u>Visible Emissions</u> No person shall cause or allow the emission for more than 3 minutes, in any 1 hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds 20% opacity (Ecology Method 9A) except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed 20%.	<i>Directly Enforceable:</i> Monitor in accordance with MR&R for AOP Term 5.1.8.
SPU3 Startup Heater			
5.1.14	OAC 880c Condition (1) (6/25/15)	The startup heater shall not operate for more than 1,000 hours in any 12-month period.	Records documenting operation time shall be updated at least monthly and include the date of operation and total hours of operation on each calendar day the unit is run. Operation records shall be kept on-site and available for review by NWCAA.
5.1.15	OAC 880c Condition (2) (6/25/15) WAC 173-401-630(1) (3/5/16)	Visible emissions from the startup heater stack shall not exceed an average of ten percent opacity in any consecutive six minute period as determined by 40 CFR 60 Appendix A Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16.

Table 5-2 Sulfur Recovery Unit

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
Sulfur Recovery Unit (SRU) [40 CFR 60 and 63 General Provisions included in AOP Section 3 apply to this affected facility]			
5.2.1 VE	OAC 650d Condition (8) (6/25/15) WAC 173-401-630(1) (3/5/16)	Visible emissions from the incinerator stack shall not exceed an average of ten percent opacity in any consecutive 6-minute period as determined by 40 CFR 60 Appendix A Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16.
5.2.2 SO ₂	OAC 650d Condition (7) (6/25/15) WAC 173-401-615(1)(b) & (c) (10/17/02)	The sulfur dioxide (SO ₂) emissions from the SRU shall not exceed 40 tons during any consecutive 12-month period.	<i>Directly Enforceable:</i> Determine compliance using the 1-hour average SO ₂ CEMS concentration data under AOP Term 5.2.5 multiplied by an average stack flow for the most recent 12 passing performance tests under AOP Term 5.2.3 summed over the 12-month period.
5.2.3 SO ₂	OAC 650d Conditions (2) & (6) (6/25/15)	Emissions of SO ₂ from the SRU shall not exceed 9.2 pounds per hour SO ₂ on a one-hour basis.	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 6 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
5.2.4 HAP	40 CFR 63 Subpart UUU 63.1570(a) (12/1/15)	<u>Refinery MACT 2</u> Non-opacity standards apply to affected sources at all times.	The responsible official shall certify compliance with these terms under AOP Term 2.4.1.
5.2.5 VE	40 CFR 63 Subpart UUU 63.1570(b) (12/1/15)	<u>Refinery MACT 2</u> Opacity and visible emission standards apply to affected sources at all times.	

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.6 General Duty	40 CFR 63 Subpart UUU 63.1570(c) (12/1/15)	<u>Refinery MACT 2 - General Duty to Minimize Emissions</u> At all times, operate and maintain the affected source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	
5.2.7 SO ₂	40 CFR 60 Subpart J 60.104(a)(2)(i) (6/24/08), 60.105(a)(5) & (e)(4)(i) (12/1/15); and 60.107(d) (6/24/08) 40 CFR 63 Subpart UUU 63.1568(a)(1) (7/13/16), Table 29 Line 1a (12/1/15), (a)(2) (7/13/16), Table 30 Lines 1 & 6 (12/1/15), (a)(4) (7/13/16), (b)(1) (7/13/16), Table 31 Lines 1a & 5 (12/1/15), (c)(1) (7/13/16), Table 34 Line 1a (12/1/15), and Table 35 Lines 1, 5a, & 5b (12/1/15); 63.1570(a) & (c) (12/1/15); 63.1572(a) (12/26/18), Table 40 Lines 5 & 9 (12/1/15), (c) (12/26/18), Table 41 Lines 9 & 10 (12/1/15), & (d) (12/26/18); and 63.1576(d), (f), (g), (h), & (i) (12/26/18)	<u>Sulfur Recovery Units – SO₂</u> <u>Sulfur Recovery Units – HAP Emissions</u> SO ₂ from the sulfur recovery unit shall not exceed 250 ppmvd at 0% excess air based on 12-hour rolling average at all times including startup and shutdown. Alternatively, startup and shutdown purge gases may be sent to a thermal oxidizer or incinerator operated at a minimum hourly average temperature of 1,200 degrees Fahrenheit in the firebox and a minimum hourly average outlet oxygen (O ₂) concentration of 2 volume percent (dry basis).	Install, operate, and maintain a continuous monitoring system to measure SO ₂ emissions and O ₂ for correcting the data for excess air. Collect hourly average SO ₂ (dry basis) and percent excess air data; determine and record each 12-hour rolling average concentration of SO ₂ . Install, operate, and maintain a continuous parameter monitoring systems to measure and record the firebox temperature of each thermal incinerator or oxidizer and the oxygen content (percent, dry basis) in the exhaust vent from the incinerator or oxidizer. The SO ₂ CEMS and O ₂ monitor shall be installed, operated, and maintained in accordance with 40 CFR 60 Appendix B Performance Specification 2 using a span value of 500 ppm SO ₂ and 25% O ₂ and 40 CFR 60 Appendix F Procedure 1. The monitoring system shall be certified using 40 CFR 60 Appendix A Methods 6 or 6C and 3A or 3B. Relative accuracy audits are required annually instead of quarterly. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), conduct all monitoring in continuous operation at all times the source is operating. For any periods for which sulfur dioxide or oxides emissions data are not available, submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.8 SO ₂	OAC 650d Conditions (1), (5), & (6) (6/25/15)	Emissions of sulfur dioxide (SO ₂) from the incinerator stack shall not exceed 250 ppm by volume (dry basis) at zero percent excess air, for any 12-hour period (measured as 12-hour rolling average).	Determine compliance using a certified continuous emission monitoring system (CEMS) for SO ₂ and O ₂ . The CEMS shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60.105, the appropriate specifications of 40 CFR 60 Appendices B and F, NWCAA Section 367 and NWCAA Appendix A. Also, determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 6 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
5.2.9 H ₂ SO ₄	OAC 650d Conditions (3) & (6) (6/25/15)	Emissions of sulfuric acid mist from the SRU shall not exceed 0.45 pounds acid per ton of sulfur produced on an hourly average.	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 8 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
5.2.10 HAP	40 CFR 63 Subpart UUU 63.1569(a)(1)(ii) (11/26/18), Table 36 Line 2 (2/9/05), (c)(1) (11/26/18), & Table 39 Lines 2 & 5 (2/9/05); and 63.1576(d), (g), (h), & (i) (11/26/18)	<u>Sulfur Recovery Unit Bypass Lines – HAP Emissions</u> Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	Visually inspect the seal or closure mechanism at least once every month; and record whether the bypass line valve is maintained in the closed position and whether flow is present in the line. Record and report the time and duration of any bypass.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.11	OAC 650d Conditions (4) & (6) (6/25/15)	The SRU sulfur recovery efficiency shall not be less than 99 percent. The sulfur recovery efficiency shall be calculated as follows: $e = \frac{S_{\text{recovered}} \times 100}{S_{\text{recovered}} + S_{\text{incinerator}}}$ Where: e = sulfur recovery efficiency, % $S_{\text{recovered}}$ = elemental sulfur in pit, lb/hr $S_{\text{incinerator}}$ = sulfur in incinerator stack, lb/hr	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, 6, and 8 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
Fugitive Components in VOC Service [40 CFR 60 General Provisions included in AOP Section 3 apply to this affected facility]			
5.2.12 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.482-8 (11/16/07), 60.485(a) & (b) (5/16/24); and 60.486(a), (b), (c), (e) & (l) (5/16/24)	<u>Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors</u> If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, within 5 days, either monitor using EPA Method 21 or eliminate the visual, audible, olfactory, or other indication of potential leak. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected, except for units with a leak definition of 2,000 ppm. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided under delay of repair in AOP Term 5.2.10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	Instrument monitor using EPA Method 21 as indicated. The instrument used to monitor leaks shall be calibrated before use each day of use. The following calibration gases shall be used: Zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but not less than, 10,000 ppm methane or n-hexane. When a leak is detected, comply with AOP Term 5.2.14. Record in a log in a readily accessible location the information required in 60.486(e). Electronic records reported into EPA's CEDRI database may be maintained in electronic format.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.13 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.482-9 (11/16/07); 60.486(a), (c) & (l) (5/16/24); and 60.487(a), (c), (g), (h) & (i) (5/16/24)	<u>Delay of Repair</u> Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit. Delay is also allowed for equipment isolated from the process and which does not remain in VOC service. Valves: Delay of repair will be allowed if (1) it is demonstrated that purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and (2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device. Delay of repair beyond a process unit shutdown will be allowed if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and supplies had been sufficiently stocked before they were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. Pumps: Delay of repair will be allowed if (1) repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and (2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected. A leaking valve or pump may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly instrument readings are below the leak definition.	When each leak is detected and a delay of repair is utilized, record in a log in a readily accessible location: "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery, the signature of the person whose decision it was that repair could not be effected without a process shutdown, the expected date of successful repair of the leak if a leak is not repaired within 15 days, dates of process unit shutdowns that occur while the equipment is unrepaired, and date of successful repair of the leak. Submit a semiannual report as required in AOP Term 5.2.15. Electronic records reported into EPA's CEDRI database may be maintained in electronic format.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.14 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.486(a), (b) & (c) & (l) (5/16/24)	<u>Maintain Records for Equipment Found Leaking</u> When each leak is detected, attach a weatherproof and readily visible identification, marked with the equipment identification number to the leaking equipment. The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected. Identification on equipment except valves may be removed after it has been repaired.	When each leak is detected, record in a log in a readily accessible location: the instrument and operator identification numbers and equipment identification number, date of leak detection and each attempt at repair, repair methods applied for each attempt, instrument leak reading, and date of successful repair of leak. Electronic records reported into EPA's CEDRI database may be maintained in electronic format.
5.2.15 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.487 (a), (c), (g), (h) & (i) (5/16/24)	<u>Semiannual Report</u> Submit semiannual reports to the NWCAA beginning 6 months after the initial startup date; after July 15, 2025, or once the report template for this subpart is available on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for 1 year, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart.	The semiannual reports shall include the following information: (1) Process unit identification. (2) For each month during the semiannual reporting period, the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. (3) Dates of process unit shutdowns which occurred within the semiannual reporting period. (4) Revisions to items in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.

SRU Auxiliary Boiler [40 CFR 63 General Provisions included in AOP Section 3 apply to this affected facility]			
5.2.16 HAP	40 CFR 63 Subpart DDDDD 63.7500(a), (e), Table 3 Line 2, & (f); 63.7505(a); 63.7510(g); 63.7515(d) & (g); 63.7530(f); 63.7540(a) & (b); 63.7545(a) (b), & (e) (10/6/22); 63.7550(a), (b), Table 9, (c), & (h)(3) (11/20/15); 63.7555(a) (10/6/22)	<u>Boilers & Process Heaters</u> Conduct a tune-up of the boiler or process heater every 2 years. Tune-ups shall be conducted no more than 25 months after the previous tune-up. The inspection shall include: inspect the burner, clean and replace components as necessary; inspect the flame pattern, adjust as necessary; inspect air-to-fuel ratio system control, as applicable, to ensure it is correctly calibrated and functioning properly; optimize total emissions of CO; measure CO concentrations before and after adjustments are made; and maintain on-site an annual report including the items in 63.7540(a)(10)(vi).	Submit a compliance report every two calendar years. Reports are due, in accordance with AOP Term 4.1, 30 days after the close of the period that the reports cover. Submit copy of reports electronically to EPA via CEDRI using the appropriate electronic report for this subpart. (https://www.cdx.epa.gov) The compliance report shall include, among other things (see 63.7550(c)), the date of the most recent tune-up and burner inspection; if applicable, a statement that no deviations occurred; and be certified by the Responsible Official.

Table 5-3 Gasoline Dispensing Facility

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
Gasoline Dispensing Facility (GDF) [40 CFR 63 General Provisions included in AOP Section 3 apply to this affected facility]			
5.3.1 VOC	NWCAA 580.6(E) (7/10/25) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Vapor-Tight Tank</u> All gasoline storage tanks at gasoline dispensing facilities shall be maintained in a vapor-tight condition and in good working order. This includes, but is not limited to, caps, adaptors, and drain valves.	<i>Directly Enforceable:</i> At each gasoline delivery, inspect to make sure fill and recovery caps are on, PV cap is not damaged, poppet is operating properly, dispensing hoses are not cracked or excessively worn, and no visual leaks are occurring. Record results of each inspection, date, person conducting inspection, and date and type of any corrective action taken in a checklist.
5.3.2 VOC	WAC 173-491-040(1)(c) (1/23/98) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Fixed-roof Gasoline Storage Tanks</u> All openings not related to safety are to be sealed with suitable closures.	

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.3.3 VOC	40 CFR 63 Subpart CCCCCC 63.11115 (1/24/11)	At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Determination of whether such operation and maintenance procedures are being used will be based on information available to NWCAA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
5.3.4 VOC	40 CFR 63 Subpart CCCCCC 63.11116 (1/24/11)	<u>GDF with Monthly Throughput Less Than 10,000 Gallons of Gasoline</u> Gasoline must not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (1) Minimize gasoline spills; (2) Clean up spills as expeditiously as practicable; (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirements of 40 CFR 59 Subpart F are considered acceptable; and (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.	Records must be available within 24 hours of a request by NWCAA to document gasoline throughput.

SECTION 6 INAPPLICABLE REQUIREMENTS

The regulations identified in this section do not apply to Chemtrade as of the date of permit issuance. The basis for each determination is specified in the Reason(s) for Inapplicability column.

Citation	Title or Applicability	Reason(s) for Inapplicability
NWCAA Regulation		
NWCAA Sections 320 – 321, 324.1	General Requirements for Registration	The registration requirements do not apply to sources or emission units subject to Air Operating Permits.
NWCAA Section 458	Incinerators – Wood Waste Burners	Facility does not have this source category.
NWCAA Section 460	Weight/Heat Standard-Emission of Sulfur Compounds	Facility is not a petroleum refinery under NWCAA regulation.
NWCAA Section 560	Storage of Organic Liquid	Facility does not have this source category.
NWCAA Section 580 (except 580.6 & 580.7)	Volatile Organic Compound Control	Facility does not have this source category.
State of Washington Regulations		
WAC 173-400-100 through -104	Registration	The registration requirements do not apply to sources or emission units subject to Air Operating Permits.
Chapter 173-434 WAC	Solid Waste Incineration	Facility does not have this source category.
Federal Regulations		
Standard of Performance for New Stationary Sources (NSPS)		
40 CFR 60 Subpart Cd	Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units	Facility does not operate any of the designated facilities.
40 CFR 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Da	Standards of Performance for Electric Utility Steam Generating Units	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Facility does not operate any of the affected sources.

Citation	Title or Applicability	Reason(s) for Inapplicability
40 CFR 60 Subpart Ja	Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	Facility does not operate any of the affected sources that have been constructed, reconstructed, or modified after May 14, 2007.
40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	Facility does not operate any of the affected sources. Spent acid does not qualify as a "petroleum liquid".
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Facility does not operate any of the affected sources. Spent acid does not qualify as a "petroleum liquid".
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After 7/23/84	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Kc	Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023)	Facility does not operate any of the affected sources.
40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	Facility does not operate any of the affected sources.

Citation	Title or Applicability	Reason(s) for Inapplicability
40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry	Facility does not operate any of the affected sources.
40 CFR 60 Subpart GGGa	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	Facility does not operate any of the affected sources that have been constructed, reconstructed, or modified after November 7, 2006.
40 CFR 60 Subpart QQQ	Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems	Facility does not operate any of the affected sources.
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Facility does not operate any subject stationary compression ignition internal combustion engines.
40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Facility does not operate any subject stationary spark ignition internal combustion engines.
National Emission Standards for Hazardous Air Pollutants (NESHAPs)		
40 CFR 61 Subpart FF	National Emission Standard for Benzene Waste Operations	Facility does not handle or process oil or hydrocarbon that contains benzene.
40 CFR 63 Subpart Q	Industrial Process Cooling Towers	Did not use chromium-based treatment chemicals as of the specified date.
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	Facility does not maintain any process streams in HAP service.
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines	Facility does not operate any subject stationary reciprocating internal combustion engines.



Serving Island, San Juan, Skagit and Whatcom Counties

Air Operating Permit—DRAFT

AOP 009R3

Chemtrade Solutions LLC

Anacortes, Washington

April 10, 2026



PERMIT INFORMATION

Chemtrade Solutions LLC, Anacortes Works 8579 North Texas Road, Anacortes, Washington

SIC: 2819
NAICS: 325188
EPA AFS: 53-057-00002

NWCAA ID: 1010

Responsible Corporate Official

Howard Powell, Regional Manufacturing
Manager
8579 North Texas Road
Anacortes, WA 98221
(360) 293-2171

Corporate Inspection Contact

Ricky Gaethle, Plant Manager
8579 North Texas Road
Anacortes, WA 98221
(360) 293-2171

Northwest Clean Air Agency

1600 South Second Street
Mount Vernon, Washington 98273-5202
(360) 428-1617

Prepared by:

Crystal Rau
Air Quality Scientist
(360) 419-6771

Air Operating Permit Number: 009R3

Issued: TBD 2026

Expires: Issue Date +5 years

Renewal Application Due: Issue Date +4 years

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Appendix A: CAM Plan for Sulfuric Acid and Visible Emissions from the Sulfuric Acid Plant

1 INTRODUCTION

Chemtrade Solutions LLC operates the Anacortes Works Facility (Chemtrade, permittee, or the facility), located near Anacortes, WA. The facility is required to obtain an Air Operating Permit (AOP or Permit) pursuant to Title V of the 1990 Federal Clean Air Act and chapter 173-401 of the Washington Administrative Code (WAC) because it has the potential to emit greater than 100 tons of sulfur dioxide (SO₂) per year among other reasons. See Section 3.2 for a discussion of the applicability of federal programs to the facility. As a sulfuric acid plant and a sulfur recovery plant are both on the list in 40 CFR 52.21(b)(1)(i)(a), the Chemtrade facility is major for the Prevention of Significant Deterioration (PSD) program for SO₂ as well with a potential to emit greater than 100 tons per year.

The purpose of this Statement of Basis is to set forth the legal and factual basis for the AOP conditions to provide background information to facilitate review of the permit by interested parties. The Statement of Basis is not a legally enforceable document.

Northwest Clean Air Agency (NWCAA or Agency) issued the original AOP on March 18, 2002. NWCAA issued the first AOP renewal (AOP 009R1) on April 14, 2009 which was modified on December 20, 2010 (AOP 009R1M1). The NWCAA issued the second AOP renewal on April 9, 2021. Chemtrade submitted a timely complete renewal on April 9, 2025. See Statement of Basis (SofB) Section 1.1 for the changes made to the AOP during this renewal.

1.1 Changes Made During the Third Renewal

NWCAA received the application for the third AOP renewal on April 9, 2025. The following revisions have been made to the permit during this renewal.

- Updated the source contact information and general permit information on the Permit Information Page of both Statement of Basis and Permit.
- Updated each Section header to match NWCAA template.
- Updated Section 2 and Section 3 Standard Terms and Conditions to match NWCAA template.
- Updated citation dates throughout to match NWCAA's most recent adopt-by-reference in Section 104.
- Revised AOP Section 1 to reflect replacement of 3.348 MMBtu/hr natural gas-fired boiler SRU auxiliary boiler with 9.9 MMBtu/hr natural gas-fired boiler; and to list Sulfuric Acid Plant Abatement Units 10 & 11 Process Heaters to reflect 6.61 MMBtu/hr higher heating value; previous table listed lower heating value.
- Added gap-filling (WAC 173-401-615(1)(b) & (c) citations or sufficiency monitoring citations (WAC 173-401-630(1)) to all terms that have been enhanced.
- Added Compliance Assurance Monitoring regulatory citations for sulfuric acid (mist) and visible emissions requirements for the Sulfuric Acid Plant.
- Updated SRU Fugitive Components in VOC service to address retention of records reported in EPA's CEDRI in electronic format and submission of semiannual reports using the appropriate electronic template on through the CEDRI website.
- Moved from Section 3 to Section 5 Refinery MACT 2 general duty, visible emission (VE) & non-VE standards apply at all times.
- Updated SRU Auxiliary Boiler tune-ups and compliance reports to every two years to reflect Boiler MACT frequency based on boiler rating.

- Added 40 CFR 60 Subpart Kc to Section 6 as an Inapplicable Requirement.
- Added rental maintenance heaters (less than 1 MMBtu/hr) for temporary use on an as-needed basis to the list of Insignificant Emission Units in Table 10 of the Statement of Basis, as they meet the criteria under WAC 173-401-533(2)(g).

2 FACILITY DESCRIPTION

2.1 General Facility Description

The Chemtrade facility (Anacortes Works) comprises a sulfuric acid plant and a sulfur recovery unit. It is located on March Point, a heavy industrial area approximately 2 miles southeast of Anacortes, WA, and 11 miles west of Mount Vernon, WA in Skagit County. March Point is bordered on the west by Fidalgo Bay and on the east by Padilla Bay. The Chemtrade plant is located between the Tesoro Refining & Marketing Company LLC (Tesoro Anacortes Refinery) facility to the north and the HollyFrontier Sinclair Puget Sound Refinery to the southeast. The nearest Class I area is Olympic National Park, which is located 43 miles to the west. A location map is shown in Figure 1.

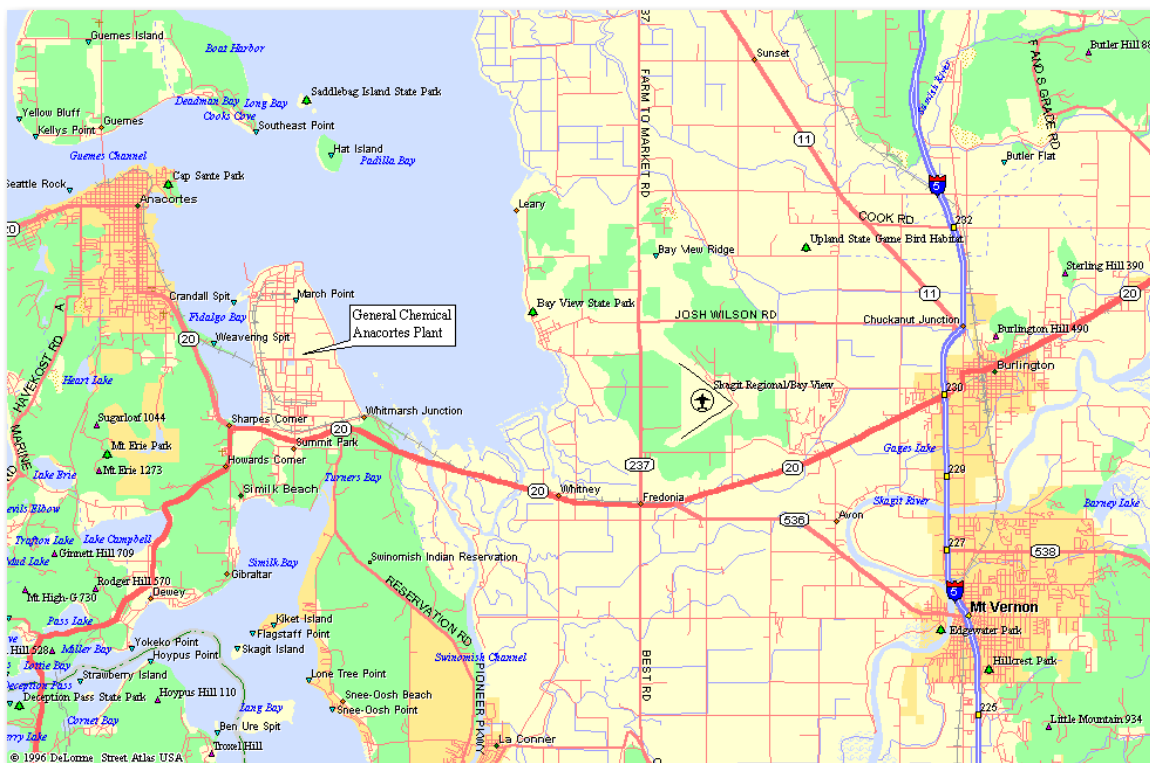


Figure 1 Location of Chemtrade Solutions LLC

The facility consists of three sulfuric acid production units (Sulfuric Acid Plant Units (SPU) 1, 2 and 3) with two abatement units (Abatement Units 10 and 11) and a Claus sulfur recovery unit (SRU) with a Shell Claus Off-gas Treating (SCOT) unit, Tail Gas Treatment Unit (TGTU), and incinerator. The Sulfuric Acid Plant units are owned by Chemtrade while the SRU and the land upon which the SRU is situated are owned by Tesoro. Chemtrade operates the entire facility.

Chemtrade receives spent sulfuric acid as a raw material primarily from the Tesoro Anacortes Refinery's and the HollyFrontier Sinclair Puget Sound Refinery's (PSR) alkylation units. Tesoro Anacortes Refinery also sends its refinery acid gas for treatment in the Chemtrade SRU. Chemtrade processes these materials into 99 percent sulfuric acid, 93 percent sulfuric acid, 30 percent sulfuric acid, and elemental sulfur. A large portion of the product acid is sold to nearby refineries where it is returned to the process as alkylation catalyst. The elemental sulfur is loaded into trucks and transported offsite for ultimate use.

in other industries, including fertilizer manufacturing. Natural gas is used for any supplemental fuel firing. A plot plan is included in Figure 2.

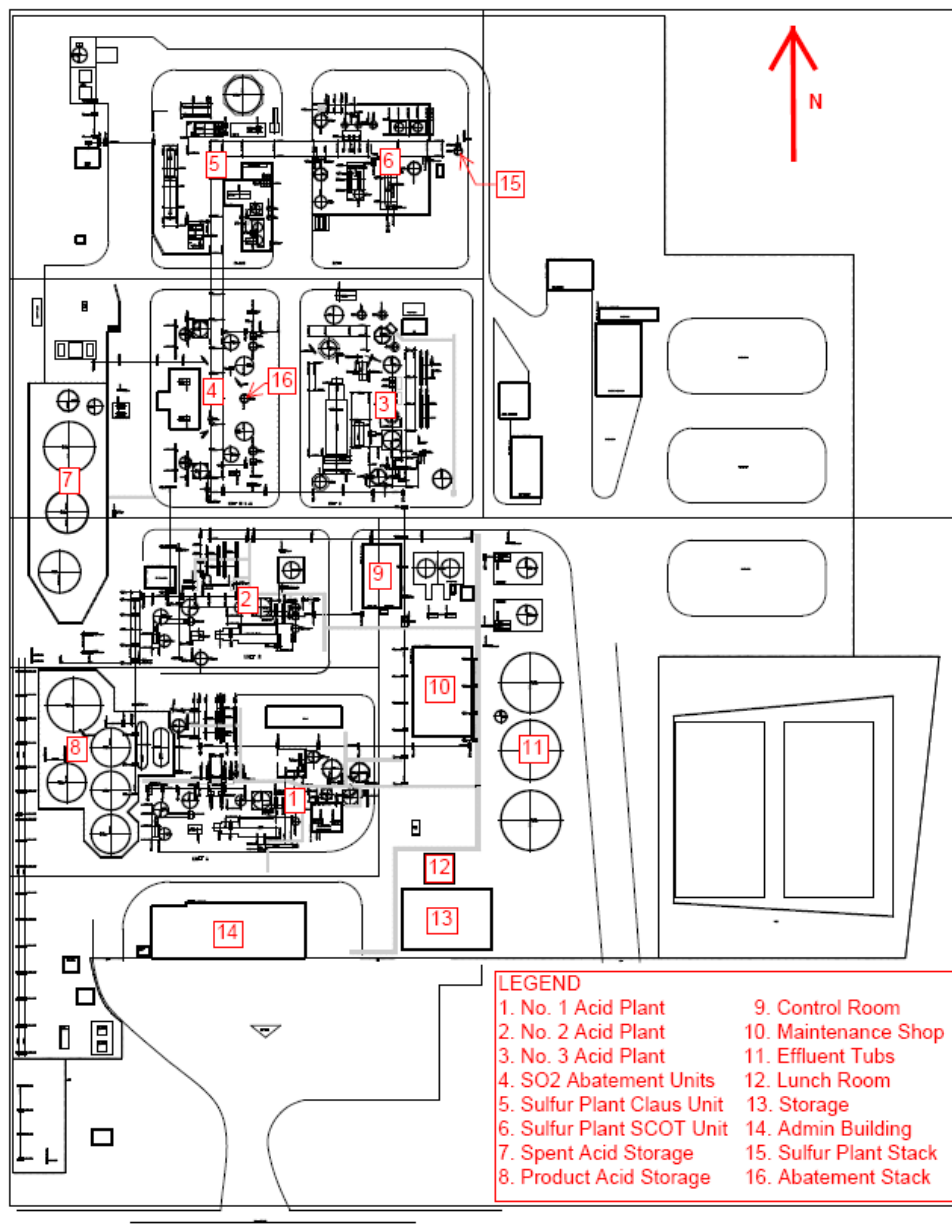


Figure 2 Chemtrade Plot Plan

Note that wastewater generated at the Anacortes Works is piped to the oily water sewer system at HollyFrontier Sinclair PSR. This water is treated in the PSR effluent plant and then released to Fidalgo Bay.

Chemtrade operates one 300-gallon above-ground fixed-roof gasoline storage tank used to fuel facility vehicles (referred to as a Gasoline Dispensing Facility (GDF)).

2.2 Emission Unit Description

Industrialization of March Point began in 1955 with the opening of the Anacortes Refinery, followed by the Puget Sound Refinery opening in 1958. The first sulfuric acid unit (SPU1) at the facility, then Allied Chemical Corporation, was built in 1957 in response to the availability of refinery wastes as raw materials. A second sulfuric acid unit (SPU2) was added in 1964. The two abatement units were added in 1971. The third sulfuric acid unit (SPU3) was added in 1975. On April 27, 1981, Allied Chemical Corporation (an indirectly wholly-owned subsidiary of Allied-Signal, Inc.) changed its name to Allied Corporation; then on May 21, 1986 ownership transferred to General Chemical Corporation of Parsippany, New Jersey. The sulfur recovery unit (owned by Tesoro) was constructed in 1986. On January 27, 2014, Chemtrade Solutions LLC took ownership of the facility. For the purposes of this Air Operating Permit, the facility has been divided into two primary process areas: the sulfuric acid plant and the sulfur recovery unit.

Sulfuric Acid Plant

The Sulfuric Acid Plant is made up of three production trains (SPUs 1, 2, and 3). The sulfuric acid trains vent to two abatement processes (Abatement Units 10 and 11), which treat the exhaust gases prior to release to the atmosphere.

Figure 3 and Figure 4 are process flow diagrams illustrating the SPU1 & 2 and SPU3, respectively. The sulfuric acid trains have a combined maximum production capacity of 566 tons per day (tpd) of acid (100% basis). SPU1 and SPU2 each have a maximum production capacity of 143 tpd of acid (100% basis) and SPU3, 280 tpd of acid (100% basis).

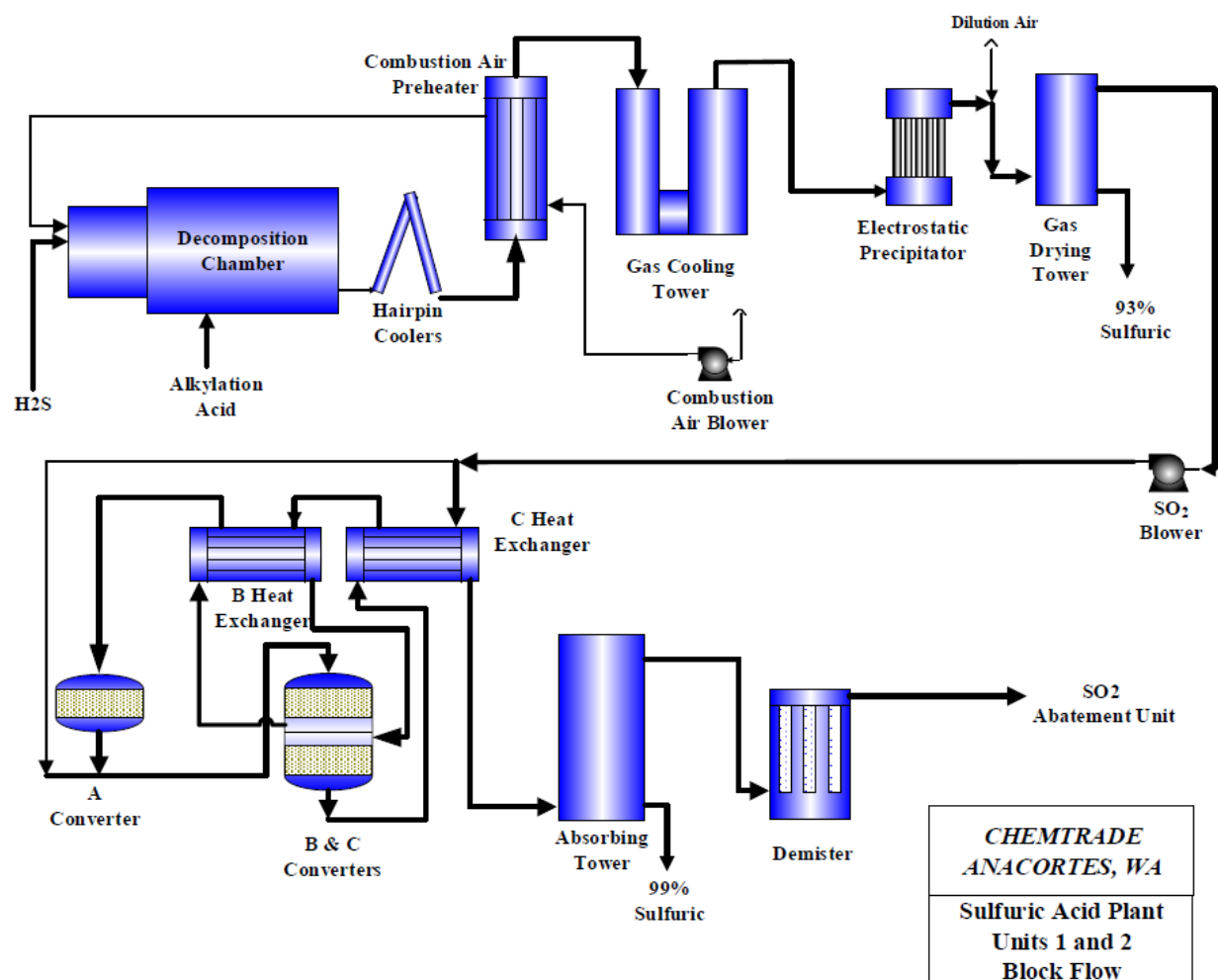


Figure 3 Sulfuric Acid Plant Units 1 and 2 Flow Diagram

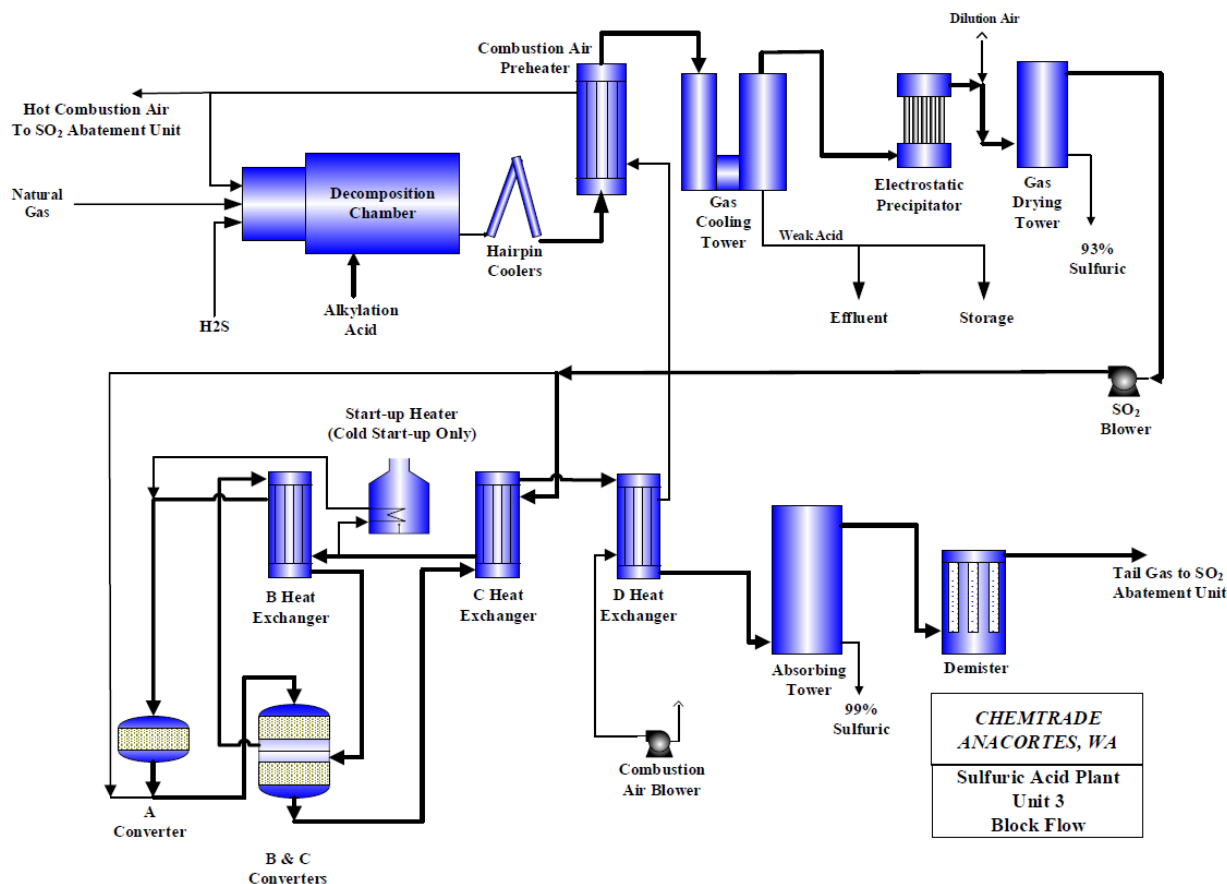


Figure 4 Sulfuric Acid Plant Unit 3 Flow Diagram

Each of the three sulfuric acid trains consists of the following equipment: decomposition chamber, gas cooling tower, electrostatic precipitator, gas drying tower, SO₂ blower, catalytic converter, absorption tower, and mist eliminator. SPUs 1 and 2 use a small portable natural-gas direct-fired in-line catalyst preheater (1-3 MMBtu/hr) to heat the catalyst during start up.¹ The SPU3 train includes a 9.2 MMBtu/hr natural gas-fired startup heater.

The facility is a spent acid regeneration (SAR) type sulfuric acid manufacturing facility that uses the contact process. The process is based on the catalytic conversion of SO₂ to SO₃ and the subsequent hydration of SO₃ to sulfuric acid.

Refinery acid gas and spent acid are subjected to high temperatures in the decomposition chambers where they are broken down into SO₂ and SO₃ gases. The hot acid gas is cooled and purified in a three-step process to eliminate acid mist, particulate matter, and water. The purified gas is then reheated to initiate the conversion reaction. The converter vessel holds catalyst that facilitates SO₂ in the stream to react with O₂, forming SO₃. The SO₃-rich stream then passes to the absorption tower where 99% sulfuric acid is produced.

¹ The portable in-line catalyst preheater is used to preheat the catalyst during start up moving between SPU1 and SPU2 as needed. While air quality standards generally do not apply to portable or temporary sources, the portable in-line catalyst preheater has been used at Chemtrade for years in the same service so, pursuant to NWCAA Section 200 (definition of Temporary Source), is considered part of the facility stationary source.

Particulate matter is generated from the decomposition of the metals, hydrocarbons, and other solid compounds in spent acid. The metals and ash are removed primarily at the gas cooling tower and the rest at the wet electrostatic precipitator (WESP). The gas stream also flows through a series of candle filters and mist pads which would remove potential material, although Chemtrade has no evidence of any remaining particulate being collected in the product acid.

Tail gas exiting the sulfuric acid train contains residual SO_3 and acid mist. The stream is further treated in the abatement units in order to meet emission requirements and to improve the overall efficiency of the plant. Each of the abatement units consists of a natural gas-fired heater (5.75 MMBtu/hr), a two-stage catalytic converter, and an absorption tower. Figure 5 is a process flow diagram of the Chemtrade abatement units.

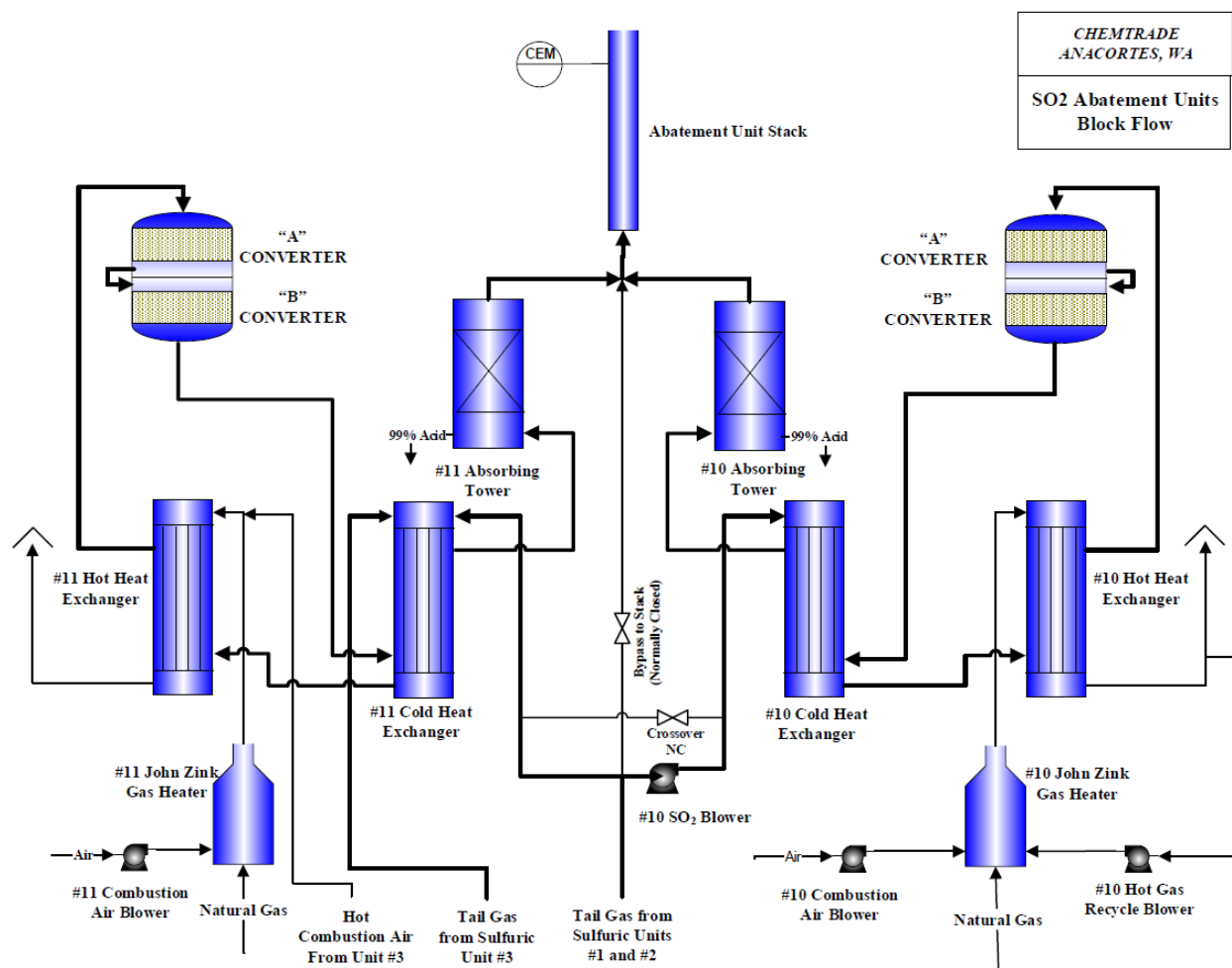


Figure 5 Abatement Unit Flow Diagram

Tail gas is heated prior to entering the catalytic converter, where SO_2 is converted to SO_3 . The gas stream is cooled and then directed to the secondary absorption unit where SO_3 is absorbed by a countercurrent stream of 99 percent sulfuric acid. Gas from the absorption tower passes through a mist eliminator prior to exhausting through the common stack for Abatement Units 10 and 11.

A continuous emission monitoring system (CEMS) and a data acquisition and handling system (DAHS) are used to measure and record SO₂ emissions from the Sulfuric Acid Plant common stack. See SofB Section 3.5 for further discussion of the CEMS.

Sulfur Recovery Unit

The Sulfur Recovery Unit (SRU) uses the Claus process to recover and produce elemental sulfur from acid gas from the Tesoro Anacortes Refinery. Following the Claus unit is the Shell Claus Off-gas Treating (SCOT) process that reduces residual H₂S emissions. The SRU has the capacity to produce up to 50.6 tons of elemental sulfur per day. A process flow diagram is shown in Figure 6.

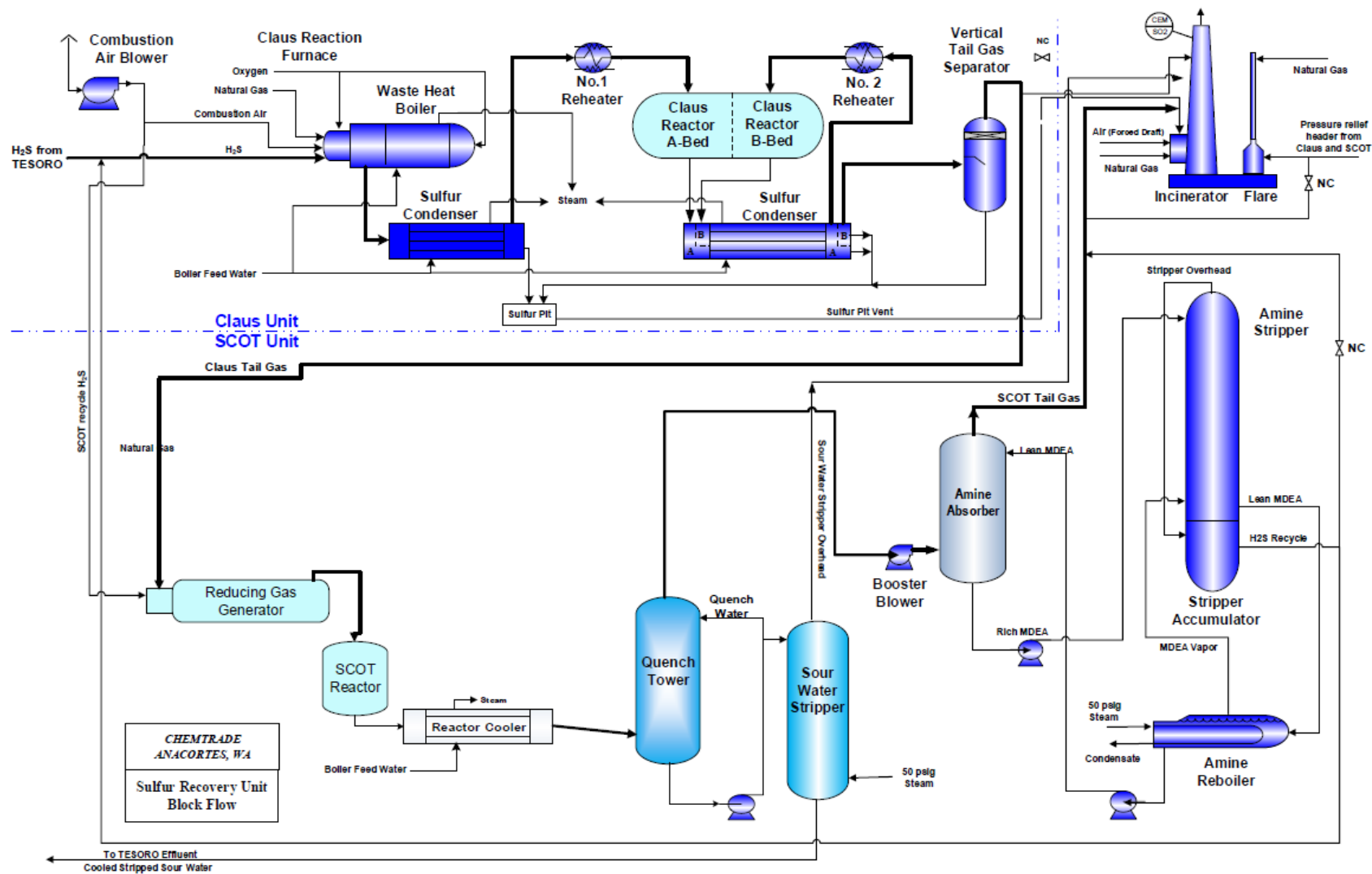


Figure 6 Sulfur Recovery Unit Flow Diagram

Acid gas from the refinery contains primarily H_2S and a minor amount of hydrocarbons. The incoming acid gas is combined with recycled gas from the SCOT process, air, and supplemental oxygen and fed into the Claus furnace with integral waste heat boiler. The Claus furnace converts the H_2S to SO_2 and water vapor. The gas is then passed through a series of reactors and condensers (Condensers A/B and C) and catalytic reactors (A-Reactor and B-Reactor), converting the sulfur dioxide to elemental sulfur and steam. Condensed elemental sulfur drains to the sulfur pit for collection and storage. Non-condensable gases from the Claus train are sent to the SCOT abatement unit for additional treatment.

Claus tailgas enters the SCOT unit through an in-line heater and is mixed with reducing gas. The stream then enters the fixed bed catalyst reactor (SCOT reactor) where sulfur compounds are converted back to H_2S . The gas is cooled with water in a quench tower. From the quench tower, the stream enters a countercurrent flow absorbing tower (amine absorber) contacting a 25-30% methyl diethanolamine (MDEA)/water solution to recover the H_2S . Overhead gas from the absorber (which contains small amounts of residual H_2S) is routed to the incinerator, where it is combusted to SO_2 prior to discharge to the atmosphere. H_2S -rich amine solvent from the bottom of the amine absorber is stripped in the amine stripper, recovering the H_2S back to the front end of the Claus train.

The Sulfur Recovery Unit is designed to handle up to 55 short tons/day of hydrogen sulfide. This is equivalent to 2,400 SCFM of acid gas with a H_2S content of 75%. The SRU incinerator stack is designed for a maximum natural gas heat input of 4.5 MMBtu/hr from the burner(s). This rate of heat release ensures that any H_2S in the process gas exiting the SCOT unit is combusted to SO_2 . The incinerator stack is 2'-6" in outside diameter and 100'-1" in height.

The Sulfur Recovery Unit is also equipped with an emergency flare system. The flare is used for emergency situations to vent gas from the incinerator combustion zone to prevent explosive conditions. The bypass line to the flare is sealed with a manual lock system (i.e., carseal). The flare stack is 1'-0" in diameter and is designed to combust the acid gas stream to SO_2 . Design combustion conditions are an operating temperature of 1,400°F and a residence time in the combustion zone of at least 0.6 seconds.

In 2025, Chemtrade replaced their small (3.348 MMBtu/hr) natural gas-fired auxiliary boiler with a new 9.9 MMBtu/hr natural gas boiler (B-501) to supply heat to the Claus process during cold starts and low process rates. This boiler is equipped with a dedicated exhaust stack.

A CEMS and a computerized data acquisition and handling system (DAHS) are used to measure and record SO_2 emissions and oxygen concentrations from the incinerator stack. See SofB Section 3.5 for further discussion of the CEMS.

2.3 Facility Emissions Inventory

Each year all major sources are required to submit an air pollution emissions inventory upon request of NWCAA. This report includes criteria air pollutants, hazardous air pollutants (HAP), and greenhouse gas (GHG) emissions. NWCAA publishes an emissions inventory report each year that includes emissions summaries for all of the large industrial facilities located within Whatcom, Skagit, San Juan and Island counties; emissions from Chemtrade are also included. Table 1 summarizes the last five years of available emissions data for the facility.

Table 1 Annual Actual Emissions from the Anacortes Works

Pollutant	Calendar Year Emissions (tons)				
	2020	2021	2022	2023	2024
PM ₁₀	0	1	1	1	1
SO ₂	91	144	168	186	139
NO _x	1	6	4	5	5
VOC	1	0	0	1	1
CO	1	7	6	8	8
H ₂ SO ₄ ²	1.4	1.6	6.9	3.9	3.5
GHG (CO ₂ e)	12,261	9,525	8,303	12,335	11,683

2.4 Permit History

NWCAA Order of Approval; Issued September 3, 1971

On September 1, 1971, Allied Chemical submitted a "Notice of Construction and Application for Approval" (NOC application) to NWCAA requesting approval to install two mist eliminators - one downstream of each of the two existing sulfuric acid units. The Order of Approval was issued on September 3, 1971. This permit is considered "narrative only" because it does not contain any specific conditions that are considered specifically applicable requirements under Title V and, therefore, is not included in the AOP.

NWCAA Order of Approval; Issued February 25, 1974

On July 2, 1973, Allied Chemical submitted NOC applications to NWCAA. One application requested approval for a third sulfuric acid unit. The second application requested approval for two sulfur dioxide abatement units. The Order of Approval issued on February 25, 1974 permitted both of these projects to proceed. Preliminary construction was allowed prior to issuance of the Approval Order. Though construction began in late 1973, the third sulfuric acid unit was not completed and brought online until April 2, 1975. As a result of this project, the entire Sulfuric Acid Plant became subject to 40 CFR 60 Subpart H – New Source Performance Standards (NSPS) for Sulfuric Acid Plants. This permit is considered "narrative only" because it does not contain any specific conditions that are considered specifically applicable requirements under Title V and, therefore, is not included in the AOP.

NWCAA Order of Approval to Construct (OAC) 307; Issued February 20, 1986

On December 5, 1985, Allied Corporation submitted an NOC application to NWCAA for the installation of a sulfur recovery unit. This unit included a single Claus process train with a SCOT process, an incinerator, and auxiliary equipment, including a start-up boiler, steam vent, and sulfur storage. The Sulfur Recovery Unit was subject to 40 CFR 60 Subpart J – NSPS for Petroleum Refineries upon startup.

OAC 307a was issued May 14, 2007 to remove boilerplate language and eliminate duplicate grain loading and visible emission requirements. Requirements in OAC 307a have been superseded by issuance of OAC 650d on June 25, 2015.

² Toxic air pollutant (TAP), per Chapter 173-460 Washington Administrative Code (WAC)

NWCAA OAC 421; Issued May 11, 1993

On February 11, 1993, General Chemical submitted an NOC application to NWCAA as required by the letter from NWCAA dated November 2, 1992. This NOC requested approval to increase sulfuric acid production at the facility through the use of a new blower on SPU3 and enhanced catalysts in the converters. Requirements in OAC 421 have been superseded by the issuance of OAC 458c on December 13, 2001.

Ecology PSD Approval 94-01; Issued August 24, 1994

In late 1993, General Chemical proposed to increase production at SPU3 by increasing the size of the blower fan on the unit, enlarging the catalytic converters, and adding a new heat exchanger. This project qualified as a major modification, and was therefore evaluated and permitted under the Prevention of Significant Deterioration (PSD) rules. Washington State Department of Ecology (Ecology) PSD Approval 91-04 was issued on August 24, 1994.

PSD Approval 91-04 Amendment 1 was issued January 14, 1998 to remove one-time requirements for emission testing, made interim emission limits permanent, and updated the method specified for determining compliance with the visible emission standard to 40 CFR 60 Appendix A Method 9 (EPA Method 9).

NWCAA OAC 458; Issued August 29, 1994

On October 18, 1993, General Chemical submitted an NOC application to NWCAA requesting approval for the same plant expansion project covered by PSD 94-01. OAC 458 was issued on August 29, 1994 and essentially mirrors the requirements of the PSD permit. This OAC has been revised on four occasions. A summary of each revision is listed below:

Revision a issued April 23, 1998: Deleted throughput and production limits, removed unenforceable Condition 1, added annual performance testing for SO₂ and H₂SO₄, added recordkeeping and adjusted reporting to match NSPS and PSD.

Revision b issued June 25, 2001: Adjusted language of visible emission requirement to match PSD, updated contact names, deleted paragraph about fees.

Revision c issued December 13, 2001: Updated facility address, added superseded permit term clarifying that OAC 458 superseded all requirements found in OAC 421, clarified and updated language to match PSD, deleted duplicate requirements.

Revision d issued June 25, 2015: Deleted requirements duplicated in PSD, deleted completed tasks and duplicative requirements, updated to current OAC format and language.

NWCAA OAC 650; Issued April 23, 1998

On February 12, 1998, General Chemical submitted an NOC application to NWCAA requesting approval to install liquid oxygen combustion augmentation equipment to the sulfur recovery unit. This installation would result in an increase in the processing capacity of the unit from 22 short tons (2000 lb/ton) of H₂S per day to 55 short tons per day. On February 23, 1998, Ecology concurred with a NWCAA interpretation that the project was not subject to review under the PSD regulations. This OAC has been revised on four occasions.

A summary of each revision is listed below:

Revision a issued July 13, 2000: Increased acid mist mass emission limit to account for increased emissions at higher permitted production rate and restated Condition 9 to require a single series of annual performance tests at a minimum production rate of 25 tons per day (50% of the current limit of 50 tons per day) using either air or oxygen as a combustion gas.

Revision b issued June 25, 2001: Updated compliance demonstration method for visible emissions to EPA Method 9.

Revision c issued December 13, 2001: (Incorrectly) removed reference to NSPS Subpart GGG found in version OAC 650b.

Revisions d issued June 25, 2015: Combined OAC 307a into OAC 650d. Deleted overlapping, duplicative, and completed requirements, and included applicability of NSPS Subpart GGG, MACT Subpart UUU, and MACT Subpart DDDDD.

NWCAA OAC 880; Issued July 22, 2004

The facility filed an NOC application on December 12, 2003 for approval to construct a 7.7 MMBtu/hr natural gas fired heater for facilitation of startups on acid plant 3 without excess emissions. General Chemical actually installed a 9.2 MMBtu/hr heater instead of the 7.7 MMBtu/hr unit. The startup heater began operation on November 20, 2005 successfully eliminating excess emissions during cold startups of the unit. The heater is operated normally only during startup and is limited to less than 1,000 hours of operation in a 12-month operating period. This OAC has been revised on three occasions.

A summary of each revision is listed below:

Revision a issued February 2, 2009: Allowed an exemption to the 1,000 hour per any 12-month period operating limit up to 5,000 hours for calendar year 2009 during which the SPU3 natural gas-fired heater would be used for acid plant startup and also for additional heat to decompose spent acid when the quantity of H₂S feed drops below the minimum amount required for optimum conversion temperatures.

Revision b issued July 8, 2010: Allowed additional operating hours for the SPU3 natural gas-fired heater in excess of the 1,000 operating hour limit for calendar year 2010 and changed the visible emission compliance demonstration to EPA Method 9.

Revision c issued June 25, 2015: Removed allowance for 2010 additional hours of operation for SPU3 natural gas-fired heater and modified language to match current usage.

2.5 Periodic Reports

Chemtrade has periodic reporting requirements from various orders and regulations. Reported elements provide a valuable tool indicating the facility's compliance status with regard to an applicable emission or operational limit. In addition to these periodic reports, the facility has specific action-based notifications and on-site recordkeeping requirements. Note that, similar to all recordkeeping, the data supporting the reported information must be maintained for at least 5 years from its date of generation.

Generally, reports are due 30 days after the close of the period that the report covers. Also, reporting periods are on a calendar basis: monthly reports cover a calendar month, quarterly reports cover a calendar quarter, six-month reports cover January through June and July through December, and annual reports cover a calendar year.

Monthly Reports: The monthly reports include a wide range of data collected during the month that are required to be submitted monthly by various permits, orders and regulations. A large part of the monthly report comprises continuous emission monitoring system (CEMS) performance data which provides information about the duration and nature of CEMS downtime, changes made to the CEMS, total operating time and dates of CEMS audits or certifications. Another significant element of monthly reports is the disclosure of deviations from required monitoring and exceedance of emission limits.

Quarterly and Semiannual Reports: Chemtrade is required to submit semiannual reports under 40 CFR 63 Subpart UUU which should address any compliance exceptions to the requirements of the rules. Leak detection and repair (LDAR) programs also require submittal of semiannual reports that summarize the number of leaking components found and the number not repaired in a timely manner, an explanation as to the reason for any delay of repair, any process unit shutdowns, and any revisions to the program since the initial report.

All monitoring reports required by the AOP must be certified by a responsible official as to their truth, accuracy and completeness. Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only be submitted in a semiannual report that specifically identifies all documents subject to certification. .

Annual Reports: 40 CFR 63 Subpart DDDDD requires submittal of an annual compliance report that summarizes tune-ups performed on subject boilers and heaters and post-tune-up combustion analysis.

Reports required by federal programs, such as NSPS or NESHAP, are frequently required to be submitted electronically through the EPA's CEDRI electronic reporting system (www.cdx.epa.gov).

A compliance certification is required to be submitted annually, listing each term of the permit, the facility's compliance status, whether compliance was continuous or intermittent, and the methods used for determining compliance status.

2.6 Performance Testing

Each year, stack tests at emission units are performed to determine compliance with emission limits and standards found in NWCAA-issued Orders of Approval to Construct, Ecology PSD permits, and as part of New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements. Table 2 contains information on the tests performed during the last air operating permit term.

Table 2 Performance Test Summary

Sulfuric Acid Plant (SAP)				
Date	Pollutant	Limit	Result	Frequency
9/18/24	SO ₂	4 lb/ton acid produced	Pass	Annually
		59.9 lb/hr	Pass	
		315 ppmvd	Pass	
		1,000 ppmvd	Pass	
	SO ₃ /H ₂ SO ₄	0.15 lb/ton acid produced	Pass	Annually

		0.105 lb/ton acid produced	Pass	
		1.5E-06 lb/dscf	Pass	
8/16/23	SO ₂	4 lb/ton acid produced	Pass	Annually
		59.9 lb/hr	Pass	
		315 ppmvd	Pass	
		1,000 ppmvd	Pass	
	SO ₃ /H ₂ SO ₄	0.15 lb/ton acid produced	Pass	Annually
		0.105 lb/ton acid produced	Pass	
		1.5E-06 lb/dscf	Pass	
9/8/22	SO ₂	4 lb/ton acid produced	Pass	Annually
		59.9 lb/hr	Pass	
		315 ppmvd	Pass	
		1,000 ppmvd	Pass	
	SO ₃ /H ₂ SO ₄	0.15 lb/ton acid produced	Pass	Annually
		0.105 lb/ton acid produced	Pass	
		1.5E-06 lb/dscf	Pass	
8/17/21	SO ₂	4 lb/ton acid produced	Pass	Annually
		59.9 lb/hr	Pass	
		315 ppmvd	Pass	
		1,000 ppmvd	Pass	
	SO ₃ /H ₂ SO ₄	0.15 lb/ton acid produced	Pass	Annually
		0.105 lb/ton acid produced	Pass	
		1.5E-06 lb/dscf	Pass	
Sulfur Recovery Unit (SRU) SCOT Incinerator				
Date	Pollutant	Limit	Result	Frequency
9/19/24	SO ₂	250 ppmvd @ 0% O ₂ , 12-hr rolling average	Pass	Annually
		1,000 ppmvd	Pass	
		9.2 lb/hr	Pass	
		99.0% Efficiency	Pass	
	SO ₃ /H ₂ SO ₄	0.45 lb/ton acid produced	Pass	Annually
8/17/23	SO ₂	250 ppmvd @ 0% O ₂ , 12-hr rolling average	Pass	Annually
		1,000 ppmvd	Pass	
		9.2 lb/hr	Pass	
		99.0% Efficiency	Pass	

	SO ₃ /H ₂ SO ₄	0.45 lb/ton acid produced	Pass	Annually
9/9/22	SO ₂	250 ppmvd @ 0% O ₂ , 12-hr rolling average	Pass	Annually
		1,000 ppmvd	Pass	
		9.2 lb/hr	Pass	
		99.0% Efficiency	Pass	
	SO ₃ /H ₂ SO ₄	0.45 lb/ton acid produced	Pass	Annually
8/18/21	SO ₂	250 ppmvd @ 0% O ₂ , 12-hr rolling average	Pass	Annually
		1,000 ppmvd	Pass	
		9.2 lb/hr	Pass	
		99.0% Efficiency	Pass	
	SO ₃ /H ₂ SO ₄	0.45 lb/ton acid produced	Pass	Annually

Based on a review of the stack test results since the last AOP renewal, NWCAA concluded that testing frequency was sufficient and that tests demonstrate an adequate margin of compliance, therefore no changes to testing, monitoring, recordkeeping or reporting were warranted.

2.7 Enforcement History

A summary of Notices of Violation (NOVs) issued to the facility by NWCAA for the period from April 2021 through February 2026 are presented in Table 3. Each violation listed in the table has been resolved through a combination of penalty assessments and/or by corrective action taken by the source.

Table 3 Notice of Violations Issued

Case No	Violation Date	Issue Date	Description
4757	11/4/24 through 11/6/24	1/28/25	Sulfur recovery unit (SRU) stripper reboiler emissions exceeded 1,000 ppm SO ₂ 1-hour average for (22) 1-hour averages during the event and 250 ppm SO ₂ 12-hour rolling average for (9) 12-hour rolling periods during the event due to a failed steam trap. 616 lb excess SO ₂ was emitted. This violation was resolved with payment of \$3,000 penalty on 4/4/25.
4692	3/1/22, 12/21/22, 3/27/23, & 7/24/23	12/5/23	Four excess SO ₂ events stemming from, in part, insufficient equipment maintenance. At SRU: exceedances of 1,000 ppm SO ₂ 1-hour average, and/or 250 ppm SO ₂ 12-hour rolling average - 3/1/22 for 290 lb excess SO ₂ ; and 12/21/22 for 11 lb excess SO ₂ . At SAP: exceedances of 4 lb SO ₂ /ton sulfuric acid produced 3-hour average and/or 315 ppmvd SO ₂ 3-hour average and/or 1,000 ppm SO ₂ 1-hour average: 3/27/23 for 334 lb excess SO ₂ ; and 7/24/23 for 71 lb excess SO ₂ . The NOV was closed out 6/7/24, based on (relatively) small excess emissions and mitigation measures taken.

Case No	Violation Date	Issue Date	Description
4620	12/26/21 through 12/29/21, & 1/5/22	10/17/22	Insufficient weatherization to prevent operational upsets that caused or contributed to exceedances of 1,000 ppm SO ₂ 1-hour average and 250 ppm SO ₂ 12-hour rolling average: 510 lb excess SO ₂ while SRU in hot standby; and 3.3 lb excess SO ₂ during SRU startup. The NOV was closed out 3/1/23; current action serves as baseline for future weather events.

2.8 Miscellaneous Non-Process Activities & Insignificant Emission Units

There are several regulated activities that can emit air pollutants not generated by sulfuric acid production and sulfur recovery operations. These include laboratory services, asbestos removal, fire training, abrasive blasting, painting, gasoline dispensing and cutback asphalt paving. Asbestos removal occurs during the demolition or modifications of buildings and piping that are likely to include asbestos-containing materials such as insulation and tiles. Abrasive blasting and painting occur during maintenance and repair activities of tanks and equipment to remove old and chipped paint and surface contaminants, which are subject to state and NWCAA regulations. Gasoline is dispensed from one pump for fueling Chemtrade vehicles used on site and is regulated under NWCAA gasoline dispensing regulations. And cutback asphalt paving may occur from time to time to repair road and other impermeable surfaces. Use of cutback asphalt is subject to NWCAA regulations.

In addition, Chemtrade has emission units and activities determined to be insignificant under WAC 173-401-530, -532, and -533. In general, they are considered insignificant because they have low emission rates or, generally, are only fugitive emissions. The Generally Applicable Requirements in Section 4 of the AOP apply to these units, although the testing, monitoring, recordkeeping and reporting requirements do not apply. As specified in WAC 173-401-530(2)(a), no emission unit or activity subject to a federally enforceable requirement, other than generally applicable requirements of the state implementation plan, may qualify as insignificant. The insignificant emission units and activities located at Chemtrade are listed in Section 6 of this SofB.

3 GENERAL REGULATORY REQUIREMENTS

3.1 New Source Review

3.1.1 Minor NSR

Projects resulting in increases of regulated air pollutants less than the significance levels of the Prevention of Significant Deterioration (PSD) program must undergo minor new source review (NSR) in the State of Washington. NWCAA evaluates both criteria and toxic air pollutants that will result from new and modified sources of air pollution. NWCAA may then issue an "Order of Approval to Construct" (OAC) that identifies Best Available Control Technology (BACT), establishes maximum pollutant concentrations and emission rates, identifies required source testing and/or continuous emission monitors, and requires operation and maintenance procedures that will ensure continuing compliance with applicable air pollution rules and regulations. OAC conditions are federally enforceable because the NWCAA minor NSR program is approved in the State Implementation Plan (SIP). Several minor NSR permits have been issued by NWCAA to Chemtrade, as described in SofB Section 2.4. However, only three OACs currently contain applicable requirements and are included in the AOP (i.e., OAC 458d, 880c, and 650d).

3.1.2 Prevention of Significant Deterioration (PSD)

Before a major source can be constructed or modified in an area that meets all the ambient air requirements, the owner or operator must demonstrate that the project will not cause or contribute to violations of any ambient air quality standard or air quality increment pursuant to the Prevention of Significant Deterioration (PSD) program under 40 CFR 52.21. Also, the owner or operator must demonstrate that the project will not cause significant deterioration in nearby Class I Areas (parks and wilderness areas).

Chemtrade qualifies as a PSD major source and is therefore, potentially, a subject source under the PSD program. PSD permit 94-01 was issued on August 24, 1994 by Ecology prior to the expansion of SPU3. The PSD permit was amended on January 14, 1998. The applicable requirements from PSD 94-01 Amendment 1 are included in the AOP.

3.2 Federal Regulations

The applicability of certain federal rules to the SRU and to other emission units that are part of the Chemtrade facility depends on whether the SRU is considered part of the adjacent Tesoro Anacortes Refinery for the purposes of those rules or whether it is a separate stationary source. Federal rule applicability will also depend on whether the Sulfuric Acid Plant and the SRU are determined to be part of the same source.

By Definition Under NSPS and NESHAP (SRU & Refinery): As discussed above, the Chemtrade SRU processes acid gas produced solely by the adjacent Tesoro Anacortes Refinery. Both NSPS 40 CFR 60 Subparts J and Ja explicitly include an SRU as part of petroleum refinery by definition:

40 CFR 60.100(a): The provisions of this subpart are applicable to the following affected facilities in petroleum refineries: fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices, and all Claus sulfur recovery plants except Claus plants with a design capacity for sulfur feed of 20 long tons per day (LTD) or less. The Claus sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery.

40 CFR 60.100a(a): The provisions of this subpart apply to the following affected facilities in petroleum refineries: fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices (including process heaters), flares and sulfur recovery plants. The sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery.

Note that the NSPS standards expressly provide for SRUs not located within the boundaries of a petroleum refinery to nevertheless be considered an affected facility for the purposes of these standards.

SRUs are considered by definition to be part of a petroleum refinery under 40 CFR 63 Subpart UUU as well (emphasis added):

40 CFR 63.1561(a)(1): A petroleum refinery is an establishment engaged primarily in petroleum refining as defined in the Standard Industrial Classification (SIC) code 2911 and the North American Industry Classification (NAIC) code 32411, and used mainly for:

- (i) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants;
- (ii) Separating petroleum; or
- (iii) Separating, cracking, reacting, or reforming an intermediate petroleum stream, or recovering a by-product(s) from the intermediate petroleum stream (e.g., sulfur recovery).

Definition of Stationary Source (SRU & Refinery): Under New Source Review (NSR) and Title V, there are three criteria that must be met for pollutant emitting activities to be considered part of the same “stationary source” even if they are not located within the same plant site:

1. They belong to the same industrial grouping, or one entity is a “support facility” for the other;
2. They are located on one or more contiguous or adjacent properties; and
3. They are under the control of the same person, or of separate persons that are under common control.

The SRU is considered a “support facility” for the adjacent Tesoro Anacortes Refinery, meeting the first criterion. The SRU and the land on which the SRU is located is owned by Tesoro and is located contiguous to the refinery, meeting the second criterion. The question becomes whether the SRU is under common control with the adjacent Tesoro Anacortes Refinery.

Historically, EPA guidance held that a contract between companies was enough to demonstrate common control – that is, “companies don’t just locate on another’s property and do whatever they want. Such relationships are usually governed by contractual, lease or other agreements that establish how the facilities interact with one another. Therefore, we [EPA] presume that one company locating on another’s land established a ‘control’ relationship.”³ In addition, “EPA interprets the term ‘common control’ of an owner to

³ Letter from W. Spratlin, Director of Air, RCRA, and Toxics Division, EPA Region VII, to Peter R Hamlin, Chief, Iowa Department of Natural Resources, September 18, 1995.

include an operator (who is different from an owner) of a source that is operating under a contractual obligation with the owner and funded by the owner.”⁴

Chemtrade currently has a contract with Tesoro to process up to 95 tons per day of Tesoro’s hydrogen sulfide. In addition, Tesoro owns the land and the SRU equipment; the SRU receives all of the hydrogen sulfide raw material from Tesoro Anacortes Refinery; and operation of the SRU is completely dictated by Tesoro Anacortes Refinery’s operation. These factors lead NWCAA to conclude that the SRU is under Tesoro’s control, even though it is operated by Chemtrade.

EPA issued a memo (the Meadowbrook letter⁵) that states that the existence of a contract between two companies may not be sufficient to establish common control. “[T]he agency [EPA] believes clarity and consistency can be restored to source determinations if the assessment of ‘control’ for title V and NSR permitting purposes focuses on the power of authority of one entity to dictate decisions of the other that could affect the applicability of, or compliance with, relevant air pollution regulatory requirements.” EPA said this can include the first entity having the ability to act in a way that effectively determines the second entity’s actions.

Chemtrade has agreed to process all of Tesoro Anacortes Refinery’s hydrogen sulfide output, up to a contractual limit. Tesoro decides how much hydrogen sulfide Chemtrade will receive, except during rare maintenance stoppages. During maintenance or other stoppages or reductions in Chemtrade’s capacity, Tesoro Anacortes Refinery must implement a sulfur curtailment program, but a sulfur curtailment program would be necessary regardless of who directly operates the SRU.

Chemtrade could argue that its operation of the SRU is not under Tesoro’s control, based on three points: (1) Chemtrade decides whether the hydrogen sulfide is directed to the SRU or to the Sulfuric Acid Plant; (2) Chemtrade is responsible for maintaining and operating the SRU; and (3) Chemtrade is responsible for compliance with SRU-related applicable requirements, as they are in Chemtrade’s AOP.

(1) The fact that Chemtrade has authority to direct some of the hydrogen sulfide to the Sulfuric Acid Plant does not change the requirements applicable to the SRU when it is in use, nor Tesoro Anacortes Refinery’s obligation to comply with limits on its sulfur emissions. The relevant question is whether the SRU is used for Tesoro Anacortes Refinery to achieve compliance with sulfur emission constraints, not whether Chemtrade has other equipment that also may be used for the same purpose. It is used for that purpose – indeed, solely for that purpose.

(2) Chemtrade is responsible for operation and maintenance of the SRU, but only because it has contractually committed to Tesoro that it will take on those responsibilities. Tesoro owns the SRU. Tesoro has contracted with Chemtrade to operate the SRU for Tesoro Anacortes Refinery’s benefit. Through the contract, Tesoro controls Chemtrade’s operation and maintenance of a piece of equipment that is owned by Tesoro. Presumably if Chemtrade does not properly operate and maintain the SRU, Tesoro would have contractual remedies against Chemtrade for those failings. Tesoro’s contractual rights and Chemtrade’s contractual obligations give Tesoro control over Chemtrade’s operation and maintenance of the SRU. This goes well beyond the “ability to influence”.

⁴ Letter from Kenneth Eng, Chief, Air Compliance Branch, US EPA, to Thomas Micai, Chief, Bureau of Operating Permits, New Jersey Department of Environmental Protection, April 5, 1995.

⁵ Letter from William L. Wehrum, Assistant Administrator, Office of Air and Radiation, US EPA, to the Honorable Patrick McDonnell, Secretary, Pennsylvania Department of Environmental Protection, April 30, 2018 (Meadowbrook letter).

Tesoro also controls Chemtrade's use of the SRU through Tesoro's authority to control capital expenditures related to the SRU. Chemtrade relies on financial support from Tesoro (as the equipment owner) for maintenance activities and equipment upgrades to the SRU.

(3) Chemtrade did not become the operator of the SRU because it was issued an Air Operating Permit; it was issued an Air Operating Permit because it is the operator of the SRU. The obligation to obtain a permit rests on the "owner or operator". Here, the owner, Tesoro, has contracted with Chemtrade to be the operator of the SRU and all of Chemtrade's actions as SRU operator, including obtaining air permits, are in furtherance of its contractual obligations to Tesoro.

EPA also issued another memo (the Ameresco letter⁶) in which EPA differentiates between control of an entity and control of an activity. Chemtrade as an entity is not under Tesoro's control, but Chemtrade's activities in operating the SRU are under Tesoro's control. In this case, Tesoro does not just have some degree of control over the SRU. As the owner of the SRU, Tesoro controls the SRU and, through a contract, delegated some of that control to Chemtrade as operator of the SRU. Through that contract Tesoro controls Chemtrade's actions in relation to the SRU. This is substantially more than simply having shared responsibility for performance of a piece of equipment, as discussed in the Ameresco letter.

Chemtrade's status as operator of the SRU is entirely derived from its contract with Tesoro. It has no independent authority or control over the SRU. An emission unit is not removed from a source simply by the owner of the source delegating operation of the emission unit to a third party.

Note that both the Meadowbrook and the Ameresco letters state that they are EPA's opinions in these matters. The letters themselves each assert that the permitting authority retains the ultimate discretion to make source determinations based on its EPA-approved Title V and NSR rules. EPA approved NWCAA's Title V program most recently on January 2, 2003⁷ and NSR rules on June 15, 2020⁸. NWCAA's determination that the SRU is under the control of Tesoro, and so is part of the Tesoro Anacortes Refinery stationary source, has been made giving consideration to EPA's interpretation but is an exercise of NWCAA's discretion under the Washington Clean Air Act and its own regulations.

In addition, EPA more recently issued additional memos (the Ocean County Landfill (OCLC) letter⁹ and the Eastman letter¹⁰) that clarify that the new source determination policies and interpretations apply prospectively rather than retroactively:

[A]s a general matter, the guidance contained in EPA's recent documents concerning common control was intended to assist with future source determinations and was not intended to prompt permitting authorities to revisit prior permitting decisions. EPA does not believe it would be appropriate in most circumstances for permitting authorities to re-evaluate prior source determinations based solely on the change in EPA policy on which the 2018 OCLC Letter relies, especially where, as is the case with the OCLC request, relevant facts have not changed.

⁶ Letter from Anna Marie Wood, Director, Air Quality Policy Division, US EPA, to Gail Good, Director, Wisconsin Department of Natural Resources, October 16, 2018 (Ameresco letter).

⁷ 40 CFR 70 Appendix A

⁸ 40 CFR 52.2470(c) Table 5

⁹ Letter from Anne L. Idsal, Acting Assistant Administrator, EPA Office of Air and Radiation, to Catherine McCabe, Commissioner, New Jersey Department of Environmental Protection, July 12, 2019 (OCLC letter).

¹⁰ Letter from Cristina Fernandez, Director, Air and Radiation Division, EPA, to Brett A. Sago, Director, HSE Legal Services, Eastman Chemical Company, February 12, 2020 (Eastman letter).

NWCAA is not aware of any change regarding the relationship between Tesoro and Chemtrade triggering a new applicability review.

EPA Guidance (SRU & Refinery): EPA guidance has been clear that sources cannot avoid permit requirements by dividing the facility up.

"[W]e [EPA] have found at least one case where a company set up an 'unrelated' corporation in the middle of their property to split the property into multiple, distinct sites. After concluding that these 'distinct' sites were in fact under the common control of the companion company's president, the split was later disallowed for permitting purposes. ...

We [EPA] seriously urge you [Iowa Department of Natural Resources] to consider the principles found in the various guidance documents and in this letter when evaluating requires to split properties for permitting purposes. We [EPA] realize that in many cases it is easier not to second guess a company's motives. However, we [EPA] also believe this administratively expedient approach can result in allowing circumvention of the permit requirements and ultimately jeopardize the goals and effectiveness of the permitting programs."¹¹

It would be illogical and unreasonable for the SRU to be subject to different requirements depending on who is operating it, Tesoro versus Chemtrade.

Major Source MACT Standards (SRU & Refinery): For purposes of MACT standards (40 CFR 63.2), a "major source" is "any stationary source or group of stationary sources located within a contiguous area and under common control" that emits more than the relevant threshold amount of HAPs. The Tesoro Anacortes Refinery is a major source for HAPs. The SRU is under common control with the Tesoro Anacortes Refinery, and so is subject to MACT standards that are applicable to petroleum refineries that are a major source of HAPs.

Conclusion (SRU & Refinery): Based on the above analysis, NWCAA has determined that the SRU is part of the adjacent Tesoro Anacortes Refinery stationary source under the applicable Title V and NSR definitions, and is an affected source for purposes of MACT standards applicable to refineries. The SRU is potentially subject to rules applicable to petroleum refineries and also major sources of HAP, such as NSPS (e.g., 40 CFR 60 Subparts J, QQQ, and GGG/GGGa) and NESHAP (e.g., 40 CFR 61 Subpart FF, 40 CFR 63 Subparts CC and UUU, DDDDD). NWCAA has assigned the SRU to Chemtrade's AOP because Chemtrade is the operator of the SRU. This does not affect the applicability of these various standards to the SRU. The requirements applicable to an emission unit are not changed by the owner contracting out operation of that emission unit.

Major Source MACT Standards (SRU & Sulfuric Acid Plant): For MACTs other than the petroleum refinery-related standards applicable to the SRU, the Chemtrade facility is not a major source of HAPs. To be a major source of HAPs, the emission units located within a contiguous area and under common control must emit more than 10 tons a year of any one HAP or 25 tons a year of all HAPs combined. The collective HAP emissions from the emission units that are within the Chemtrade facility boundaries and under Chemtrade's direct control are less than the HAP major source thresholds. While the SRU is considered part of the Tesoro Anacortes Refinery source, for reasons discussed above, and Chemtrade, as operator of the SRU, shares control of the SRU with the Tesoro Anacortes Refinery, Chemtrade does not control other parts of the refinery source. Accordingly, HAP emissions from other parts of the refinery source cannot be attributed to the Chemtrade facility for purposes of the major source determination. Therefore, the Sulfuric Acid Plant is not part of a HAP major source and is not subject to HAP major source MACTs (e.g., 40 CFR 63 Subpart

¹¹ Spratlin 1995.

DDDDD). However, it is potentially subject to area source NESHAPs including 40 CFR 63 Subparts JJJJJ (area source Boiler NESHAP) and CCCCC (gasoline dispensing facility NESHAP).

NWCAA considered whether the Sulfuric Acid Plant, like the SRU, should be considered part of the petroleum refinery source by definition. Each regulatory program has a specific definition of what is included in each source category (e.g., petroleum refinery) so a separate determination must be made for each. Note that less than 50% of the Sulfuric Acid Plant output is sent to a single facility by contract; as such, the Sulfuric Acid Plant is not considered a support facility to either of the adjacent refineries. For the same reason, the refineries do not exercise control over the Sulfuric Acid Plant, in the way that the Tesoro Anacortes Refinery controls the SRU. Accordingly, the Sulfuric Acid Plant is not subject to those regulatory programs applicable to petroleum refineries (e.g., 40 CFR 60 Subpart GGG/GGGa, 40 CFR 61 Subpart FF, 40 CFR 63 Subparts CC and UUU) unless explicitly listed as subject.

Because the SRU is considered part of a petroleum refinery and potentially subject to federal requirements for petroleum refineries, the AOP includes general requirements or applicable-when-triggered requirements from federal requirements applicable to petroleum refineries.

3.2.1 New Source Performance Standards (NSPS)

40 CFR 60 Subpart Cd - Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units: The emission guidelines in NSPS Subpart Cd apply to existing sulfuric acid production units (i.e., those that were constructed or modified before August 17, 1971). SPU1 was constructed in 1957 and SPU2 in 1964 so both units were potentially subject to the emission guidelines. However, the construction of SPU3 in 1975 triggered the requirements for new sulfuric acid production units in NSPS Subpart H for all three trains. As such, NSPS Subpart Cd does not apply.

40 CFR 60 Subpart H – Standards of Performance for Sulfuric Acid Plants: The provisions of NSPS Subpart H are applicable to sulfuric acid production units constructed or modified after August 17, 1971. The construction of SPU3 in 1975 modified the Sulfuric Acid Plant triggering the applicability of this subpart to all three trains.

In late 1993, General Chemical proposed to increase production at SPU3 by increasing the size of the blower fan on the unit, enlarging the catalytic converters, and adding a new heat exchanger. This expansion project was considered a modification under NSPS Subpart H which triggered the initial requirements again.

40 CFR 60 Subparts J and Ja – Standards of Performance for Petroleum Refineries: 40 CFR 60 Subpart J applies to fluid catalytic cracking unit (FCCU) catalyst regenerators, fuel gas combustion devices, and Claus sulfur recovery plants greater than 20 long tons per day generally constructed, modified, or reconstructed after June 11, 1973 and on or before May 14, 2007. 40 CFR 60 Subpart Ja applies to FCCUs, fluid coking units (FCU), delayed coking units (DCU), fuel gas combustion devices, flares, and sulfur recovery plants generally constructed, modified, or reconstructed after May 14, 2007.

The SRU was originally constructed in 1986 with a throughput of 22 short tons per day (19.6 long tons per day). As such, it did not trigger Subpart J upon construction under OAC 307 (issued February 20, 1986). However, the 1998 modification under OAC 650 which increased production to 55 short tons per day (49.1 long tons per day) triggered direct applicability of Subpart J to the SRU. The SRU has not been modified since, so NSPS Subpart Ja does not apply.

The SRU emergency flare combusts refinery-generated gases (i.e., SRU exhaust gas) so it potentially is a fuel gas combustion device (FGCD) under NSPS Subpart J. Fuel gas combustion devices must not burn fuel gas that contains hydrogen sulfide in excess of 162 ppmvd (40 CFR 60.104(a)(1)). However, the combustion in a flare of process upset gases is exempt from this emission limitation and associated monitoring. Process upset gases are defined as: “any gas generated by a petroleum refinery process unit as a result of start-up, shut-down, upset or malfunction.” Because gases are only routed to this flare during emergencies, the flare is subject to NSPS Subpart J but is exempt from the FGCD emission limitation (40 CFR 60.104(a)(1)) and associated monitoring (40 CFR 60.105(a)(4)(iv)).¹² Because the flare has no emission limits or ongoing monitoring, NSPS Subpart J applicability to the flare is listed in AOP Section 1 but the flare is not listed in AOP Section 5.

40 CFR 60 Subparts K, Ka, Kb and Kc - Standards of Performance for Volatile Organic Liquid Storage Vessels: The following New Source Performance Standards apply to tanks (i.e., vessels) depending on the date the tank was constructed, reconstructed or modified; what liquid it stores; and the storage capacity:

- 40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
- 40 CFR 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984
- 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
- 40 CFR 60 Subpart Kc - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after October 4, 2023

The only tanks at Chemtrade that are large enough and store material that may emit VOC to potentially be subject to NSPS requirements are the three 158,000-gallon storage tanks potentially storing spent acid. Spent acid does not qualify as a “petroleum liquid” under NSPS Subparts K and Ka. Based on information available as of this writing, Chemtrade’s spent acid storage tanks are not affected facilities under NSPS Subpart Kb. In addition, none of the spent acid tanks have been constructed, reconstructed or been modified since October 4, 2023; therefore, they are not subject to NSPS Subpart Kc.

40 CFR 60 Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems: 40 CFR 60 Subpart QQQ applies to individual drain systems, oil-water separators, and aggregate facilities in refinery oily wastewater systems that were constructed, modified, or reconstructed after May 4, 1987. The SRU and Sulfuric Acid Plants do not handle oil or hydrocarbons as part of the refining process so wastewater generated at Chemtrade is not considered oily wastewater subject to NSPS Subpart QQQ.

Regardless of NSPS Subpart QQQ applicability, the wastewater generated at Chemtrade, including stormwater runoff and water falling on the pads supporting the process equipment, is collected and piped to the HollyFrontier Sinclair PSR oily water sewer. The oily water sewer is routed to the effluent for treatment before being released to Fidalgo Bay.

¹² See also EPA Applicability Determination Index (ADI) Control Number 0000086 (Gigliello to Guillemette, 12/2/99) and 1000045 (Czerniak (EPA) to Thiesse (Linde), 9/15/10)

PSR chose to have Chemtrade's wastewater enter the oily water sewer system for convenience (e.g., it was the closest entry point) and also because the volume of water from the Chemtrade is fairly insignificant relative to the rest of the refinery's oily water sewer.

40 CFR 60 Subparts GGG and GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries: 40 CFR 60 Subpart GGG applies to refinery process units with equipment components in VOC service that have been constructed, reconstructed, or modified between January 4, 1983, and November 7, 2006. As part of a petroleum refinery that was constructed during the applicability window, the SRU is potentially subject to NSPS Subpart GGG. The SRU does not generally handle VOC-containing materials. However, the amine absorption system in the tail gas treatment unit does use methyl diethanolamine (MDEA) which qualifies as a VOC. As such, the SRU is subject to NSPS Subpart GGG. MDEA is considered a heavy liquid under Subpart GGG so only heavy liquid requirements are included in the AOP.

40 CFR 60 Subparts IIII and JJJJ - Standards of Performance for Stationary Compression and Spark Ignition Internal Combustion Engines: 40 CFR 60 Subpart IIII applies to stationary compression ignition internal combustion engines (ICE) that commenced construction after July 11, 2005 and were manufactured after, for engines that are not fire pump engines, April 1, 2006 and, for fire pump engines, July 1, 2006. NSPS Subpart JJJJ applies to stationary spark ignition internal combustion engines that commenced construction after the specified dates and were manufactured after the specified dates. Chemtrade does not maintain or operate any stationary internal combustion engines. Therefore, NSPS Subparts IIII and JJJJ do not apply.

3.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR 61 Subpart FF – National Emission Standard for Benzene Waste Operations: 40 CFR 61 Subpart FF applies to the treatment, storage, and disposal of benzene-containing hazardous waste at petroleum refineries. NESHAP Subpart FF contains control requirements, limits, and work practice standards for equipment that handles and treats benzene-containing waste (e.g., tanks, individual drain systems, containers). In 1991, refineries were required to come into compliance with NESHAP Subpart FF. The purpose of this regulation was to reduce the amount of benzene emissions to the atmosphere from wastewater operations.

As part of a petroleum refinery, the Chemtrade SRU is potentially subject to NESHAP Subpart FF. However, because the facility does not handle or process oil or hydrocarbon that contains benzene, there are no ongoing requirements. Therefore, NESHAP Subpart FF applicability is not listed in the AOP.

Chemtrade's wastewater is piped into HollyFrontier Sinclair PSR's oily water sewer. Note that, regardless of the applicability of NESHAP Subpart FF to Chemtrade, PSR's oily water sewer complies with NESHAP Subpart FF.

40 CFR 63 Subpart Q – National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers: 40 CFR 63 Subpart Q applies to industrial process cooling towers at major HAP sources that used chromium-based water treatment chemicals as of the proposal date (August 12, 1993). Because the Chemtrade cooling towers did not use chromium-based treatment chemicals as of August 12, 1993, the cooling towers at the facility are not considered affected sources under MACT Subpart Q and, hence, are not subject.

40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries: 40 CFR 63 Subpart CC (commonly referred to as Refinery MACT 1) generally applies to fugitive HAP emission sources from petroleum refining process units. The subject unit categories include:

- Miscellaneous process vents (MPVs)
- Storage vessels
- Wastewater streams and treatment operations
- Gasoline loading racks
- Marine tank vessel loading
- Equipment leaks from petroleum refining process units
- Heat exchanger systems

The SRU is by definition a petroleum refining process unit subject to MACT Subpart CC. None of the SRU's process streams have a HAP content of more than the applicability thresholds. As such, any MPVs, storage vessels, wastewater streams and treatment operations, gasoline loading racks, marine tank vessel loading, fugitive components, and heat exchanger systems associated with the SRU are not subject to MACT Subpart CC. Note also that sulfur plant vents are explicitly exempted from being considered an MPV.

The Sulfuric Acid Plant is not considered a sulfur plant so is not a petroleum refining process unit subject to MACT Subpart CC. However, Chemtrade's spent acid is fed by the refinery alkylation units which are refining process units by definition. Based on information available as of this writing, Chemtrade's spent acid storage tanks are not subject to MACT Subpart CC.

40 CFR 63 Subpart UUU – National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units: 40 CFR 63 Subpart UUU (also referred to as Refinery MACT 2) became effective April 11, 2002 establishing hazardous air pollutant emission limits and control requirements at specific refinery operations including sulfur recovery units. The SRU is an affected source because it is owned by and serves the Tesoro Anacortes Refinery. The rule addresses emissions from bypass lines and startup, shutdown, and malfunction events, as well as normal operation requiring additional procedures, records, and reporting.

To control HAP emissions, SRUs have four options; however, if an SRU is already subject to NSPS Subpart J, such as at Chemtrade, it must comply with the Subpart J requirements option.

The Chemtrade SRU is equipped with a bypass line allowing the SCOT exhaust gas to bypass the incinerator and go directly to a flare. There is no way for the Claus outlet to bypass the SCOT to the flare. MACT Subpart UUU allows four different options for the control of HAP emissions from bypass lines. Chemtrade has chosen to install a manual lock system (i.e., carseal) to demonstrate compliance with MACT Subpart UUU.

Note that, due to the June 30, 2010 rule change, the startup, shutdown, malfunction plan (SSMP) requirements under 40 CFR 63 Subparts A and UUU no longer apply.

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines: 40 CFR 63 Subpart ZZZZ applies to various Reciprocating Internal Combustion Engines (RICE) located at area and major sources of HAP. Chemtrade does not maintain or operate any stationary internal combustion engines. Therefore, MACT Subpart ZZZZ does not apply.

40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters: 40 CFR 63 Subpart DDDDD applies to industrial, commercial, or institutional boilers and process heaters that are located at a major source of hazardous air pollutants (HAPs), commonly referred to as the Boiler MACT.

See Table 4 for a list of the subject boilers and process heaters and associated ratings.

Table 4 Heaters and Boilers Subject to 40 CFR 63 Subpart DDDDD

Unit	Rating (MMBtu/hr)	Oxygen Trim?
SRU Auxiliary Boiler	9.9	No

Note that Chemtrade operates a couple of other “heaters”. These are generally heat exchangers that use process gases to indirectly heat or cool other process gases with no supplemental fuel combustion. Note from earlier discussions that the Sulfuric Acid Plant is not part of a major HAP source, therefore neither the SPU3 startup heater nor the two process heaters associated with Abatement Units 10 and 11 are subject to Boiler MACT. The SRU is equipped with an integral waste heat boiler that recovers some of the heat generated in the sulfur recovery process. Waste heat boilers are excluded from the definition of “boiler” as affected sources under the Boiler MACT. Therefore, the SRU waste heat boiler is not subject to Boiler MACT.

The SRU natural gas-fired auxiliary boiler is subject to Boiler MACT. As such, this unit falls into the “units designed to burn gas 1 fuels” subcategory. Boiler MACT does not require any pollutant-specific emission limits for existing or new heaters and boilers in the gas 1 subcategory. Instead, the rule requires work practice standards that include periodic “tune-ups” as described in 63.7540(a)(10).

Note that none of the units at Chemtrade have oxygen trim; therefore, for units rated between 5 MMBtu/hr and 10 MMBtu/hr, Boiler MACT requires tune-ups biennially (every 2 years). Boiler MACT also requires a one-time energy assessment performed by a qualified energy assessor as described in 40 CFR 63 Subpart DDDDD Table 3.

40 CFR 63 Subpart CCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities: 40 CFR 63 Subpart CCCCC applies to Gasoline Dispensing Facilities (GDFs) located at area sources of HAP. Because the Chemtrade facility is an area source of HAP as discussed in SofB Section 3.2, 40 CFR 63 Subpart CCCCC applies to the facility’s GDF. Because the GDF has a throughput of less than 10,000 gallons per month, it must comply with 40 CFR 63.11116.

40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources: 40 CFR 63 Subpart JJJJJ applies to industrial, commercial, and institutional boilers located at area sources of HAP. Because the Chemtrade facility is an area source of HAP as discussed in SofB Section 3.2, 40 CFR 63 Subpart JJJJJ potentially applies. However, the heaters and boilers at the Sulfuric Acid Plant all fire natural gas exclusively so are considered gas-fired boilers under the rule and are, thus, not subject to this subpart (63.11195(e)). Because the SRU Auxiliary Boiler is an affected source under 40 CFR 63 Subpart DDDDD, it is not subject to this subpart (63.11195(a)). As such, NESHAP Subpart JJJJJ does not apply at the Chemtrade facility.

3.3 Washington State Regulations (WAC)

WAC 173-400-105(5)(b) requires that sulfuric acid plants continuously monitor sulfur dioxide. However, WAC 173-400-105(5)(g) lists the exceptions to the continuous monitoring requirements under -105(5) which include emission units that are required to continuously monitor emissions due to a requirement under, among others, 40 CFR Part 60. Because the Chemtrade Sulfuric Acid Plant is subject to sulfur dioxide continuous monitoring requirements under 40 CFR 60 Subpart H, it is exempt from the continuous monitoring requirements under WAC 173-400-105(5).

Chapter 173-491 WAC lists requirements for Gasoline Dispensing Facilities. Because Chemtrade's gasoline storage tank is less than 40,000 gallons and the Gasoline Dispensing Facility (GDF) has a throughput less than 200,000 gallons per year, it is only subject to the requirement that all storage tank openings not related to safety are to be sealed with suitable closures (WAC 173-491-040(1)(c)).

3.4 NWCAA Regulations

The NWCAA Regulation defines "petroleum refinery" in NWCAA Section 200 as:

A facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products by distilling crude oils or redistilling, cracking, extracting, or reforming unfinished petroleum derivatives.

Because Chemtrade is not engaged in producing hydrocarbon products, it is not considered a petroleum refinery under the NWCAA Regulation. As such, the facility is not subject to the requirements applicable to petroleum refineries (e.g., NWCAA Section 460, NWCAA 580.2). Because it is not a petroleum refinery subject to NWCAA Section 460, the Chemtrade facility is subject to the fuel sulfur requirements in NWCAA 520.14.

NWCAA Section 560 – Storage of Organic Liquid: NWCAA Section 560 requires that storage tanks of greater than 6,000 gallons that store organic liquids or solvents with a true vapor pressure greater than 1.5 psi or greater be equipped with vapor loss control devices.

Based on information available as of this writing, Chemtrade's spent acid storage tanks are not subject to NWCAA Section 560.

NWCAA 580.3 – High Vapor Pressure Volatile Organic Compound Storage Tanks: NWCAA 580.3 requires that storage tanks of greater than 40,000 gallons that store volatile organic compounds with a true vapor pressure greater than 1.5 psi or greater meet 40 CFR 60 Subpart Kb requirements.

Based on information available as of this writing, Chemtrade's spent acid storage tanks are not subject to NWCAA 580.3.

NWCAA 580.6 – Gasoline Dispensing Facilities: NWCAA 580.6 requires controls and testing for GDFs and storage tanks of a certain size. Chemtrade's Gasoline Dispensing Facility (GDF) has a throughput less than 120,000 gallons per year so is not subject to the control requirements. The storage tank is less than 2,000 gallons and was installed prior to January 1, 1990 so is not subject to most of the control and testing requirements. The storage tank is only subject to the requirement to maintain the tank in a vapor-tight condition and in good working order (NWCAA 580.6(E)).

3.5 Continuous Emission Monitoring Systems (CEMS)

Continuous Emission Monitoring Systems (CEMS) can be mandated via a variety of mechanisms, including federal or local rules (e.g., NSPS, NESHAP/MACT, NWCAA) and

construction permits (e.g., OACs, PSD). Table 5 lists the CEMS at Chemtrade and the type of requirement that mandates its use.

Table 5 CEMS at Chemtrade

Process Unit	Compounds Monitored	Type of Requirement
SPU Abatement Stack	SO ₂	NWCAA Section 465, NSPS Subpart H, PSD 94-01 Amendment 1
SRU Incinerator Stack	SO ₂ , O ₂	NSPS Subpart J, MACT Subpart UUU, OAC 650d

Note that, in addition to a CEMS, annual stack tests for SO₂ are required on both the Sulfuric Acid Plant and the SRU in addition to the CEMS as required by OAC 650d (SRU) and gap-filled under AOP Term 5.1.3 (SPU). This annual testing explicitly demonstrates compliance with the mass emission limits. These annual SO₂ tests are usually conducted in conjunction with the required annual sulfuric acid mist emission testing.

If the CEMS is mandated by NSPS or MACT, it must comply with the requirements in the applicable subpart along with the referenced terms in NSPS Subpart A (60.13) or in MACT Subpart A (63.8). The respective Subpart As list general CEMS installation, operation, and QA/QC requirements. In addition, the specific subpart (e.g., NSPS Subpart J, MACT Subpart UUU) mandates the specific QA/QC thresholds and also references the pollutant-specific Performance Specifications (PS) under 40 CFR 60 Appendix B for installation and initial evaluation and 40 CFR 60 Appendix F for the ongoing quality control and quality assurance.

In the case of NSPS Subpart J and MACT Subpart UUU, they can apply to the same pollutant and both require a CEMS to demonstrate compliance (i.e., SO₂ for SRU). As such, Subpart UUU has an overlap provision that generally aligns the requirements with those in Subpart J to simplify compliance.

In addition, all CEMS installed in the NWCAA jurisdiction must also comply with NWCAA Section 367 which references NWCAA Appendix A (formerly referred to as NWCAA Sections 365, 366 and the "Guidelines for Industrial Monitoring Equipment and Data Handling"). Note that NWCAA Sections 365 and 366 are federally enforceable (i.e., are included in the SIP). NWCAA Section 367 and NWCAA Appendix A were adopted on July 14, 2005; the new regulations are "State Only" until incorporated into the State Implementation Plan.

NWCAA Appendix A references the 40 CFR 60 Appendix B Performance Specifications for CEMS installation requirements and 40 CFR 60 Appendix F for ongoing operation. It also explicitly lists certain operating requirements (e.g., calibration; maintenance; auditing; data recording, validation, and reporting).

Generally, the calibration drift (zero and span) for each CEMS must be checked daily. Data accuracy assessments shall be performed at least once every calendar quarter. This entails a relative accuracy test audit (RATA) that must be performed once per year and cylinder gas audits (CGAs) performed once during each of the other calendar quarters. Data recorded during periods of CEMS breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages. Pursuant to NWCAA Appendix A III(F)(14), CEMs are required to maintain greater than 90% data availability on a monthly basis.

In addition, CEMS performance is required to be submitted to NWCAA on a monthly basis or as required by an applicable subpart. A large part of the CEMS report includes information

about the duration and nature of CEMS downtime, changes made to the CEMS, total operating time and dates of CEMS audits or certifications. Monthly reports include disclosure of deviations from required monitoring and exceedances of emission limits.

The CEMS quality assurance reports which document drift, out of control periods, and the results of relative accuracy test audits (RATA) and cylinder gas audits (CGA) are to be reported on a quarterly basis.

3.6 Compliance Assurance Monitoring

40 CFR Part 64 Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act of large emission units that rely on pollution control device equipment to achieve compliance. The CAM rule (40 CFR Part 64) requires owners and operators to conduct monitoring to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements.

The CAM approach establishes monitoring for the purpose of:

- Documenting continued operation of the control measures within ranges of specified indicators of performance that are designed to provide a reasonable assurance of compliance with applicable requirements,
- Indicating any excursions from the performance indicator ranges, and
- Responding to the data so that the cause or causes of the excursions are corrected.

The first step in the CAM process is to determine the applicability of CAM to each pollutant-specific emission unit (PSEU). The determination is made on a pollutant-by-pollutant basis for each emission unit. To be subject to CAM, the PSEU must be:

1. Located at a major source required to obtain a Part 70 permit,
2. Subject to an emission limit or standard for the applicable pollutant,
3. Use a control device to achieve compliance,
4. Have potential pre-control emissions of the applicable pollutant that are at least 100% of major source threshold, and
5. Not otherwise exempt.

Chemtrade is a major source required to obtain a Part 70 permit, so all emission units at the facility are potentially subject to CAM. Based on the discussion below, only one PSEU triggers the requirement to submit a CAM plan – the sulfuric acid plant controlled by mist eliminators. Table 6 (below) identifies the CAM triggers and provides a summary of the CAM applicability review for the sulfuric acid plant. Table 7 (below) discusses why CAM doesn't apply to other emission units at the facility.

Sources required to submit CAM plans must include:

- The approved monitoring approach, including the indicators (or the means to measure the indicators) to be monitored, and the performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable;
- The means by which the owner or operator will define exceedances or excursions;
- The duty to conduct monitoring;
- If appropriate, minimum data availability and averaging period requirements; and

- Milestones for testing, installation or final verification.

Table 6 CAM Applicable

Pollutant-Specific Emission Unit	Control Device	Pollutant	Emission Limit	Pre-controlled Emissions
Sulfuric Acid Plant	Mist Eliminators	• H₂SO₄ / Visible Emissions	• 1.5x10⁻⁶ lb/dscf • 0.105 lb/ton acid produced • 0.15 lb/ ton acid produced¹³ • 10% opacity, 3 min aggregate/hr • 10% opacity, 6 min/hr • 20% opacity, >3 min in any hour	> 100 tpy ¹⁴ (Permitted PTE)

Sulfuric Acid Mist: As can be seen in Table 6, CAM potentially applies to the Sulfuric Acid Plant for sulfuric acid mist. In this case, it has acid emission limits in terms of pounds per dry standard cubic foot (lb/dscf) and pounds per ton of acid produced (production expressed as 100% H₂SO₄) (lb/ton acid produced) and uses mist eliminators associated with Abatement Units 10 and 11 to meet these limits. Based on the emission limit in OAC 458d (i.e., 0.105 lb/ton acid produced), the SPU is a major source pre-control but post-control emissions are less than the major source threshold (i.e., 100 tons per year)¹⁴. Therefore, the SPU is subject to CAM for the lb/dscf and lb/ton acid produced limits and a CAM Plan is required.

Note that OAC 458d requires that the compliance demonstration for the lb/dscf and lb/ton acid produced sulfuric acid mist emission limits is annual source testing. This source testing is also used to demonstrate compliance with the applicable sulfuric acid mist limits in NWCAA 465.12 and NSPS Subpart H. As a unit with potential post-control non-major source emissions, CAM mandates that the required monitoring be collected at least once per 24-hours. As such, this stack test does not satisfy the monitoring frequency requirement under CAM.

Visible Emissions: Two pollutants from the Sulfuric Acid Plant stack potentially cause visible emissions – particulate matter (from combustion of the spent acid contaminants) and sulfuric acid mist. CAM for visible emissions from sulfuric acid mist is addressed in the CAM Plan for sulfuric acid mist emissions.

¹³ Production expressed as 100% H₂SO₄

¹⁴ Permitted maximum allowable emission rate is 0.105 lb/ton acid produced x 566 ton acid/day x 365 days/year x 1 ton/2000 lb = 10.8 tons per year post-control. Based on the control efficiency distribution for the chosen mist pads, the mist pads are at least 89.2% efficient by weight (1 - (10.8 tons per year post-control / 100 tons per year pre control) = 89.2%) so pre-control emissions are greater than 100 tons per year.

Sulfuric Acid Mist: Chemtrade submitted a CAM Plan for the Sulfuric Acid Plant for the lb/dscf, and lb/ton acid produced sulfuric acid mist limits, which is included in SofB Appendix A. As part of the CAM Plan, Chemtrade proposed to monitor differential pressure daily across each mist eliminator pad in the Abatement Units absorption towers coupled with daily visible emissions observations when indicated. A potential excursion is defined as two consecutive daily differential pressure readings less than 0.2" H₂O for Abatement Unit 10 and 0.4" H₂O for Abatement Unit 11. A potential excursion triggers an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting.

Visible Emissions: A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where visible emissions is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold.

In addition to the CAM monitoring, Chemtrade also is required to stack test the Sulfuric Acid Plant annually for demonstrating compliance with the lb/dscf and the lb/ton acid produced limits. The testing will provide additional data to "spot-check" compliance and also evaluate the suitability of the CAM monitoring strategy.

This monitoring strategy is determined to be adequate to satisfy CAM requirements.

Table 7 lists other emission units at the facility and provides a summary of the CAM applicability review and is discussed further below. The table identifies the PSEU, pollutant, whether there is a control device other than inherent process equipment provided for safety or material recovery or passive methods that prevent pollutants from forming (e.g., low NO_x burners, lids or seals, etc) used to destroy or remove pollutants prior to discharge to the atmosphere to achieve compliance, and the basis for the non-applicability determination.

Table 7 Emission Units Not Subject to CAM

Process Unit	Control Device	Pollutant	Reason(s) for Non-Applicability
Sulfuric Acid Plant	SO ₂ Abatement Units 10 & 11	SO ₂	Otherwise exempt – equipped with continuous compliance determination method – CEMS
	Gas Cooling Tower with WESP	PM & Visible Emissions	Inherent process equipment
Sulfur Recovery Unit	SCOT Unit & Incinerator	SO ₂	Otherwise exempt – equipped with continuous compliance determination method – CEMS
	Uncontrolled	H ₂ SO ₄ /Visible Emissions	No active control device
	Uncontrolled	PM & Visible Emissions	No active control device
SPU3 Startup Heater	Uncontrolled	SO ₂	No active control device
	Uncontrolled	PM & Visible Emissions	No active control device
Abatement Units Process Heaters	Uncontrolled	SO ₂	No active control device
	Uncontrolled	PM & Visible Emissions	No active control device
SRU Auxiliary Boiler	Uncontrolled	SO ₂	No active control device
	Uncontrolled	PM & Visible Emissions	No active control device

The Sulfuric Acid Plant is equipped with Abatement Units 10 and 11, which are considered active control devices that reduce SO₂ emissions. SO₂ emissions prior to the Abatement Units exceed major source thresholds (100 tons per year). However, the Sulfuric Acid Plant exhaust is equipped with an SO₂ CEMS. This CEMS is also subject to NWCAA Section 367 and NWCAA Appendix A which requires quality assurance for the CEMS. As such, the CEMS is considered a continuous compliance determination method, which exempts it from CAM requirements under 40 CFR 64.2(b)(1)(vi).

Particulate matter from combustion is removed from the gas stream using a gas cooling tower and a wet electrostatic precipitator (WESP). The gas cooling tower is considered inherent process equipment because it serves primarily to cool the exhaust gas in preparation for the next process step and collection of entrained particulate is a side benefit.

The WESP is primarily used to remove particulate matter to prevent it from plugging equipment downstream and from collecting in the product acid. Because the product acid has specifications for particulate matter and metals, the WESP is considered inherent process equipment so is not subject to CAM requirements.

The SRU is equipped with the SCOT and incinerator to control SO₂. Pre-control SO₂ emissions exceed major source thresholds. However, similarly to the Sulfuric Acid Plant, the SRU exhaust is equipped with a continuous compliance determination method (i.e., a CEMS) for SO₂ so is exempt from CAM for SO₂ under 40 CFR 64.2(b)(1)(vi).

The SRU is also potentially subject to CAM for a sulfuric acid mist emission limit. However, the SCOT and incinerator do not reduce sulfuric acid mist emissions; the SRU is not equipped with an active control device for sulfuric acid mist. Therefore, CAM does not apply to the SRU for sulfuric acid mist.

The SPU3 startup heater, abatement unit process heaters and SRU auxiliary boiler are potentially subject to CAM; none of these units are equipped with an active control device for either SO₂ or particulate matter. Therefore, CAM does not apply to these units.

Note that in this CAM applicability analysis, pre-controlled emissions are not calculated when:

- A control device is not used to achieve compliance,
- There are no emission limits or standards that apply, or
- The PSEU is otherwise exempt.

A PSEU is otherwise exempt when subject to:

- Post-11/15/90 proposed NSPS or NESHAP, as those standards were designed with monitoring that provides a reasonable assurance of compliance
- Stratospheric ozone protection requirements
- Acid rain program requirements
- Emission limitations, standards or other requirements apply solely under an approved emission trading program
- Emissions cap that meets the requirements of 70.4(b)(12)
- Emission limitations or standards for which a Part 70 permit specifies a continuous compliance determination method that does not use an assumed control factor, such as a CEMS used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard and provides data in units of the standard.

An emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g., a state rule or an older NSPS emission limit) apply to the emission unit.

3.7 Risk Management Plan (RMP)

The goal of 40 CFR Part 68 and the risk management program is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur. If a facility contains the hazardous or flammable substances listed in 40 CFR 68.130 in an amount above the “threshold quantity” specified for that substance, the facility operator is required to develop and implement a risk management program.

Chemtrade does not maintain any substances in quantities greater than the listed thresholds. As such, Chemtrade is not required to submit an RMP to the EPA. This regulation is implemented in its entirety by the EPA. The facility certifies their compliance status with all applicable requirements of 40 CFR Part 68 in their annual compliance certification.

3.8 Greenhouse Gas (GHG) Regulation

Greenhouse gases are chemicals that contribute to climate change by trapping heat in the atmosphere. The greenhouse gases recognized by EPA and Ecology are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). “Hydrofluorocarbons” or “HFCs” means a class of greenhouse gases primarily used as refrigerants, composed of hydrogen, fluorine, and carbon.

Chemtrade is required to meet the following federal and state greenhouse gas emission requirements, as applicable.

3.8.1 WAC 173-401-200(19) & (35) – Greenhouse Gas Definition

WAC 173-401-200(19) & (35) define what the terms “major source” and “subject to regulation” regarding greenhouse gases (GHGs) mean and how to calculate GHG emissions.

Because the statutory authority for WAC 173-401-200 was the state Clean Air Act (ch 70.94 RCW), it is considered an applicable requirement under the air operating permit program (WAC 173-401-200(4)); as such, it is included in the AOP.

3.8.2 Chapter 173-441 WAC – Reporting of Emissions of Greenhouse Gases

Chapter 173-441 WAC was adopted by Ecology on December 1, 2010, was subsequently amended, and became effective on March 12, 2022. The rule requires annual GHG inventories be provided to Ecology by no later than March 31 of the following year beginning for calendar year 2012. This regulation is implemented in its entirety by Ecology. Because the statutory authority for Chapter 173-441 WAC is the state Clean Air Act (Chapter 70A.15 RCW), it is considered an applicable requirement under the air operating permit program (WAC 173-401-200(4)); as such, it is included in the AOP.

Chapter 173-441 WAC, “Reporting of Emissions of Greenhouse Gases”, adopts a mandatory greenhouse gas reporting rule for:

- Suppliers that supply applicable fuels sold in Washington state of which the complete combustion or oxidation would result in at least 10,000 metric tons of carbon dioxide annually, or
- Any listed source category that emits at least 10,000 metric tons of carbon dioxide equivalents (CO₂e) of greenhouse gases annually in the state.

Petroleum refineries is a listed source category. Tesoro Anacortes Refinery includes the GHG emissions from treatment of refinery sour gas at Chemtrade’s facility in their ch 173-441 reporting.

4 GENERAL ASSUMPTIONS OF THE PERMIT

4.1 Permit Content

The permit contains standard terms; generally applicable conditions for the type of facility permitted; and specifically applicable conditions originating from PSD permits, orders of approvals to construct, and any orders issued to the facility. Applicable requirements that were satisfied by a single past action on the part of the source are not included in the AOP but are discussed in the SofB. In addition, as discussed below, conditions that do not contain substantive requirements and have no ongoing compliance demonstrations are excluded from the AOP. Also, regulations that require action by a regulatory agency, but not of the regulated source, are not included as applicable permit conditions.

4.2 Excluded Requirements

Requirements in permits (OACs) that have been superseded (e.g., an earlier version of a modified permit) are not considered applicable requirements and are not included in the AOP.

The following requirements are excluded from the AOP:

4.2.1 Sulfuric Acid Plant

40 CFR Part 60 Subpart H – Initial Construction:

- The facility notified NWCAA of the commencement of construction of the third Sulfuric Acid Plant unit by letter dated September 4, 1973. (40 CFR 60.7(a) and 40 CFR Part 60 Subpart H)
- The facility submitted the notification of initial startup of the third Sulfuric Acid Plant unit as required by 40 CFR 60.7(a) by letter, dated April 14, 1975.
- The initial performance test results required by 40 CFR 60.84 and 60.8 were submitted to NWCAA and EPA Region 10 dated June 2, 1976.
- The facility submitted initial monitoring information to EPA Region 10 indicating compliance with the monitoring requirements of 40 CFR 60.84 by a letter dated January 21, 1977.

40 CFR Part 60 Subpart H – Modification: The Sulfuric Acid Plant was expanded and modified under 40 CFR 60 Subpart H triggering the initial requirements again.

- The facility notified NWCAA of the proposed modification under 40 CFR 60.7(a) in a letter dated October 18, 1993.
- Notification of initial startup under 40 CFR 60.7(a) was submitted by letter, dated September 20, 1995.
- The facility notified NWCAA of the initial performance test as required by 40 CFR 60 Subpart A. The letter is dated February 22, 1996.
- Notification of a Relative Accuracy Test Audit (RATA) on the Sulfuric Acid Plant CEMS was provided via letter dated July 30, 1996. Note that the Sulfuric Acid Plant CEMS has been in operation and in compliance with 40 CFR 60 Subpart H since initial construction.

New Source Review Permits:

- Condition 6 of PSD 94-01 Amendment 1 (1/14/98) includes language regarding operating in accordance with the PSD application unless otherwise approved. This

condition has no specific substantive ongoing requirements. As such, it is not listed in the AOP.

- PSD 94-01 Amendment 1 Condition 7 (1/14/98) states that “Any activity that is undertaken by General Chemical that is inconsistent with the PSD application shall be subject to enforcement.” NWCAA recognizes the difficulty in showing continuous compliance with this broadly-stated requirement and therefore considers that it does not have substantive requirements that need to be included in the AOP.

4.2.2 Sulfur Recovery Unit

40 CFR Part 60 Subpart J – Initial Construction:

- Records were not located in the NWCAA files demonstrating that the facility met the one-time initial notification requirements of the rule (40 CFR 60.7). There is evidence that the facility had some difficulty meeting the requirement to install and operate a CEM in accordance with 40 CFR 60.105. In a letter dated October 12, 1989, NWCAA stated that the facility had made “a determined effort” to comply with this requirement, and allowed additional time for this to occur. NWCAA does not assert that any outstanding requirements to provide the initial notifications remain for this rule at this time.

40 CFR Part 60 Subpart J – Modification: The SRU was modified under 40 CFR 60 Subpart J triggering the initial requirements again.

- The facility notified NWCAA of the proposed modification as required by 40 CFR 60.7(a) in a February 12, 1998 letter.
- The facility submitted the notification of commencement of construction as required by 40 CFR 60.7(a) in a September 9, 1998 letter.
- The facility submitted the notification of initial startup as required by 40 CFR 60.7(a) in an October 28, 1998 letter.
- The facility notified NWCAA of the initial performance test as required by 40 CFR Part 60 Subpart A in a March 25, 1999 letter.

40 CFR Part 63 Subpart UUU – Initial Applicability:

- The initial notification was required by 40 CFR 63.1574(a)(3)(i) and (d) to be submitted within 30 days of completion of the initial compliance demonstration. The facility submitted two documents labeled “initial notification”.

4.2.3 Boilers and Process Heaters

40 CFR Part 63 Subpart DDDDD – Initial Compliance:

- The Initial Notification under 40 CFR 63.7545(b) was due 120 days after January 31, 2013 (i.e., May 31, 2013). On February 3, 2009, NWCAA received an initial notice from Chemtrade listing all the subject units at the facility, all having a heat input capacity less than 10 MMBtu/hr, all firing only natural gas, and all commenced construction prior to June 4, 2010 (i.e., are considered existing units). NWCAA received a notice of intent to construct (replace) the SRU auxiliary boiler with a 9.9 MMBtu/hr natural gas-fired boiler on March 27, 2025; followed by notification of the actual startup date of the boiler on April 22, 2025.
- 40 CFR 63.7530(e) and (f) requires that the Notification of Compliance Status be submitted within 60 days of the compliance date (January 31, 2016). Chemtrade submitted the Notification of Compliance Status on February 18, 2016 and submitted supplemental information on March 31, 2016.

- The initial tune-ups must be completed by the compliance date (January 31, 2016). Chemtrade reported in the Notification of Compliance Status that they completed the initial tune-ups in a timely fashion. The initial tune-up and inspection for the replacement SRU auxiliary boiler occurred on May 12, 2025.
- The one-time energy assessment must be completed by the compliance date of January 31, 2016. Chemtrade reported in the Notification of Compliance Status that they completed the energy assessment in a timely fashion. The energy assessment was completed on January 23, 2016.

RCW 70.94.992 – Energy Assessment Submittal

- The nonproprietary information in the one-time energy assessment required under 40 CFR 63 Subpart DDDDD must be submitted to NWCAA by January 31, 2018. Chemtrade submitted their one-time energy assessment received on November 1, 2017.
- The nonproprietary information in the one-time energy assessment required under 40 CFR 63 Subpart DDDDD must be submitted electronically to the Washington State University extension energy program by January 31, 2018. The Washington State University extension energy program received Chemtrade's one-time energy assessment on November 7, 2017.

4.3 Federal Enforceability

Federally enforceable requirements are terms and conditions required under the Federal Clean Air Act or under any of its applicable requirements (e.g., NSPS or NESHAPs). Local and state regulations become federally enforceable by formal approval and incorporation into the State Implementation Plan (SIP) or through other delegation mechanisms. Federally enforceable requirements are enforceable by the EPA and citizens. All applicable requirements in the permit including standard terms and conditions, generally applicable requirements, and specifically applicable requirements are federally enforceable unless specifically identified as enforceable by only the state (i.e., labeled as "State Only").

Most rules and requirements are followed by a date in parentheses. For WAC regulations, the date listed in parentheses in the AOP represents the State Effective date. For the NWCAA regulations, the date represents the most recent Board of Directors adoption date, which is identified as the "Passed" or "Amended" date in the NWCAA Regulation. The date associated with an OAC or PSD permit represents the latest revision date of that order. For a federal rule, the date is the rule's most recent promulgation date.

Two different versions (identified by date) of the same regulatory citation may apply to the source if federal approval/delegation lags behind changes made to the Washington Administrative Code (WAC) or the NWCAA Regulation. As such, those citations that have been federally approved (i.e., incorporated into the SIP) are federally enforceable; the date listed is when it was incorporated into the SIP. If the rule has subsequently changed, those changes are enforceable only by the state or NWCAA; the date listed is of the current version and is identified as "State Only".

Chapter 173-401 WAC is not federally enforceable although the requirements of this regulation are based on federal requirements for the air operating permit program. Upon issuance of the permit, the terms based on ch 173-401 WAC become federally enforceable for the source.

4.4 Gap Filling

Title V of the Federal Clean Air Act is the basis for 40 CFR Part 70, which is the basis for the State of Washington air operating permit regulation, Chapter 173-401 WAC. Title V requires that all air pollution regulations applicable to the source be called out in the air operating permit for that source. Title V also requires that each applicable requirement be accompanied by a federally enforceable means of “reasonably assuring continuous compliance”. 40 CFR Part 70 and WAC 173-401-615 all contain a “gap-filling” provision to address situations where no monitoring is present. 40 CFR 70.6(c)(1) and WAC 173-401-630(1) contain authority to address situations where monitoring exists, but is deemed to be insufficient. NWCAA relied upon these authorities to add monitoring where needed to the air operating permit.

The majority of cases where monitoring needed to be added were older regulations and permits that contained no monitoring. For example, NWCAA used its gap-filling authority to add monitoring for the 20% opacity visible emission standard, NWCAA 451.1. The term “Directly Enforceable” is included in each AOP term where NWCAA added gap-filling.

There were also some limited cases where monitoring did exist but was found to be insufficient. NWCAA used its sufficiency monitoring authority to add monitoring in those cases. “Directly Enforceable” is included in the AOP term when NWCAA used its authority to supplement insufficient monitoring.

The type and frequency of monitoring added under the authorities in WAC 173-401-615 and WAC 173-401-630(1) were set based on the following factors:

1. Historical Compliance – NWCAA reviewed the facility’s past compliance with the underlying requirement. This information helped inform the decision about monitoring frequency and stringency.
2. Margin of Compliance – The margin of compliance is a measure of whether the facility can easily achieve compliance with a requirement, or whether they operate close to an exceedance. NWCAA considered the facility’s margin of compliance for each underlying requirement in setting monitoring for that requirement.
3. Variability of Process and Emissions – Processes that vary their production rates and/or emissions over time (e.g., batch loading of grain silos, VOC emissions from lumber drying kilns) require different monitoring from steady-state processes. NWCAA considered each process and emission variability in setting monitoring.
4. Environmental Impact of a Problem – Exceedances of some permit requirements have greater environmental consequences than others. For example, a problem that causes an exceedance of a refinery sulfur plant limit could have a greater environmental impact than failing to use ultra-low sulfur diesel at an emergency generator. NWCAA considered the environmental impact of a problem in setting monitoring.
5. Clarity and Complexity – The requirements that apply to AOP facilities are numerous, varied and can be complex. The greater number, variety and complexity of requirements, the harder it is for a facility to understand and comply. NWCAA’s goal is to write clear, concise permits the facilities can understand. To help achieve this goal, when possible, NWCAA aligned additional monitoring with monitoring that the facility is already performing. This approach required careful thought. NWCAA reviewed the monitoring the facility is already performing to see if it was adequate to stand-in as monitoring for the permit term, and only used it if deemed adequate. For example, an older storage tank may have a NWCAA construction permit that didn’t list monitoring. The same tank may also be subject to 40 CFR 60 Subpart Kb.

Subpart Kb monitoring would only be used as the gap-filled (or sufficiency) monitoring if we found it was adequate to show compliance with the construction permit.

The Tables below list where in the AOP NWCAAA used its gap-filling monitoring authority (Table 8) or sufficiency monitoring authority (Table 9).

Table 8 Gap-filled Monitoring Under WAC 173-401-615

AOP Terms	Description	Monitoring
2.4.1.3	Monitoring report certification by responsible official	Semiannual RO certification for all required monitoring reports during the six-month period
2.4.3.2	Required recordkeeping	Report when emission unit shutdown, no monitoring & recordkeeping required when shutdown
2.4.7	Reporting deviations	Identification of “prompt” with respect to reporting when a deviation represents a potential threat to human health or safety
4.2	Operation & maintenance	Monitor, keep records & report
4.3-4.11	Nuisance (contaminants, odors, PM, fugitives)	Investigation, corrective action & documentation of air contaminant complaints.
4.12, 4.13, 4.15, & 4.16	Visible emissions	Visible emission observation monitoring
4.18-4.20	Emissions of sulfur compounds; SO ₂	Monitor & record concentration of stack SO ₂ , or alternately, fuel gas H ₂ S
4.21-4.22	Sulfur in fuel	Retain fuel specifications & purchase records
5.2.2	SRU SO ₂ emission limit	Calculation methodology for using CEMS data to calculate 12-month cumulative total
5.3.1 – 5.3.2	GDF vapor-tight tank & fixed roof storage	Delivery component inspections

Table 9 Sufficiency Monitoring Under WAC 173-401-630(1)

AOP Terms	Description	Monitoring
4.1	Required monitoring reports	Reporting periods identified
4.14	PM emissions	Visible emission observation monitoring
4.17	Ambient SO ₂	Operate & maintain an ambient SO ₂ monitor
5.1.3 – 5.1.4	SO ₂ emission rate	Annual testing
5.1.5 – 5.1.7	H ₂ SO ₄ (acid mist) lb/ton mass emission rate	Enhanced testing details, Visible emission observation, CAM pressure

		drop monitoring & VE excursions, corrective action
5.1.8 – 5.1.13	Visible emissions	Visible emission observation, CAM pressure drop monitoring & VE excursions, corrective action
5.1.15 & 5.2.1	Visible emissions	Visible emission observation monitoring

4.5 Future Requirements

Applicable requirements promulgated with future effective compliance dates may be included as applicable requirements in the permit with a reference stating when compliance needs to be demonstrated. Some requirements that are not applicable until triggered by an action, such as the requirement to file a Notice of Construction application prior to building a new emission unit, are addressed within the standard terms and condition section of the AOP.

There are no requirements with future compliance dates in Chemtrade's AOP.

Some requirements that are not applicable until triggered by an action, such as the requirement to file an application prior to constructing a new source, are addressed within the standard terms and conditions section of the AOP. Chemtrade certified in the permit application that the facility will meet any future applicable requirements on a timely basis.

4.6 Alternative Operating Scenarios & Compliance Options

Chemtrade did not request emissions trading provisions or specify more than one operating scenario in the air operating permit application. Therefore, the permit does not address these options as allowed under WAC 173-401-650. This permit does not condense overlapping applicable requirements (streamlining) nor does it provide any alternative emission limitations.

5 PERMIT ELEMENTS AND BASIS FOR TERMS AND CONDITIONS

5.1 Permit Organization

The permit is organized in the following sequence:

- Permit Information
- Attest
- Table of Contents
- Emission Unit Identification (AOP Section 1)
- Standard Terms and Conditions (AOP Section 2)
- Standard Terms and Conditions for NSPS and NESHAP (AOP Section 3)
- Generally Applicable Requirements (AOP Section 4)
- Specifically Applicable Requirements (AOP Section 5)
- Inapplicable Requirements (AOP Section 6)

5.2 Permit Information and Attest

5.2.1 Permit Information

The Permit Information page of the permit identifies the source and provides general information about the permit, the responsible official, and the agency personnel responsible for permit preparation, review, and issuance.

5.2.2 Attest

The Attest Page provides authorization for the source to operate under the terms and conditions contained in the permit.

5.3 AOP Section 1 Emission Unit Identification

The Emission Unit Identification section is a non-enforceable section of the permit that is meant to list and provide relevant information on significant emission units at the facility. It includes emission unit identification, size or rating of the unit, control equipment where applicable, fuel types, applicable regulations and other related comments. Additional information about the facility may be found in the operating permit application and in associated files.

5.4 AOP Section 2 Standard Terms and Conditions

The Standard Terms and Conditions section contains administrative requirements and prohibitions in the State and NWCAA regulations that do not generally have ongoing compliance monitoring provisions. The citations giving legal authority to the Standard Terms and Conditions are provided in the section. At times, requirements are paraphrased. In this case the language of the cited regulation takes precedence over the paraphrased summary. For clarity and readability, the terms and conditions have been grouped by function. Similar requirements from State and NWCAA regulations are grouped together where possible. There are several requirements included that are not applicable until triggered such as the requirement to file an NOC application.

Monitoring Report Certification by Responsible Official (AOP Term 2.4.1.3): NWCAA gap-filled language allowing facilities to send in certification statements once every six months that covers the listed reports during that period. In conjunction with AOP Term 4.1, these six-month periods are based on a calendar year. The addition of this requirement and clarification meets the intent of the requirement in the WAC in that all reports are certified, while minimizing the burden on a facility to go to the responsible official every time a report is submitted.

Required Recordkeeping (AOP Term 2.4.3.2): For clarity, NWCAA gap-filled language stating that monitoring and recordkeeping are not required when the source is not operating but the facility must report when the source is shut down.

Reporting of Deviations from Permit Conditions (AOP Term 2.4.7): WAC 173-401-615(3)(b) states that “The permitting authority shall define “prompt” in each individual permit in relation to the degree and type of deviation likely to occur and the applicable requirement.” NWCAA gap-filled language to clarify the timeframe of the reporting of deviations that represent a potential threat to human health or safety.

5.5 AOP Section 3 Standard Terms and Conditions for NSPS and NESHAP

The Standard Terms and Conditions for NSPS and NESHAP sections contains administrative requirements or prohibitions with no ongoing compliance monitoring requirements. The conditions in this section are taken from the “General Provisions” in Subpart A of 40 CFR 60 and Subpart A of 40 CFR 63.

5.6 AOP Sections 4 and 5 Generally and Specifically Applicable Requirements

Requirements that limit emissions and broadly apply to all sources within NWCAA’s jurisdiction or apply facility-wide are identified in AOP Section 4 – Generally Applicable Requirements. Requirements that limit emissions and apply to specific emission units at Chemtrade are identified in AOP Section 5 – Specifically Applicable Requirements.

The first column lists the condition number and identifies the pollutant. The second column identifies the regulatory citation. The third column provides a brief description of the applicable requirements for informational purposes and is not enforceable. The fourth column identifies the periodic or continuous MR&R obligations the source must perform as required by WAC 173-401-605(1), -615(1) & (2), or the underlying requirement. MR&R obligations do not apply to insignificant emission units pursuant to WAC 173-401-530(2)(c).

The requirements in the MR&R column labeled “*Directly Enforceable:*” are legally enforceable requirements added under NWCAA’s “gap-filling” authority (WAC 173-401-615(1)(b) & (c)) or under NWCAA’s sufficiency monitoring authority (WAC 13-401-630(1)).

The requirements in the MR&R column labeled “*CAM:*” stem from the CAM Plan that are unique to the CAM Plan (i.e., not repeated elsewhere) including descriptions of “excursion” and “exceedance” events, as appropriate. An excursion is a departure from an indicator range established for monitoring consistent with the averaging period specified for the monitoring. An excursion does not necessarily indicate that a permit limit has been exceeded. An exceedance is an incident when emissions limits have been surpassed. The CAM Plan for the Sulfuric Acid Plant for sulfuric acid (and visible emissions) is included in SofB Appendix A.

Other MR&R requirements not labeled “*Directly Enforceable:*” or “*CAM:*” are brief descriptions of the regulatory requirements for informational purposes and are not enforceable, unless they are identical to the cited requirement; the language of the cited

regulation takes precedence over a paraphrased requirement. The following paragraphs provide additional information describing the basis of those MR&R requirements that do not stem directly from other regulations (i.e., those requirements that are directly enforceable).

Required Monitoring Reports (AOP Term 4.1): To explicitly place all AOP sources in NWCAA jurisdiction on the same reporting schedule based on the calendar year, NWCAA added under NWCAA's sufficiency monitoring authority the schedule for report submittal under AOP Term 4.1.

Operation and Maintenance (AOP Term 4.2): For clarity, NWCAA gap-filled language that monitoring, recordkeeping, and reporting in accordance with the AOP can also demonstrate compliance with operating in good operating condition and repair.

Nuisance – Odor and Fugitive Dust (AOP Terms 4.3 through 4.6 and 4.7 through 4.11): None of the listed conditions related to nuisance, odor, and fugitive dust have explicit monitoring, recordkeeping, and reporting requirements. As such, NWCAA gap-filled in an MR&R program to address how nuisance issues and complaints are handled by the facility. Generally, all NWCAA AOP facilities have similar requirements.

Visible Emission Requirements (AOP Terms 4.12, 4.13, 4.15, 4.16; 5.1.8 through 5.1.13; 5.1.15; & 5.2.1): Monitoring, recordkeeping and reporting (MR&R) requirements for compliance with visible emission standards found in State and NWCAA regulations or contained in OACs for various emissions units have been gap-filled by NWCAA as the standards themselves did not contain sufficient monitoring to reasonably assure compliance.

- There may be up to three visible emission standards that utilize one of two demonstration methods for emission units at the SPU and SRU Visible emissions shall not exceed 10% or 20% opacity for any period aggregating more than three minutes in any one hour (demonstrated using Ecology Source Test Method 9A – Visual Determination of Opacity for a Three Minute Standard (7/12/90)) (AOP Terms 4.12, 4.13, 5.1.11, 5.1.12 & 5.1.13) and
- Visible emissions shall not exceed 10% opacity on a six-minute average (demonstrated using 40 CFR 60 Appendix A Method 9 – Visual determination of the opacity of emissions from stationary sources) (AOP Terms 5.1.8, 5.1.9, & 5.1.10).

Visible emission is also being used as a surrogate for the grain loading standards in NWCAA 455.1 (AOP Term 4.14), WAC 173-400-060 (AOP Term 4.15), and WAC 173-400-050 (AOP Term 4.16).

Note that visible emissions can stem from fuel combustion or from the emission of sulfuric acid mist.

For clarity and simplicity, the MR&R requirements for each of these requirements have been consolidated and gap-filled as directly enforceable. Demonstration of compliance with the visible emission limits for the emission units (e.g., Sulfuric Acid Plant, SRU, SPU3 Startup Heater, Abatement Unit 10 and 11 Process Heaters, SRU Flare, SRU Auxiliary Boiler) will be based on periodic qualitative visual emission observations, initially conducted monthly. Any observed visible emissions at any time will require within 24 hours either corrective action, shutting the unit down, or an EPA Method 9 observation. If any single reading is greater than an applicable numerical visible emission limit (e.g., 10%), a certified reading must be taken in accordance with the appropriate method for each limit (i.e., a 6-minute EPA Method 9 and a 1-hour Ecology Method 9A). This must be repeated daily until visible emissions are determined to be in compliance with each limit.

All EPA Method 9 or Ecology Method 9A visible emission readings must be taken by an individual holding a valid Certification of Completion for Plume Evaluation Training from the

Washington State Department of Ecology or other authorized training facility. Both methods call for visible emission readings to be taken at 15-second intervals.

If no visible emissions are seen during the monthly qualitative observations for six consecutive months, the periodic reading can drop to quarterly.

Generally, all NWCAA AOP facilities have similar requirements.

Ambient Station (AOP Term 4.17): NWCAA 465.21, 465.22, and 465.24 list requirements for sulfuric acid plants, including installing a continuous recording ground level sulfur dioxide (SO₂) monitor “as approved by the Control Officer”. The requirement for the SO₂ ambient station has been added under NWCAA’s sufficiency monitoring authority with a reference to the operation of the ambient station in accordance with NWCAA 367 and NWCAA Appendix A.

Sulfur Compound Emissions (AOP Terms 4.18, 4.19, and 4.20): NWCAA Section 462 and WAC 173-400-040(7) limit sulfur dioxide emissions from stacks but do not have any specific MR&R requirements. Because Chemtrade is required to monitor sulfur dioxide emissions from each of their stacks, the gap-filled MR&R was linked to the monitoring requirements in AOP Section 5.

Sulfur Compounds in Fuel (AOP Terms 4.21 and 4.22): NWCAA 520.11, 420.12, 520.13 and 520.15 limit the fuel sulfur content but do not have any specific MR&R requirements. To document the fuel sulfur content, NWCAA gap-filled language requiring that fuel specifications and purchase records be retained.

Sulfuric Acid Plant Requirements – SO₂ under NWCAA 465.11, 465.23, and 465.24 (AOP Term 5.1.3): NWCAA 465.11 limits SO₂ from sulfuric acid plants with different limits for “new” and “existing” facilities. Because SPU3 was added in 1975 and SPU3 production was significantly expanded in 1994, the Chemtrade SPU is considered a new facility under NWCAA 465.11.

NWCAA 465.11, 465.23, and 465.24 lists requirements for sulfuric acid plants, including installing a continuous emission monitoring system (CEMS) for SO₂ “if required by the Control Officer”. As such, the requirement for the CEMS has been added under NWCAA’s sufficiency monitoring authority with a reference to the operation of the SO₂ CEMS under 40 CFR 60 Subpart H and to NWCAA Section 367. The limit has an averaging period similar to that in 40 CFR 60 Subpart H.

In addition, annual performance testing using EPA Methods 1-4 and 6 or 6C was added under NWCAA’s sufficiency monitoring authority to explicitly demonstrate compliance with the mass emission limits.

Sulfuric Acid Plant Requirements – SO₂ under PSD 94-01 Amendment 1 (AOP Term 5.1.4): Annual performance testing using EPA Methods 1-4 and 6 or 6C was added under NWCAA’s sufficiency monitoring authority to explicitly demonstrate compliance with the mass emission limits.

Sulfuric Acid Plant Requirements – H₂SO₄ Compliance Demonstration (AOP Terms 5.1.5 through 5.1.7): To clarify how compliance will be demonstrated with sulfuric acid limits based on facility production, NWCAA added under NWCAA’s sufficiency monitoring authority that the daily production rate may be used, even for shorter-term limits, since, according to the facility, it is the most accurate data currently available without significant expense at the time of this writing. This language will be reviewed during future AOP renewals for appropriateness.

Sulfuric Acid Plant Requirements – Visible Emission Compliance Demonstration (AOP Terms 5.1.8 through 5.1.13): See discussion above related to AOP Terms 4.12

through 4.16 regarding added monitoring under NWCAA's sufficiency monitoring authority for visible emission compliance.

Because sulfuric acid emissions can cause opacity, the proposed CAM monitoring strategy for sulfuric acid will also satisfy monitoring for visible emissions.

Sulfur Recovery Unit Requirements – SO₂ Tons Per 12-Month Period (AOP Term 5.2.2): OAC 650d Condition (7) limits SO₂ emissions from the SRU to 40 tons during any consecutive 12-month period. The OAC did not include any ongoing compliance demonstration. The compliance demonstration was gap filled as using the CEMS concentration data (an hourly average of ppm/minute data) multiplied by an average stack flow from the most recent 12 passing performance tests. Note that the appropriate average stack flowrate basis must be chosen for this calculation – to use the hourly average of ppm/minute data, it must be multiplied by the average actual cubic feet/minute flowrate; it must be converted to ppm/hour (i.e., multiplied by 60) to be multiplied by the actual cubic feet per hour flowrate.

An average stack flow was chosen because, according to the facility, it is the most reasonable and conservative method for determining stack flow currently available without significant expense at the time of this writing. This will be reviewed during future AOP renewals for appropriateness. Because the performance tests are generally performed at the upper end of SRU operation, using the stack flow from source tests is conservative. In addition, over the range of operating rates in the last 16 years of testing, the stack flow is fairly constant. A rolling average of the tested stack flows was to reflect potential shifts in tested operating rates and equipment age; an average of many performance tests was to avoid potential large step changes in flow rate.

Gasoline Dispensing Facility (AOP Terms 5.3.1 and 5.3.2): Periodic inspections when gasoline is delivered were gap-filled to ensure the gasoline storage tank is maintained in a vapor-tight condition and in good working order.

5.7 AOP Section 6 Inapplicable Requirements

WAC 173-401-640 allows a determination regarding inapplicable requirements. AOP Section 6 contains a list of inapplicable requirements and the causal basis.

6 INSIGNIFICANT EMISSIONS UNITS

Table 10 below lists emission units present at Chemtrade that are insignificant based on their emission rate, size, or production rates in accordance with WAC 173-401-530 and -533. The third column of the table provides a justification for the exemption based on operational characteristics for each unit. Some categorically exempt insignificant emission units as defined in WAC 173-401-532 are present at Chemtrade but are not required to be listed herein. An emission unit cannot be considered insignificant if it is subject to any federally-enforceable applicable requirement.

Note that the Generally Applicable requirements in AOP Section 4 apply to all insignificant emission units, although the monitoring, recordkeeping, and reporting requirements are deemed to not apply.

Table 10 Insignificant Emissions Units

Exempt Unit	WAC Citation	Comment
Diesel Storage Tank (250 gal)	WAC 173-401-533(2)(c)	Operation, loading and unloading of VOC storage tanks of ten thousand gallons or less with lids or other appropriate closure, vp not greater than 80mm Hg at 21°C
Waste Oil Storage Tank (300 gal)	WAC 173-401-533(2)(c)	
MDEA Storage Tank (2,800 gal)	WAC 173-401-533(2)(c)	
Portable In-Line Catalyst Preheater	WAC 173-401-533(2)(e)	Rated at less than 5 MMBtu/hr (natural gas fired)
Rental Maintenance Heaters	WAC 173-401-533(2)(g)	Rated at less than 1 MMBtu/hr (natural gas fired)
Cooling Tower	WAC 173-401-533(2)(m)	Water cooling tower not in contact with process streams, not using chromium-based corrosion inhibitors
Space and hot water heaters	WAC 173-401-533(2)(r)	Used for comfort. Space heaters and water heaters using natural gas, propane, or kerosene, and generating less than 5 million Btu per hour
Caustic Storage Tank (9,400 gal)	WAC 173-401-533(2)(s)	Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases, and acids.
93% H ₂ SO ₄ Tanks (3 @ 71,400 gal each)	WAC 173-401-533(2)(s)	
30% H ₂ SO ₄ Tanks (2 @ 17,000 gal each, 5,000 gal, 4,000 gal)	WAC 173-401-533(2)(s)	
Battery Acid Tanks (14,000 gal & 9,400 gal)	WAC 173-401-533(2)(s)	
Quality Control Lab	WAC 173-401-533(3)(c)	Chemical or physical analytical laboratory operations or equipment.
Effluent Neutralization	WAC 173-401-533(3)(d)	NPDES permitted ponds and lagoons utilized solely for the purpose of settling suspended solids and skimming of oil and grease

7 PUBLIC DOCKET

Copies of Chemtrade’s Air Operating Permit, permit application, and any technical support documents are available at the following locations:

Online:

www.nwcleanairwa.gov

Office:

Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273-5202
(360) 428-1617 (call for an appointment to review)

8 DEFINITIONS AND ACRONYMS

Definitions are assumed to be those found in the underlying regulation. A short list of definitions has been included below.

An "applicable requirement" is a provision, standard, condition or requirement in any of the listed regulations or statutes as it applies to an emission unit or facility at a stationary source.

An "emission unit" is any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant.

A "permit" means, for the purposes of the air operating permit program, an air operating permit issued pursuant to Title V of the 1990 Federal Clean Air Act.

"State" means, for the purposes of the air operating permit program, NWCAA or the Washington State Department of Ecology.

The following is a list of acronyms used in the Air Operating Permit and/or Statement of Basis:

AOP	Air Operating Permit
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CAM	Compliance Assurance Monitoring
CEM	continuous emission monitor
CFR	Code of Federal Regulations
CO	carbon monoxide
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
dscf	dry standard cubic foot
Ecology	Washington State Department of Ecology
GDF	Gasoline Dispensing Facility
HAP	Hazardous Air Pollutants
H ₂ S	hydrogen sulfide
H ₂ SO ₄	sulfuric acid
MACT	Maximum Achievable Control Technology
MDEA	methyl diethanolamine
MR&R	Monitoring, Recordkeeping, and Reporting
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOC	Notice of Construction
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
NWCAA	Northwest Clean Air Agency
O ₂	oxygen
OAC	Order of Approval to Construct
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in diameter
ppmvd	parts per million by volume, dry
psia	pounds per square inch absolute
PTE	Potential to Emit (annual, unless otherwise noted)

QA/QC	Quality Assurance/Quality Control
RCW	Revised Code of Washington
RMP	Risk Management Plan
SCF	Standard Cubic Feet
SCOT	Shell Claus Off-gas Treating
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SofB	Statement of Basis
SRU	Sulfur Recovery Unit
VOC	volatile organic compounds
WAC	Washington Administration Code

APPENDIX A

CAM Plan for Sulfuric Acid and Visible Emissions from the Sulfuric Acid Plant

**Compliance Assurance Monitoring
H₂SO₄ Mist (Acid Mist) and Opacity Control
Chemtrade Facility – Anacortes Washington**

I. BACKGROUND

A. EMISSIONS UNIT

Description: Sulfuric Acid Plant
Identification: Sulfuric Acid Plant Units (SPUs) 1, 2, & 3
Facility: Chemtrade – Anacortes, WA

B. APPLICABLE REGULATIONS AND EMISSION LIMIT

Air Operating Permit: AOP 009R2

Emission Limit: Sulfuric Acid Mist:

Sulfuric acid mist emissions (including sulfur trioxide) from the acid plant stack shall not exceed 0.15 lb/ton of sulfuric acid produced (expressed as 100% sulfuric acid). (40 CFR 60.83(a)(1), NWCAA 465.12)

Sulfuric acid mist emissions from the acid plant stack shall not exceed 1.5×10^{-6} lb/dscf and 0.105 lb/ton of acid produced on an hourly average (expressed as 100% H₂SO₄). (OAC 458d Conditions (1) & (3))

Emission Limit: Opacity

Sulfuric acid plant tailgas emissions shall not exhibit 10% opacity or greater using Method 9. (40 CFR 60.83(a)(2), OAC 458d Condition (2), PSD 94-01 Amendment 1 Condition 2)

Visible emissions from the sulfuric acid plant shall not exceed 10% opacity or greater for three minutes. (NWCAA 465.13)

No person shall cause or permit the emission, for any period aggregating more than 3 minutes in any 1 hour, of an air contaminant from any source which, at the point of emission, or within a reasonable distance of the point of emission, exceeds 20% opacity. (NWCAA 451.1)

No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed twenty percent. (WAC 173-400-040(2))

II. MONITORING APPROACH

The Sulfuric Acid Plant is made up of three production trains (SPUs 1, 2, and 3) and two abatement units (Abatement Units 10 & 11) to treat the exhaust gases prior to release to the atmosphere. SPU 1 and SPU 2 each have a maximum production capacity of 143 tpd of acid (100% basis) and SPU3, 280 tpd of acid (100% basis) for a total capacity of 566 tpd of acid (100% basis). SPUs 1 & 2 vent to Abatement Unit 10 and SPU3 vents to Abatement Unit 11. Each abatement unit is equipped with a mist eliminator pad in the absorption tower to control sulfuric acid mist. Abatement Units 10 & 11 vent to a common Sulfuric Acid Plant stack. The selected indicators of performance are differential pressure across each mist eliminator pad coupled with visible emissions observations when indicated.

Chemtrade installed differential pressure monitoring devices to measure the pressure drop across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. When the abatement unit is operating, the differential pressure of the associated mist eliminator pad will be measured and recorded in a written log daily.

Note that differential pressure across the mist eliminator pads will vary with flow rate which is directly related to production rate of the associated SPUs. There will be limited periods, such as startup, shutdown, maintenance, significant reductions in oil refinery production rates, and limited raw material supply, where the decreased SPU operation will result in a differential pressure across the mist eliminator pad(s) to be below the normal operating envelope without it necessarily being an indicator that the mist eliminator pad is being bypassed. Note that it is expected to be in a startup, shutdown, or maintenance condition only approximately 400 hours per year.

Prior to COVID-19, it was extremely rare to reduce operations below 400 tons per day sulfuric acid produced (as 100% H₂SO₄) (except when one or more SPUs are down during maintenance or the refineries were down for turnaround). For instance, during July 2019, acid production did not drop below 416 tons per day; during July 2020, production was below 416 tons per day for 20 days and below 300 tons per day for 14 days. As such, in the current situation, Chemtrade spends significant time at lower operating rates, potentially lower than what was used in the original CAM threshold testing, and is proposing an alternative compliance method for this low operation mode.

When the SPU production rate decreases such that the differential pressure across the mist eliminator pad falls below the designated thresholds, Chemtrade will continue daily differential pressure readings but also will conduct daily qualitative visible emissions observations of the Sulfuric Acid Plant stack. When SPU operation shifts such that both of the differential pressure readings are above the designated thresholds, the daily visible emissions observations will no longer take place. Note that because the three SPUs can operate independently of one another, the monitoring status of one abatement unit mist eliminator pad may be different from the other at any one time.

The key elements of the monitoring approach are presented in Table 1.

TABLE 1 SULFURIC ACID PROCESS UNIT AT ANACORTES, WASHINGTON

REQUIREMENT	PARAMETER
Indicator: Differential Pressure Inspection	
Measurement Approach	Differential pressure across Abatement Units 10 and 11 mist eliminator pads
Indicator Range	
Indicator Range	A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H ₂ O for Abatement Unit 10 or 0.4" H ₂ O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and a reporting requirement. If the corrective action requires the unit be shut down, the issue will be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Excursions, including corrective actions taken, shall be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.
Performance Criteria	
A. Data Representativeness	A differential pressure monitoring device will be installed at each abatement unit mist eliminator pad to measure differential pressure across the mist eliminator pad. Its minimum precision will be at most 0.05" H ₂ O.

B. Verification of Operational Status	The monitoring system shall be operated according to manufacturer specifications.
C. QA/QC Practices and Criteria	The monitoring system shall be maintained according to manufacturer specifications. Calibrate device(s) according to manufacturer's specification but no less frequently than every 12 months. Calibration information shall be recorded.
D. Monitoring Frequency and Data Collection Procedures	When the abatement unit is operating, differential pressure readings shall be measured and recorded on a daily basis in a log for each associated mist eliminator pad. The log shall include the date, time, and initials for each reading.
Indicator: Visible Emissions Qualitative Observations	
Measurement Approach	Qualitative visible emissions observations from the Sulfuric Acid Plant stack when indicated
Indicator Range	
Indicator Range	An excursion is defined as a single daily qualitative observation where visible emissions are present. Excursions trigger an inspection, corrective action, and a reporting requirement.
Performance Criteria	
A. Data Representativeness	While Method 9 certification is not required, staff will be trained with respect to the general procedures for determining the presence of visible emissions.
B. Verification of Operational Status	NA
C. QA/QC Practices and Criteria	Staff will be trained initially and have a refresher at least once every 12 months. Keep training records.
D. Monitoring Frequency and Data Collection Procedures	When indicated, visible emissions observations of the Sulfuric Acid Plant stack shall be taken on a daily basis.

III. JUSTIFICATION

A. RATIONALE FOR SELECTION OF PERFORMANCE INDICATORS

Differential Pressure Monitoring

Mist eliminators are essentially coarse filter pads that allow sulfuric acid in the exhaust gas stream to collect on the mesh and drip back into the process. The most common failure mechanisms that potentially result in emissions are when the mesh pad is being bypassed either via a hole in the mesh, the reactive sheathing on the mesh wears out (thereby reducing its cross-section), or the mesh modules shift or are not installed correctly.

When the mist eliminator pad is operating properly and there is no bypassing, the differential pressure should be relatively constant with constant flow rate (i.e., operating rate). If bypassing occurs, the differential pressure across the mist eliminator pad will decrease below its normal operating envelope. Differential pressure monitoring is the suggested long-term method of monitoring by the manufacturer. When the mist eliminator pad becomes fouled, the differential pressure can also increase; however, this issue should not impact emissions so is not addressed in the monitoring strategy.

Visible Emissions Qualitative Observations

Since sulfuric acid mist emissions are visible, the presence of visible emissions is also an indicator of sulfuric acid mist emissions. This monitoring procedure requires only the qualitative determination of whether visible emissions are present since the presence of any visible emissions is an indicator of process issues. A determination of opacity levels is not required; therefore, observer certification according to the procedures of Method 9 is not required. However, it is necessary that the observer is knowledgeable with respect to the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training will be based on the lecture portion of the Method 9 certification course. This training will occur initially and once every 12 months thereafter and be documented.

This monitoring procedure is conservative because facility staff will be responding upon the presence of any visible emissions from the Sulfuric Acid Plant stack rather than the allowed 10% opacity on a 6-minute average (EPA Method 9) and 10% on a 3-minute aggregate in 1 hour (Ecology Method 9A).

Note that because both abatement units feed into a single stack, observing opacity from the single combined stack is conservative because both units are being monitored simultaneously and if visible emissions are observed, operation of the mist eliminator pad with the low differential pressure will be checked but so will all three SPUs.

B. RATIONALE FOR SELECTION OF INDICATOR RANGES

Differential Pressure Monitoring

The selected indicator ranges for mist eliminator pad differential pressure are lower limits (i.e., shall not fall below) based on emission testing. There is no upper limit for the differential pressure, since a high differential pressure will indicate fouling of the mist eliminator pad but that condition will have no impact on emissions. Different values were selected for each abatement unit because, while the mist eliminator for each abatement unit is constructed identically, Abatement Unit 10 has a greater range of flow and therefore, experiences a larger range of operable differential pressures (i.e., Abatement Unit 10 handles the exhaust of two of the SPUs while Abatement Unit 11 handles only one SPU).

The differential pressure was measured periodically during the June 16, 2016; August 3-4, 2016; and June 14, 2017 stack tests. These tests were conducted to comply with the annual testing requirement while the overall SPU was operating at a “normal conditions” rate. Table 2 lists the results of this testing. The selected differential pressure values reflect the lowest value measured for each mist eliminator pad during both tests. All three stack tests showed no opacity and compliance with both of the sulfuric acid emission limits.

Because differential pressure across the mist eliminator pads varies with flow (i.e., operating rate), Chemtrade performed engineering testing at lower operating rates to set the differential pressure threshold values to allow more operational flexibility while still demonstrating compliance with the applicable limits. This testing took place on June 15, 2017 and the results are listed in Table 2. The engineering test indicated no opacity and compliance with the sulfuric acid emission limits.

TABLE 2 CAM THRESHOLD TESTING RESULTS

Test Date	Total (tpd)	Lb/ton	Lb/dscf	Abatement Unit 10 dP (“ H₂O)	Abatement Unit 11 dP (“ H₂O)	Opacity?
6/16/16	485	0.029	4.08E-07	0.8	0.7	No
8/4/16	483	0.02	2.84E-07	1.1	0.6	No
6/14/17	489	0.03	4.60E-07	0.8	0.6	No
6/15/17 Run 1	388	0.014	2.30E-07	0.51	0.49	No
6/15/17 Run 2	302	0.01	1.70E-07	0.3	0.4	No
6/15/17 Run 3	301	0.011	1.90E-07	0.17	0.4	No
Limit	--	0.105	1.5E-6	--	--	10%

The differential pressure meter has a degree of accuracy of ± 0.05 ” H₂O. As such, the thresholds chosen are 0.2” H₂O for Abatement Unit 10 and 0.4” H₂O for Abatement Unit 11 since they are the lowest differential pressure for which compliance is demonstrated. Note that at these low production rates, the emissions are less than 15% of the limits. Should the facility wish to change these thresholds, Chemtrade may source test at any time and submit the results for approval.

Two consecutive daily readings below the threshold was selected as triggering an excursion because, during the stack tests for which data were collected, the differential pressure across each mist eliminator pad can be extremely stable at constant production rates. Generally, Chemtrade sets the daily operation rate and maintains that operating rate throughout each day so swings in operation throughout a day are not expected.

This monitoring strategy was developed to monitor for sudden changes in differential pressure (e.g., when a hole is punched through the mesh or the mesh modules shift). Should the pressure gradually decrease, for example when the sheathing on the mesh is wearing off, this strategy may not explicitly capture this shift but as long as the differential pressure stays above the threshold

value, emissions should be below the emission limits as demonstrated by the testing. However, the sheathing wearing off should only be a problem if an improper mist eliminator pad is installed so this should be unlikely at best.

This differential pressure monitoring strategy will help to ensure that the mist eliminator pads are operating properly and, thus, maintain sulfuric acid mist emissions below the mandated thresholds.

Visible Emissions Qualitative Observations

The selected indicator range for visible emissions observations are a single daily reading of essentially an upper limit (i.e., shall not go above) based on emission testing. A single daily qualitative observation of the presence of visible emissions was selected because any presence of visible emissions is an indicator of a process issue. No visible emissions have been observed during any historical passing source tests including the engineering tests on June 15, 2017.



1600 South Second Street
Mount Vernon, WA 98273-5202
ph 360.428.1617
fax 360.428.1620
www.nwcleanair.org

Title V Air Operating Permit Renewal Application

The information requested in this document must be provided for a complete application. The application may be submitted either electronically (as a signed pdf) or in paper.

If submitting electronically, email to: facilityreports@nwcleanairwa.gov.

If submitting in paper, mail to: 1600 South 2nd St, Mount Vernon, WA, 98273.

The certification at the end of this document applies to the entire submittal. It must be signed.

If additional room to reply is needed on any question, please attach pages.

In some cases, a prior submittal to the NWCAA (e.g., the annual emissions inventory) may include information requested below. If you'd like to refer to that information instead of providing it here, please note this below. Any submittal to which the NWCAA is referred will become part of your renewal application. It is also acceptable to attach relevant portions of your current Air Operating Permit if the information therein provides an adequate response to a question below.

Part 1: General Information

- 1) Company name and address [or plant name and address if different from the company name]

[Chemtrade Solutions LLC, Anacortes Works](#)
[8579 North Texas Road, Anacortes, Washington](#)

- 2) Current Air Operating Permit number and expiration date

[AOP #: 009R2](#)
[Expiration Date: April 8, 2026](#)

- 3) Owner's name and agent

[Chemtrade Logistics](#)

- 4) Responsible Official name and address

[Howard Powell, Regional Manufacturing Manager](#)
[8579 North Texas Road](#)
[Anacortes, WA 98221](#)
[\(360\) 293-2171](#)

- 5) Telephone number and name of plant site manager/contact

[Ricky Gaethle, Plant Manager](#)
[8579 North Texas Road](#)
[Anacortes, WA 98221](#)
[\(360\) 293-2171](#)

- 6) Were there any changes to the facility impacting air emissions since receiving the current Air

Operating Permit? [if yes, please describe changes]

Please see the summary below for changes to the facility impacting air emissions since receiving the current Air Operating Permit (AOP):

1. Replacement of the SRU Auxiliary Boiler in 2025

Chemtrade plans to replace the current Sulfur Recovery Unit (SRU) Auxiliary Boiler (B-501) with a larger boiler to increase steam capacity. The new boiler is expected to begin operating in April 2025.

The SRU auxiliary boiler is used to produce steam when the SRU is operating at low rates, and minimal waste steam is available. Chemtrade will be replacing the SRU auxiliary boiler with a new boiler capable of producing enough steam to prevent freezing and excess emissions associated with hot standby at the SRU. The current SRU auxiliary boiler is rated at approximately 3.35 million British thermal units per hour (MMBtu/hr), and Chemtrade is installing a boiler physically derated to a maximum heat input capacity of 9.9 MMBtu/hr to increase steam capacity for the SRU. There are no other physical changes to upstream or downstream process units at Chemtrade as a result of the boiler replacement.

The planned SRU auxiliary boiler will be an affected source under National Emission Standards for Hazardous Air Pollutants (NESHAPs) Subpart DDDDD and will require biennial tune-ups.

The described changes resulted in amendments (shown as redlines) to Section 1.2 and Term 5.2.13 of Attachment A.

2. SRU Incinerator Stack (SO₂/O₂) CEMS Update

In September of 2024, Chemtrade upgraded the whole continuous emissions monitoring system (CEMS) with two Ametek dry/cold gas combined sulfur dioxide and oxygen (SO₂/O₂) analyzers, one EMRC DP-75 flow monitor, and one Vivicom ADM PLC and data logger. The new Vivicom CEMS (VCEMS) environmental data acquisition and handling system (DAHS) software provides continuous monitoring. Both the Datalogger and DAHS software are installed with independent Uninterrupted Power Supply (UPS) in case of failure to either system. New monitoring parameters were established as part of this upgrade, and the SO₂/O₂ combined analyzer passed relative accuracy test audits (RATAs) on September 19, 2024.

The EMRC flow monitor will be permanently installed after the planned SRU turnaround by May 2025, and will be operated as a process analyzer. Therefore, the 12-month rolling sulfur dioxide emissions (SO₂) under AOP Term 5.2.2 will continue to be calculated using the average stack flow for the most recent 12 passing stack tests.

The VCEMS Software will automatically calculate compliance with permit limits and report excess emissions if applicable. The VCEMS software also documents daily calibration drift data, downtime data (SO₂ and O₂), and quarterly cylinder gas audits (CGAs).

The described changes do not result in any amendments to AOP terms.

3. Sulfuric Process Unit (SPU) Abatement Stack (SO₂) CEMS Updates

In September of 2021, Chemtrade upgraded the whole CEMS with one Ametek wet gas SO₂ analyzer, one EMRC DP-75 flow monitor, and one Vivicom ADM PLC and datalogger. The new VCEMS environmental DAHS software provides continuous monitoring. Both the Datalogger and DAHS software are installed with independent UPS in case of failure to either system. New monitoring parameters were established as part of this upgrade.

In October of 2021, Units 1, 2 and 3 acid plant SO₂ process analyzers were upgraded to continuously record into the DCS system, replacing the periodic (at a minimum, three times daily, but typically every 2 hours) written values manually recorded by operators during rounds. The arithmetic average of SO₂% of all units that are online (i.e., feeding sulfur

bearing compounds) is calculated in Chemtrade's DCS system and sent to the Vivicom ADM as a 1-minute average gas strength.

Sulfur dioxide emissions, calculated as SO₂ per ton sulfuric acid produced, will be calculated using the averaged converter inlet (process analyzer) and stack outlet gas strength calculated via the VCEMS Software as opposed to the previous method of manually determining the conversion factor three times daily, using the conversion factor equation provided in the AOP.

The VCEMS Software will automatically calculate compliance with permit limits and report excess emissions if applicable.

The described changes do not result in an amendment to Term 5.1.3 of Attachment A, as the addition of the process analyzer and VCEMS do not affect compliance obligations under NSPS Subpart H. NSPS Subpart H does not have any limitations about using a process analyzer for obtaining the converter inlet concentration or for using an automated system for quantification of the conversion factor.

The EMRC flow monitor will be operated as a process analyzer; therefore, Chemtrade will continue to conduct annual performance tests to demonstrate compliance with the hourly emission rate limit under AOP Term 5.1.4.

Part 2: Process and Emissions Information

- 7) Will there be any changes to the operating scenario(s) identified in the current AOP?

No changes.

- 8) Provide a description of process and products by Standard Industrial Classification (SIC) Code. Please list the applicable SIC Code. Please repeat the list of processes and products for each alternative operating scenario.

SIC: 2819 – Industrial Inorganic Chemicals. The facility produces 99 percent sulfuric acid, 93 percent sulfuric acid, 30 percent sulfuric acid, and elemental sulfur. The process descriptions of the sulfuric acid plant and SRU are provided in the current AOP and Statement of Basis.

- 9) Please list any and all pollutants that would cause the facility to be classified as a "major source" as defined in WAC 173-401.

PTE > 100 tons per year of Sulfur Dioxide (SO₂)

- 10) Please identify and describe all points of emissions at the facility except those that qualify as insignificant emission units or activities as defined in WAC 173-401-530. Are these emissions units correctly identified and defined in the current AOP? If not, please note the requested changes below.

The current AOP correctly identifies and defines all emission units except for the SRU Auxiliary Boiler (B-501), which is being replaced with a larger boiler to increase steam capacity. Please see the table below for more information, including additional details regarding the design capacity of the emergency flare.

Process Area and Emission Point Description	Construction / Modification Year	Comments
Sulfuric Acid Plant		
SPUs 1, 2 and 3 with Abatement Units 10 and 11 venting to a common stack	Unit 1: 1957 Unit 2: 1964 Unit 3: Construction startup 1973, completion in 1975	Combined design production capacity of 566 tons of sulfuric acid per day (OAC 458d, PSD 94-01 Amendment 1, NWCAA Section 465, 40 CFR 60 Subpart H)

Process Area and Emission Point Description	Construction / Modification Year	Comments
	Unit 3 modified in 1993	
SPU3 Startup Heater	2004	9.2 MMBtu/hr, natural gas fired (OAC 880c)
Abatement Unit 10 and 11 Process Heaters	1971	2 @ 5.75 MMBtu/hr each, John Zink, natural gas fired
Sulfuric Acid Product Tanks	TK-6302: 1958 TK-6403: 1981 TK-6404: 1964 TK-6305: 1958 TK-6306: 1995 TK-6307: 1978	TK-6302: 66,835 gallons TK-6403: 9,923 gallons TK-6404: 13,333 gallons TK-6305: 66,835 gallons TK-6306: 158,758 gallons TK-6307: 66,835 gallons
Spent Acid Storage Tanks	TK-6108: 1980 TK-6109: 1980	158,000 gallons each
Swing Acid Tanks (Storing product or spent)	TK-6301: 1958 TK-6110: 1995	TK-6301: 66,835 gallons TK-6110: 158,700 gallons
Sulfur Recovery Unit		
Sulfur Recovery Unit (SRU) with Shell Claus Off-gas Treating (SCOT) unit and incinerator stack and emergency flare with bypass	1986 / 1998	The SRU maximum production capacity is 50.6 tons of molten sulfur per day (OAC 650d, 40 CFR 60 Subpart J, 40 CFR 63 Subpart UUU); The SRU incinerator stack is designed for a maximum natural gas heat input of 4.5 MMBtu/hr from the burner(s); The emergency flare design capacity is 9.86 MMscf/year or 10,839 MMBtu/year.
Components in VOC Service	1986 / 1998	(40 CFR 60 Subpart GGG)
SRU Auxiliary Boiler (B-501)	1986 2024	3.348 9.9 MMBtu/hr, natural gas fired (40 CFR 63 Subpart DDDDD)
Gasoline Dispensing Facility		
Gasoline Dispensing Facility (GDF)	Pre 1990	300 gallon above-ground fixed-roof gasoline storage tank (NWCAA 580.6, ch 173-491 WAC, 40 CFR 63 Subpart CCCCCC)

Note: Other processes that emit air contaminants are present at the facility but are considered insignificant emission units per WAC 173-401-530.

- 11) Please list and quantify all emissions of regulated air pollutants from the emission points identified in item 10 above. Please include calculations. If the most recent annual emissions inventory accurately describes these emissions, it is not necessary to repeat the same information here. Please refer the NWCAA to the most recent annual emissions inventory.

The 2024 Annual Emissions Inventory (due by 4/15/2025) quantifies all emissions of regulated air pollutants from the emission points in item 10 above, except for the SRU Auxiliary Boiler that is expected to be installed in 2025. See Attachment B for the potential to emit calculations for the SRU Auxiliary Boiler.

- 12) List the fuels used and their respective usage rates at design capacity for the emission points identified in item 10 above.

Natural gas is used for any supplemental fuel firing in the Sulfuric Acid Plant or SRU. Fuel usage rates at design capacity for the emission points identified in item 10 have not changed since the current AOP was issued in 2021, except for the new SRU Auxiliary Boiler that is expected to be installed and become operational in April 2025.

- 13) List the raw materials used and their respective usage rates at design capacity for the emission points identified in item 10 above.

The Sulfuric Acid Plant receives spent sulfuric acid from the Tesoro Refining & Marketing Company LLC Anacortes Refinery and the HollyFrontier Puget Sound Refining LLC Anacortes Refinery's alkylation units. The Tesoro Refinery also sends its refinery acid gas for treatment in the Chemtrade SRU. Raw material usage rates at design capacity for the emission points identified in item 10 have not changed since the current AOP was issued in 2021 and are summarized in the following table.

Process Area	Raw Material	Design Usage Rate
Sulfuric Acid Plant – SPU 1	Spent Sulfuric Acid	95 short tons/day
Sulfuric Acid Plant – SPU 1	Hydrogen Sulfide	55 short tons/day
Sulfuric Acid Plant – SPU 2	Spent Sulfuric Acid	95 short tons/day
Sulfuric Acid Plant – SPU 2	Hydrogen Sulfide	55 short tons/day
Sulfuric Acid Plant – SPU 3	Spent Sulfuric Acid	195 short tons/day
Sulfuric Acid Plant – SPU 3	Hydrogen Sulfide	47 short tons/day
Sulfuric Acid Plant – SPU 3	Sulfur	18 short tons/day
Sulfur Recovery Unit	Hydrogen Sulfide	55 short tons/day (2,400 SCFM of acid gas)

- 14) List the production rate at design capacity for the emission points identified in item 10 above.

The Sulfuric Acid Plant has a combined design production capacity of 566 tons of sulfuric acid per day. The table under item 10 summarizes the sulfuric and spent acid storage.

The SRU maximum production capacity is 50.6 tons of molten elemental sulfur per day. Production rates at design capacity for the emission points identified in item 10 have not changed since the current AOP was issued in 2021. The molten elemental sulfur drains to the sulfur pit for collection and storage before being loaded into trucks and transported offsite for ultimate use in other industries, including fertilizer manufacturing.

- 15) Identify the facility operating schedule (anticipated operating hours per day, days per week, weeks per year)

The facility normally operates 24 hours per day, 7 days per week, 52 weeks per year.

- 16) Please identify all air pollution control equipment at the facility. Is this air pollution control equipment correctly identified and defined in the current AOP? If not, please provide information necessary to correct.

The air pollution control equipment is correctly identified and defined in the current AOP and SOB.

The Sulfuric Acid Plant is made up of three production trains that each have a decomposition chamber, gas cooling tower, electrostatic precipitator, gas drying tower, SO₂ blower, catalytic converter, absorption tower, and mist eliminator. Metals and ash are removed primarily at the gas cooling tower and the remaining particulate matter is removed at the wet electrostatic precipitator. The gas stream also flows through a series of candle filters and mist pads which would remove potential material, although Chemtrade has no evidence of any remaining particulate being collected in the product acid. The production trains vent to the two abatement processes.

The SRU receives acid gas from the refinery, which primarily contains H₂S and a minor amount of hydrocarbons. The incoming acid gas is combined with recycled gas from the SCOT process, air, and supplemental oxygen and fed into the Claus furnace with an integral waste heat boiler. The Claus furnace converts the H₂S to SO₂ and water vapor. The gas is then passed through a series of reactors and condensers and catalytic reactors, converting the sulfur dioxide to elemental sulfur and steam. Condensed elemental sulfur drains to the sulfur pit for collection and storage. Non-condensable gases from the Claus train are sent to the SCOT abatement unit for additional treatment.

Claus tailgas enters the SCOT unit through an in-line heater and is mixed with reducing gas. The stream then enters the fixed bed catalyst reactor (SCOT reactor), where sulfur compounds are converted back to H₂S. The gas is cooled with water in a quench tower. From the quench tower, the stream enters a countercurrent flow absorbing tower to recover the H₂S. An incinerator combusts the overhead gas from the absorber to SO₂ prior to discharge to the atmosphere. The SRU is also equipped with an emergency flare system. The flare is used for emergency situations to vent gas from the process pressure regulating valves and incinerator combustion zone to prevent explosive conditions.

17) Please identify and describe all compliance monitoring devices or activities at the facility.

Compliance monitoring devices or activities at the facility are correctly identified and defined in the current AOP based on the updates to both the SRU Incinerator Stack and SPU Abatement Stack CEMS. Chemtrade operates a CEMS on the SPU Abatement Stack (monitoring SO₂) and the SRU Incinerator Stack (monitoring SO₂ and O₂). The CAM rule applies to Sulfuric Acid Mist and Opacity from the Sulfuric Acid Plant, and Chemtrade has a CAM Plan that describes the monitoring approach, including differential pressure inspections and qualitative visible emissions observations.

See Part 1, Section 6 of this document for details regarding the updates to the SRU Incinerator Stack and SPU Abatement Stack CEMS.

18) Identify any limitations on source operation that affect emissions of a regulated pollutant. Similarly, list any work practice standards that affect emissions of a regulated pollutant at this facility.

Limitations and work practice standards on source operation that affect emissions of a regulated pollutant are correctly identified in the current AOP under Section 4 (Generally Applicable Requirements) and Section 5 (Specifically Applicable Requirements), except for the replaced SRU Auxiliary Boiler under Section 5.2, which will now require a tune-up every two years as opposed to five.

Note that although the limits monitored by CEMS for the SRU Incinerator Stack and SPU Abatement Stack have not changed, how compliance is measured and calculated has changed, as discussed in Item 6 of this application.

A summary of limitations and work practice standards is provided below for the specifically applicable requirements under Section 5.

Emission Point: SPUs 1, 2 and 3 with Abatement Units 10 and 11 venting to a common stack	
Limitations	Work Practice Standards
- Sulfuric acid plant emissions shall not exceed 4 lb SO₂/ton of sulfuric acid produced (production expressed as 100% H₂SO₄). - SO₂ emissions from the acid plant common stack shall not exceed 315 ppmvd on a 3-hour average or 59.9 lb/hr on a 3-hour average, whichever is more stringent. - Sulfuric acid mist emissions from the acid plant common stack shall not exceed 1.5×10⁻⁶ lb/dscf hourly average expressed as 100% H₂SO₄. In addition, sulfuric acid mist emissions from the stack shall not exceed 0.105 pounds per ton of sulfuric acid produced on an hourly average. - Sulfuric acid plant emissions shall not contain acid mist, expressed as H₂SO₄, in excess of 0.15 lb/ton of	- Operating and maintenance manuals for all equipment that has the potential to affect emission to the atmosphere have been developed and will be followed. - Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. - When the abatement unit is operating, measure and record the differential pressure of the associated

acid produced (production expressed as 100% H₂SO₄). Acid mist means sulfuric acid mist, as measured by Method 8. • Sulfuric acid mist emissions (including sulfur trioxide) from the sulfuric acid plant shall not exceed 0.15 lb/ton of sulfuric acid produced, expressed as 100% sulfuric acid. • Sulfuric acid plant tailgas emissions shall not exhibit 10% opacity or greater using Method 9. • Visible emissions from the acid plant common stack shall not exceed an average of ten percent opacity in any consecutive six-minute period as determined by 40 CFR 60 Appendix A Method 9. • Opacity from the acid plant common stack shall not exceed 10 percent for more than six minutes in any one-hour period as measured by EPA Method 9. • Visible emissions from the sulfuric acid plant shall not exceed 10% opacity or greater for three minutes. • No person shall cause or permit the emission, for any period aggregating more than 3 minutes in any 1 hour, of an air contaminant from any source which, at the point at emission, or within a reasonable distance of the point of emission, exceeds 20% opacity (Ecology Method 9A) except: When there is valid data to show that the opacity is in excess of 20% as a result of the presence of condensed water droplets, and that the concentration of the particulate matter, as shown by a source test approved by the Control Officer, is less than 0.10 (0.23 g/m³) grain/dscf. • No person shall cause or allow the emission for more than 3 minutes, in any 1 hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds 20% opacity (Ecology Method 9A) except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed 20%.	mist eliminator pad daily in a written log, along with date, time, and reader initials.
Emission Point: SPU3 Startup Heater	
Limitations	Work Practice Standards
• The startup heater shall not operate for more than 1,000 hours in any 12-month period. • Visible emissions from the startup heater stack shall not exceed an	• NA

average of ten percent opacity in any consecutive six minute period as determined by 40 CFR 60 Appendix A Method 9.	
Emission Point: Abatement Unit 10 and 11 Process Heaters	
Limitations	Work Practice Standards
• NA	• NA
Emission Point: Sulfuric Acid Product Tanks	
Limitations	Work Practice Standards
• NA	• NA
Emission Point: Spent Acid Storage Tanks	
Limitations	Work Practice Standards
• NA	• NA
Swing Acid Tanks (Storing product or spent)	
Limitations	Work Practice Standards
• NA	• NA
Emission Point: Sulfur Recovery Unit (SRU) with Shell Claus Off-gas Treating (SCOT) unit and incinerator stack and emergency flare with bypass	
Limitations	Work Practice Standards
- Visible emissions from the incinerator stack shall not exceed an average of ten percent opacity in any consecutive 6-minute period as determined by 40 CFR 60 Appendix A Method 9. - The sulfur dioxide (SO₂) emissions from the SRU shall not exceed 40 tons during any consecutive 12-month period. - Emissions of SO₂ from the SRU shall not exceed 9.2 pounds per hour SO₂ on a one-hour basis. - SO₂ from the sulfur recovery unit shall not exceed 250 ppmvd at 0% excess air based on 12-hour rolling average at all times including startup and shutdown. Alternatively, startup and shutdown purge gases may be sent to a thermal oxidizer or incinerator operated at a minimum hourly average temperature of 1,200 degrees Fahrenheit in the firebox and a minimum hourly average outlet oxygen (O₂) concentration of 2 volume percent (dry basis). - Emissions of sulfur dioxide (SO₂) from the incinerator stack shall not exceed 250 ppm by volume (dry basis) at zero percent excess air, for any 12-hour period (measured as 12-hour rolling average). - Emissions of sulfuric acid mist from the SRU shall not exceed 0.45 pounds acid per ton of sulfur produced on an hourly average. - The SRU sulfur recovery efficiency shall not be less than 99 percent.	<u>Sulfur Recovery Unit Bypass Lines – HAP Emissions:</u> Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. <u>Sulfur Recovery Unit Bypass Lines – HAP Emissions:</u> Visually inspect the seal or closure mechanism at least once every month; and record whether the bypass line valve is maintained in the closed position and whether flow is present in the line. Record and report the time and duration of any bypass.
Emission Point: SRU Components in VOC Service	
Limitations	Work Practice Standards
If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, within 5	When each leak is detected, attach a weatherproof and readily visible identification, marked with the

days, either monitor using EPA Method 21 or eliminate the visual, audible, olfactory, or other indication of potential leak. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected, except for units with a leak definition of 2,000 ppm.	equipment identification number to the leaking equipment. The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected. Identification on equipment except valves may be removed after it has been repaired.
Emission Point: SRU Auxiliary Boiler (B-501)	
Limitations	Work Practice Standards
Conduct a tune-up of the boiler or process heater every 2 years. Tune-ups shall be conducted no more than 61 months after the previous tune-up.	NA
Emission Point: Gasoline Dispensing Facility	
Limitations	Work Practice Standards
NA	- All gasoline storage tanks at gasoline dispensing facilities shall be maintained in a vapor-tight condition and in good working order. This includes, but is not limited to, caps, adaptors, and drain valves. At each gasoline delivery, inspect to make sure fill and recovery caps are on, PV cap is not damaged, poppet is operating properly, dispensing hoses are not cracked or excessively worn, and no visual leaks are occurring. <u>Fixed-roof Gasoline Storage Tanks:</u> All openings not related to safety are to be sealed with suitable closures. - Gasoline must not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: - Minimize gasoline spills; - Clean up spills as expeditiously as practicable; - Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirements of 40 CFR 59 Subpart F are considered acceptable; and - Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

Part 3: Applicable Requirements

- 19) Cite and describe all applicable requirements. An updated copy of the applicable requirements in the current AOP for the facility may be sufficient.

The current AOP correctly cites and describes all applicable requirements, which are covered in Section 4 – Generally Application Requirements and Section 5 – Specifically Applicable

Requirements (see Attachment A), except for the new SRU Auxiliary Boiler.

The new SRU auxiliary boiler will be an affected source under NESHAPs Subpart DDDDD and will require biennial tune-ups. Please refer to Question 25 for requested changes to the facility's applicable requirements.

- 20) Please list any applicable test method(s) for determining compliance with each applicable requirement listed in item 19 above. An updated copy of the current AOP for the facility may be sufficient.

The current AOP correctly lists applicable test method(s) for determining compliance with each applicable requirement (see Attachment A).

- 21) Does the applicant propose any exemptions from an otherwise applicable requirement? If so, please explain.

No.

- 22) Does the CAM rule (40 CFR part 64) apply to any of the emissions units?

Yes, the Compliance Assurance Monitoring (CAM) rule applies to Sulfuric Acid Mist and Opacity from the Sulfuric Acid Plant. CAM applicability has not changed since the current AOP was issued in 2021. The table below summarizes CAM applicability.

Pollutant Specific Emissions Unit (PSEU)	CAM Applicability
Sulfuric Acid Plant	SO ₂ (Abatement Units)– DOES NOT APPLY (equipped with continuous compliance determination method (CEMS)) H ₂ SO ₄ /Opacity (mist eliminators) – CAM APPLIES (see CAM Plan in SOB Appendix A) PM/Opacity – DOES NOT APPLY (no active control device)
Sulfur Recovery Unit	SO ₂ (SCOT & Incinerator) – DOES NOT APPLY (equipped with continuous compliance determination method (CEMS)) H ₂ SO ₄ /Opacity – DOES NOT APPLY (no active control device) PM/Opacity – DOES NOT APPLY (no active control device)
SPU3 Startup Heater, Abatement Unit 10 & 11 Process Heaters, & SRU Auxiliary Boiler	SO ₂ – DOES NOT APPLY (no active control device) PM/Opacity – DOES NOT APPLY (no active control device)

- 23) Does the accidental release prevention regulation (40 CFR part 68) apply to the facility?

No.

- 24) Do the federal Acid Rain rules (40 CFR parts 72-78) apply to any of the emissions units?

No.

- 25) Are there any requested changes to any condition in the current Air Operating Permit? [if

yes, identify the condition, the requested change, and the reason]

Please see the table below for requested changes to any condition in the current AOP:

Condition	Requested Change	Reason
Term 5.2.13	Adjust the tune-up schedule for the SRU Auxiliary Boiler from every 5 years to every 2 years.	In 2025, Chemtrade plans to replace the current Sulfur Recovery Unit (SRU) Auxiliary Boiler (B-501) with a larger boiler (9.9 MMBtu/hr) to increase steam capacity. Per 40 CFR 63 Subpart DDDDD 63.7500(e), boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years.

Note that although the permit conditions for the SRU Incinerator Stack and SPU Abatement Stack have not changed, however, how compliance is measured and calculated has changed, as discussed in Item 6 of this application. See Attachment A for redlines to Section 5 of the current AOP addressing this.

- 26) If the applicant would like to request that the permit shield be extended to cover certain requirements that the applicant believes are inapplicable, please list those requirements, below. Please include a brief narrative description of each requirement and the basis for the belief that each is inapplicable.

Not applicable.

Part 4: Compliance Status and Certification

- 27) Describe the compliance status of the facility with regard to all applicable requirements. Compliance status for each applicable requirement shall be described as "continuous" or "intermittent". Please include the method used for determining compliance. If an annual compliance certification has been recently submitted to the NWCAA, the applicant may reference this report. However, if the applicable requirements or compliance status have changed since that submittal, an updated submittal is required.

Refer to Attachment C for a copy of the facility's 2024 Annual Compliance Certification. Neither the applicable requirements nor the compliance status have changed since the report was submitted to NWCAA.

- 28) Provide the following:

- a) For applicable requirements with which the source is in compliance, provide a statement that the source will continue to comply with such requirements;

The source is currently in compliance with all applicable requirements. The source will continue to comply with all applicable requirements.

- b) For applicable requirements that become effective during the permit term, provide a statement that the source will meet such requirements on a timely basis;

For applicable requirements that become effective during the permit term, the source will meet such requirements on a timely basis.

- c) For applicable requirements with which the source is not in compliance at the time of permit issuance, provide a narrative description and provide a schedule of

compliance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based;

Not applicable, the source is currently in compliance with all applicable requirements.

- d) For sources required to have a schedule of compliance to remedy a violation, provide a schedule for submission of certified progress reports every six months or at a more frequent period if specified in an applicable requirement; and

Not applicable, the source is currently in compliance with all applicable requirements.

Statement of Certification: *Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete.*

Howard Powell

Name of responsible official

Regional Manufacturing Manager

Title of responsible official



Signature of responsible official

4 - 9 - 2025

Date

Attachment A – Redlined 2021 Air Operating Permit

Air Operating Permit **- FINAL -**

Chemtrade Solutions LLC

Anacortes, Washington

April 9, 2021



Serving Island, Skagit & Whatcom Counties

PERMIT INFORMATION

Chemtrade Solutions LLC, Anacortes Works 8579 North Texas Road, Anacortes, Washington

SIC: 2819
NAICS: 325188
EPA AFS: 53-057-00002

NWCAA ID: 1010

Responsible Official

~~Nestor Gomez~~Howard Powell, Regional
Manufacturing Manager
8579 North Texas Road
Anacortes, WA 98221
(360) 293-2171

Inspection Contact

~~Jerry Tippet~~Ricky Gaethle,
Plant Manager 8579 North
Texas Road Anacortes, WA
98221
(360) 293-2171

Northwest Clean Air Agency

1600 South Second Street
Mount Vernon, Washington 98273-5202
(360) 428-1617

Prepared by:

M.J. "Lyn" Tober, P.E.
Chemical Engineer
(360) 419-6765

Air Operating Permit Number: 009R2

Issued: April 9, 2021

Expires: April 8, 2026

Renewal Application Due: April 9, 2025

ATTEST

This permit is issued in accordance with the provisions of Section 322 of the Regulation of the Northwest Clean Air Agency and the provisions of chapter 173-401 Washington Administrative Code (WAC).

Pursuant to Section 322 of the Regulation of the Northwest Clean Air Agency and chapter 173-401 WAC, Chemtrade Solutions LLC is authorized to operate the Anacortes Works subject to the terms and conditions of this permit.

Northwest Clean Air Agency Approval:

[This document is a copy of the AOP signed 4/9/2021]

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SECTION 1 EMISSION UNIT IDENTIFICATION

The tables below list emission units and activities that are located at the Chemtrade Solutions LLC facility located at 8579 North Texas Road, Anacortes, Washington hereinafter referred to as Chemtrade, the facility, or the permittee. The information presented in AOP Section 1 is for informational purposes only.

1.1 Sulfuric Acid Plant

Process Area and Emission Point Description	Constructed/ Modified	Comments
Sulfuric Acid Plant Units (SPUs) 1, 2 and 3 with Abatement Units 10 and 11 venting to a common stack	Unit 1: 1957 Unit 2: 1964 Unit 3: Construction startup 1973, completion in 1975 Unit 3 modified in 1993	Combined design production capacity of 566 tons of sulfuric acid per day (OAC 458d, PSD 94-01 Amendment 1, NWCAA Section 465, 40 CFR 60 Subpart H)
SPU3 Startup Heater	2004	9.2 MMBtu/hr, natural gas fired (OAC 880c)
Abatement Unit 10 and 11 Process Heaters	1971	2 @ 5.75 MMBtu/hr each, John Zink, natural gas fired
Sulfuric Acid Product Tanks	TK-6302: 1958 TK-6403: 1981 TK-6404: 1964 TK-6305: 1958 TK-6306: 1995 TK-6307: 1978	TK-6302: 66,835 gallons TK-6403: 9,923 gallons TK-6404: 13,333 gallons TK-6305: 66,835 gallons TK-6306: 158,758 gallons TK-6307: 66,835 gallons
Spent Acid Storage Tanks	TK-6108: 1980 TK-6109: 1980	158,000 gallons each
Swing Acid Tanks (Storing product or spent)	TK-6301: 1958 TK-6110: 1995	TK-6301: 66,835 gallons TK-6110: 158,700 gallons

1.2 Sulfur Recovery Unit (SRU)

Process Area and Emission Point Description	Construction / Modification Year	Comments
Sulfur Recovery Unit (SRU) with Shell Claus Off-gas Treating (SCOT) unit and incinerator stack and emergency flare with bypass	1986 / 1998	The SRU maximum production capacity is 50.6 tons of molten sulfur per day (OAC 650d, 40 CFR 60 Subpart J, 40 CFR 63 Subpart UUU)
Components in VOC Service	1986 / 1998	(40 CFR 60 Subpart GGG)
SRU Auxiliary Boiler (B-501)	~~1986~~ 2024	~~3.348~~ 9.9 MMBtu/hr, natural gas fired (40 CFR 63 Subpart DDDDD)

1.3 Gasoline Dispensing Facility (GDF)

Process Area and Emission Point Description	Construction / Modification Year	Comments
Gasoline Dispensing Facility (GDF)	Pre 1990	300 gallon above-ground fixed-roof gasoline storage tank (NWCAA 580.6, ch 173-491 WAC, 40 CFR 63 Subpart CCCCCC)

Note: Other processes that emit air contaminants are present at the facility but are considered insignificant emission units per ch 173-401 WAC

SECTION 2 STANDARD TERMS AND CONDITIONS

Standard terms and conditions are administrative and/or other requirements that typically have no ongoing compliance monitoring requirements. The permittee must comply with the requirements listed below. Some requirements from the regulations have been paraphrased for brevity.

All terms and conditions of this permit are enforceable by the Environmental Protection Agency (EPA) Administrator and by citizens under the Federal Clean Air Act (FCAA), except for those terms and conditions designated in the permit as "State Only". A requirement designated "State Only" is enforceable only by the state or the NWCAA, and not by EPA or through citizen suits. "State only" WAC citations are enforceable by the NWCAA because they are adopted by reference in NWCAA 104.1 as amended April 11, 2019.

The requirements listed below the "Directly Enforceable" label are legally enforceable requirements added under NWCAA's gap-filling authority (WAC 173-401-615(1)(b) & (c) (10/17/02)). Unless the text of the term is specifically identified to be "Directly Enforceable", the language of the cited regulation takes precedence over a paraphrased requirement.

The provisions of federally-approved NWCAA 365, 366, and the "Guidelines for Industrial Monitoring Equipment and Data Handling" have been replaced in this section by NWCAA 367 and Appendix A - "Ambient Monitoring, Emission Testing, and Continuous Emission and Opacity Monitoring". NWCAA 367 and Appendix A were adopted on July 14, 2005 and are "State Only" until incorporated into the State Implementation Plan.

2.1 Compliance Requirements

2.1.1 Duty to Comply

2.1.1.1 WAC 173-401-620(2)(a) (11/4/93)

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of RCW 70.94 and, for federally enforceable provisions, a violation of the Federal Clean Air Act (FCAA). Such violations are grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

2.1.1.2 State Only: NWCAA 322.3 (11/17/11)

It shall be unlawful for any person to operate a source that is subject to the requirements of chapter 173-401 WAC without complying with the provisions of chapter 173-401 WAC and any permit issued under its authority.

2.1.2 Civil and Criminal Penalties

2.1.2.1 WAC 173-400-230(2) (3/20/93), WAC 173-400-240 (3/22/91), NWCAA 131 (4/14/93), NWCAA 132 & 133 (10/13/94), and Section 113 of the FCAA

Any person who violates applicable regulations or aids and abets in a violation, as notified in accordance with this section, shall be subject to penalties.

2.1.2.2 State Only: NWCAA 131 (3/14/13), 132 (8/13/15) & 133 (8/13/15)

Any person who violates applicable regulations or aids and abets in a violation, as notified in accordance with this section, shall be subject to penalties.

2.1.2.3 WAC 173-400-250 (9/20/93) and NWCAA 133.2 (10/13/94) State Only: NWCAA 133.2 (8/13/15)

Penalties issued may be appealed to the pollution control hearings board within 30 days after notice is served.

2.1.3 Need to Halt or Reduce Activity Not a Defense

WAC 173-401-620(2)(b) (11/4/93)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.

2.1.4 Duty to Provide Information

WAC 173-401-620(2)(e) (11/4/93)

The permittee shall furnish to the NWCAA, within a reasonable time, any information that the NWCAA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the NWCAA copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA Administrator along with a claim of confidentiality. The NWCAA shall maintain confidentiality of such information in accordance with RCW 70.94.205 and the NWCAA Regulation.

2.1.5 Confidential Information

2.1.5.1 NWCAA 114.1 (4/14/93)

Whenever the permittee requests that records or information eligible for confidentiality status be made confidential by the Board of the NWCAA, the NWCAA shall maintain confidentiality of such information in accordance with NWCAA 114. The records or information shall be only for the confidential use of the Board, the Advisory Council, and the NWCAA staff, but may not be accessed if, in the opinion of the Board, there is a conflict of interest.

2.1.5.2 State Only: NWCAA 114 (11/8/07)

Whenever any records or other information other than ambient air quality data or emission data furnished to or obtained by the Agency, relates to processes or production unique to the owner or operator, or are likely to affect adversely the competitive position of such owner or operator if released to the public or to a competitor, and the owner or operator of such processes or production so certifies, such records or information shall be only for the confidential use of the NWCAA.

Nothing herein shall be construed to prevent the use of records or information by the NWCAA in compiling or publishing analyses or summaries relating to the general condition of the outdoor atmosphere: provided, that such analyses or summaries do not reveal any information otherwise confidential under the provisions of this section: provided further, that emission data furnished to or obtained by the Board shall be correlated with applicable emission limitations and other control measures and shall be available for public inspection during normal business hours at the office of the NWCAA.

2.1.6 Inspection and Entry

2.1.6.1 WAC 173-400-105(3) (9/20/93), WAC 173-401-630(2) (3/5/16), NWCAA 110 & 111 (1/8/69)

State Only: WAC 173-400-105(3) (11/25/18)

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow Ecology, NWCAA or an authorized representative to:

- (i) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

- (ii) Have access to and copy, at reasonable times, any records that must be kept under the condition of the permit;
- (iii) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (iv) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

No person shall willfully interfere with or obstruct the Control Officer or any NWCAA employee and/or assigned agent in carrying out any lawful duty.

2.1.6.2 PSD 94-01 Amendment 1 Condition 8 (1/14/98) – Sulfuric Acid Plant

Access to the facility by the USEPA, state or local regulatory personnel shall be permitted upon request for the purpose of compliance assurance inspections. Failure to allow access is grounds for enforcement under federal and state law.

2.1.7 Investigation and Studies

NWCAA 110 (1/8/69)

The Control Officer and/or his qualified agents may make any reasonable investigation or study which is necessary for the purpose of standards or any amendments thereto on reducing the amount or kind of contaminant.

When investigating conditions specific to the control, recovery or release of air contaminants, the Control Officer or his duly authorized representatives shall have the power to enter at reasonable times upon any private or public property, except non-multiple unit private dwellings housing two families or less.

If an authorized employee of the Agency, during the course of an inspection desires to obtain a sample of air contaminant, he shall notify the owner or lessee of the time and place of obtaining a sample so the owner or lessee has the opportunity to take a similar sample at the same time and place. A receipt shall be given to the owner or lessee for the sample obtained.

2.1.8 Source Testing

2.1.8.1 WAC 173-400-105(4) (9/20/93)

To demonstrate compliance, Ecology or the NWCAA may conduct or require that a test be conducted of the source using approved EPA methods from 40 CFR 60 Appendix A which are adopted by reference, or approved procedures contained in the "Source Test Manual – Procedures for Compliance Testing," state of Washington, Department of Ecology, as of July 12, 1990, on file at Ecology. The operator of a source may be required to provide the necessary platform and sampling ports for Ecology personnel or others to perform a test of an emissions unit. Ecology shall be allowed to obtain a sample from any emissions unit. The operator of the source shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

2.1.8.2 State Only: WAC 173-400-105(4) (11/25/18)

To demonstrate compliance, the required test must be conducted using approved EPA methods from 40 CFR Parts 51, 60, 61 and 63 (in effect on January 24, 2018) or procedures contained in "Source Test Manual – Procedures for Compliance Testing," state of Washington, department of ecology, as of September 20, 2004, on file at ecology. All other language is the same as AOP Term 2.1.8.1.

2.1.8.3 State Only: NWCAA 367 and Appendix A (7/14/05)

Source tests required by NWCAA to assess compliance with an air emission standard shall be conducted according to the following provisions:

- (i) A source test plan shall be submitted to the NWCAA for approval for all compliance source tests at least 30 days prior to scheduled testing. A summary of the test shall accompany the test plan and be submitted on a template provided by the NWCAA.
- (ii) Once a test plan has been approved, any changes in test dates or methodology shall require NWCAA approval.
- (iii) Results of required source tests must be submitted within sixty days of completion of the test unless prior approval is granted by NWCAA.

2.1.8.4 PSD 94-01 Amendment 1 Condition 3 (1/14/98) – Sulfuric Acid Plant

Sampling ports and platforms must be provided on the common stack. The ports must meet the requirements of Reference Method 1 of 40 CFR Part 60 Appendix A. Other arrangements may be acceptable if approved prior to installation. Adequate permanent and safe access to the test ports must be provided.

2.1.9 Testing and Sampling

2.1.9.1 NWCAA 360.1 (2/14/73)

Any person operating or using any article, machine, equipment or other contrivance shall provide and maintain such sampling and testing facilities as specified in the Order of Approval to Construct or an Air Operating Permit.

2.1.9.2 State Only: NWCAA 367 and Appendix A (7/14/05)

All ambient monitoring, compliance testing, continuous monitoring systems and continuous opacity monitoring systems required by a regulation, order of approval or permit issued by the NWCAA shall comply with the applicable requirements of Section 367 and Appendix A of the NWCAA Regulation. The applicable requirements of Section 367 and Appendix A of the NWCAA Regulation are in addition to any monitoring, testing, calibration or quality assurance/quality control requirements that otherwise apply.

Any person operating an air operating permit source may, at any time, be required to monitor the ambient air, process emissions or conduct emission tests as deemed necessary by the Control Officer.

The Control Officer may take such samples and perform any tests and investigations deemed necessary to determine the accuracy of the monitoring reports and tests submitted to the Agency, and evaluate the validity of the data. The owner or operator may also be required by the Control Officer to take a sample using an approved procedure and submit the results thereof within a reasonable period of time.

Once initiated, a compliance test shall be completed unless interrupted by severe weather, test equipment failure or other conditions beyond control of the facility. Failure to complete a test shall be a violation of the requirement to test, and, in cases where the initial data indicate a non-compliance of the applicable emission standard, the results may be considered a violation of that standard.

2.1.10 Ambient Air and Continuous Emission Monitoring

2.1.10.1 NWCAA 365.1 (2/8/89)

Any person operating an air contaminant source or an air operating permit source may, at any time, be required to monitor the ambient air, process emissions or conduct emission tests as deemed necessary by the Control Officer under the following provisions:

The Board or Control Officer may require any person operating any source to conduct a monitoring program on site or adjacent off site for emissions, ambient air concentrations or any other pertinent special studies deemed necessary.

All monitoring data shall be submitted in a form which the Board or Control Officer may require. Averaging time and collection periods will be determined by the Control Officer. Failure to record and/or report data as specified in the "Guidelines for Industrial Monitoring Equipment and Data Handling" may be cause for a Notice of Violation to be issued.

All data and records shall be kept for a period of at least one year and made available to the Control Officer upon request.

All required continuous emission monitors or required opacity monitors used to monitor compliance and all instruments used for special studies must meet appropriate EPA performance specifications (40 CFR 60, Appendix B) and shall be calibrated and maintained in accordance with the "Guidelines for Industrial Monitoring Equipment and Data Handling" procedures approved by the Control Officer.

The Control Officer may take such samples and make any tests and investigations deemed necessary to determine the accuracy of the monitoring reports and tests submitted to the NWCAA, and evaluate the validity of the data. The owner or operator may also be required by the Control Officer to take a sample using an approved procedure and submit the results thereof within a reasonable period of time.

The Board or the Control Officer may require additional reasonable monitoring be undertaken at any appropriate time to insure compliance with the NWCAA Regulation.

2.1.10.2 State Only: NWCAA 367 and Appendix A (7/14/05)

All ambient air monitors shall be operated and maintained as required by the appropriate Sections of 40 CFR Parts 50 and 58.

A Quality Assurance (QA) manual and station log book shall be kept for all stations. Written calibration and precision/span check procedures shall be included in the QA manual. A station audit shall be conducted by the NWCAA at least once per year.

Unless subject to acid rain regulations (40 CFR Part 72 and 75), all continuous emissions monitoring systems (CEMS) shall be capable of meeting appropriate EPA performance specifications using procedures outlined in 40 CFR Part 60 Appendix B. CEMS subject to acid rain regulations shall be capable of meeting the specifications outlined in the appropriate section of 40 CFR Part 75.

All CEMS shall be operated in accordance with the appropriate section of 40 CFR Part 60 Appendix F, and the operator shall assess the operation of each CEMS daily.

Continuous opacity monitors shall be maintained according to "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/1-86-10) and the manufacturer's procedures. All gaseous CEMS shall be maintained using the QA criteria of 40 CFR Part 60 Appendix F and the manufacturer's procedures.

Auditing of opacity monitors shall be conducted according to recommended procedures. Data accuracy assessments shall be conducted at least once every calendar quarter for gaseous monitors and at appropriate periodic intervals. Relative Accuracy Test Audits (RATAs), Relative Accuracy Audits (RAAs) and Cylinder Gas Audits (CGAs) shall be employed as described in 40 CFR Part 60 (or 40 CFR Part 75 if the facility is subject to acid rain regulations).

Strip charts and approved data acquisition systems shall be used to capture and store data. All data must be retained for a period of at least five years and be available to the NWCAA upon request.

CEMS are required to maintain greater than 90% data availability on a monthly basis. A supplemental report shall be submitted if during any calendar month a CEMS fails to produce 90% data availability stating the reasons for the low data availability.

The following data shall be submitted to the NWCAA on a monthly basis or according to the applicable standard:

- (i) Time, date, magnitude, and cause of all emissions or temperatures which exceed the applicable standard(s).
- (ii) The cause and time periods of any bypass of the air pollution control equipment.
- (iii) The cause and time periods of CEM downtime not associated with routine QA or maintenance operations.
- (iv) Data availability for each CEM, listed by unit and parameter.
- (v) Supplemental report for system with $\leq 90\%$ monthly data availability.
- (vi) Other data or information as required by the Control Officer.

2.1.11 Credible Evidence

40 CFR 51.212(c) (2/24/97), 40 CFR 52.12 (2/24/97), and 40 CFR 52.33 (2/24/97)

For the purpose of compliance certifications or establishing whether or not a person has violated or is in violation of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

2.2 Permit Terms

2.2.1 Permit Expiration and Renewal

WAC 173-401-610 (11/4/93) and WAC 173-401-710 (10/17/02)

This permit is issued for a fixed term of five years from date of issuance. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted. A complete permit renewal application shall be submitted to the NWCAA no later than the date established in the permit.

2.2.2 Permit Actions

WAC 173-401-620(2)(c) (11/4/93)

This permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

2.2.3 Emissions Trading

WAC 173-401-620(2)(g) (11/4/93)

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

2.2.4 Emission Reduction Credits

State Only: WAC 173-400-131 (4/1/11), WAC 173-400-136 (12/29/12)

An emission reduction credit may be issued and used in accordance with the applicable regulations listed above.

2.2.5 Severability

WAC 173-401-620(2)(h) (11/4/93)

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

2.2.6 Permit Appeals

WAC 173-401-620(2)(i) (11/4/93), WAC 173-401-735 (5/3/97)

This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the NWCAA within thirty days of receipt. This provision for appeal is separate from and in addition to any federal rights to petition and review under section 505(b) of the FCAA.

2.2.7 Permit Continuation

WAC 173-401-620(2)(j) (11/4/93)

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. If a timely and complete application has been submitted, an application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied.

2.2.8 Reopening for Cause

WAC 173-401-730 (11/4/93)

The permit shall be reopened and revised under any of the following circumstances:

- (i) Additional requirements become applicable to the source with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);
- (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the EPA Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
- (iii) The NWCAA or the EPA Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- (iv) The NWCAA or the EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.2.9 Changes not Requiring Permit Revisions/Off-Permit Changes

WAC 173-401-722 (10/17/02), WAC 173-401-724 (3/5/16)

The permittee may make the changes described in WAC 173-401-722 and WAC 173-401-724 without revising this permit, provided that the changes satisfy the criteria set forth in those sections.

2.2.10 Permit Modifications

WAC 173-401-720 (11/4/93), WAC 173-401-725 (11/4/93)

This permit may be revised as provided in WAC 173-401-720 (administrative permit amendments) and 173-401-725 (permit modifications).

2.2.11 Property Rights

WAC 173-401-620(2)(d) (11/4/93)

This permit does not convey any property rights of any sort, or any exclusive privilege.

2.2.12 Definitions

2.2.12.1 NWCAA 200 (10/13/94)

Particular references to terms not otherwise defined in this permit or the associated Statement of Basis have the meaning assigned to them in the specific regulation being cited. The terms NWCAA, Ecology, and EPA shall mean the Northwest Clean Air Agency, the Washington State Department of Ecology, and the United States Environmental Protection Agency, respectively. FCAA means the Federal Clean Air Act.

2.2.12.2 State Only: NWCAA 200 (4/11/19)

In the new version of the NWCAA Regulation some of the definitions have been modified slightly to provide clarification and some have been revised to include an expanded definition of the term.

2.2.13 Compliance Schedule

WAC 173-401-630(3) & (4) (3/5/16), WAC 173-401-510(2)(h)(iii) (3/5/16)

The permittee shall continue to comply with all applicable requirements with which the source was in compliance as of the date of permit issuance. The permittee shall meet on a timely basis any applicable requirements that become effective during the permit term.

2.2.14 Permit Fees

2.2.14.1 WAC 173-401-620(2)(f) (11/4/93)

The permittee shall pay fees as a condition of this permit in accordance with the NWCAA fee schedule.

2.2.14.2 State Only: NWCAA 322.4 (11/17/11)

The NWCAA shall assess and collect annual air operating permit fees for sources in its jurisdiction that are required to have Title V Air Operating Permits (excluding sources regulated by WDOE directly). The total fees required to administer the program shall be determined by a workload analysis conducted by NWCAA staff and approved annually by the NWCAA Board of Directors.

2.2.15 Transfer or Permanent Shutdown

2.2.15.1 NWCAA 325 (2/14/73)

Approval to construct a stationary source is not to be transferable from one location to another (outside the plant boundary), from one piece of equipment to another, or from one person to another, except portable sources may retain the same registration so long as they remain within the jurisdiction of the NWCAA.

2.2.15.2 State Only: NWCAA 325 (11/8/07)

Approval to construct a stationary source is not to be transferable from one location to another (outside the plant boundary), from one piece of equipment to another, or from one person to another, except portable sources may retain the same registration so long as they remain within the jurisdiction of the NWCAA and they comply with NWCAA 300.

The registered owner or operator shall report the transfer of ownership or permanent shutdown of a registered source to the NWCAA within ninety (90) days of shutdown or transfer. The new owner of a registered source shall file a written report with the NWCAA within ninety (90) days of completing transfer of ownership and/or assuming operational control.

In the case of a permanent shutdown, process and pollution control equipment may remain in place and on site, but shall be rendered incapable of generating emissions to the atmosphere.

2.3 Permit Shield

2.3.1 Shield Requirement

WAC 173-401-640(1) (11/4/93)

Compliance with a permit condition shall be deemed compliance with the applicable requirements upon which that condition is based, as of the date of permit issuance. The permit shield does not apply to any insignificant emissions unit or activity so designated under WAC 173-401-530.

2.3.2 Inapplicable Requirements

WAC 173-401-640(2) (11/4/93)

As of the date of permit issuance, the requirements listed in the Inapplicable Requirements section of this permit do not apply to the permittee. The permit shield applies to all requirements so identified.

2.3.3 Exclusions

WAC 173-401-640(4) (11/4/93)

Nothing in this section or in this permit shall alter or affect the following:

- (i) Provisions of Section 303 of the FCAA (emergency orders), including the authority of the EPA Administrator under that section;
- (ii) Liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- (iii) Ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA; or
- (iv) Ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in RCW 70.94.154.

2.3.4 Reasonably Available Control Technology

2.3.4.1 WAC 173-401-605(3) (11/4/93)

Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance shall be considered RACT for purposes of permit issuance or renewal.

2.3.4.2 WAC 173-400-040 (9/20/93)

All emissions units are required to use RACT which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173

WAC. Where current controls are determined to be less than RACT, Ecology or the NWCAA shall, as provided in section 8, chapter 252, Laws of 1993, define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

2.3.4.3 State Only: WAC 173-400-040(1) (9/16/18)

All emissions units are required to use RACT which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC. Where current controls are determined to be less than RACT, the permitting authority shall, as provided in RCW 70.94.154, define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

2.3.4.4 State Only: NWCAA 309 (10/8/15)

Reasonably Available Control Technology (RACT) is required for all existing sources except as otherwise provided in RCW 70.94.331(9). Where current controls are determined by the NWCAA to be less than RACT, the NWCAA shall define RACT for that source or source category and issue a rule or an order under NWCAA 121 requiring the installation of RACT. Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance shall be considered RACT for purposes of operating permit issuance or renewal.

2.3.5 Emergencies

WAC 173-401-645 (11/4/93)

An emergency, as defined in WAC 173-401-645(1), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if conditions of WAC 173-401-645 (3) and (4) are met. This provision is in addition to the affirmative defense for unavoidable excess emissions found in any applicable requirement.

The permittee shall submit a notice of emergency to the NWCAA within two working days of the time when the emission limitation was exceeded due to an emergency or shorter periods of time specified in an applicable requirement.

2.4 Recordkeeping and Reporting

2.4.1 Compliance Certification

2.4.1.1 WAC 173-401-630(5) (3/5/16)

The permittee shall submit ongoing certifications of compliance with permit terms and conditions. The first such certification shall cover the period from the last compliance certification until issuance of this permit. The following compliance certification shall cover the period from permit issuance to the end of the calendar year. Subsequent compliance certifications shall be made on a yearly basis. Each certification shall include:

- (i) Identification of each term and condition of the permit that is the basis of the certification;
- (ii) Compliance status;
- (iii) Whether the compliance was continuous or intermittent;
- (iv) Methods used for determining the compliance status of the source, currently and over the reporting period. These methods must be consistent with the permit Monitoring, Recordkeeping, and Reporting requirements.

All compliance certifications shall be submitted to EPA Region 10 and the Northwest Clean Air Agency at the following addresses by February 28 for the previous calendar year:

U.S. EPA, Region 10, Mail Stop: OCE-101
Attn: Part 70 Operating Permit Program
1200 Sixth Avenue, Suite 155
Seattle WA 98101

Northwest Clean Air Agency
Attn: Air Operating Permits
1600 South Second Street
Mount Vernon, WA 98273-5202

2.4.1.2 WAC 173-401-520 (11/4/93)

Any application form, report or compliance certification that is submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

2.4.1.3 WAC 173-401-615(3)(a) (10/17/02) and -630(1) (3/5/16)

All required monitoring reports must be certified by a responsible official consistent with WAC 173-401-520.

Directly Enforceable:

Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only to be submitted once every six months, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents subject to the certification.

The semiannual certifications shall cover the calendar months of January through June, and July through December, and are due within 30 days after the close of the period that the reports cover.

2.4.1.4 WAC 173-401-530(2)(d) (10/17/02)

Where a permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance of an insignificant emission unit during the reporting period. Where an underlying OAC requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, the permittee may certify continuous compliance when the testing, monitoring and recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented or known instances of noncompliance during the reporting period.

2.4.2 False and Misleading Oral Statement: Unlawful Reproduction or Alteration of Documents

2.4.2.1 NWCAA 112 (2/14/73)

No person shall willfully make a false or misleading oral statement to the Board as to any matter within the jurisdiction of the Board.

No person shall reproduce or alter or cause to be reproduced or altered any order or other paper issued by the Agency if the purpose of such reproduction or alteration is to evade or violate any provision or Regulation of this Agency, or any other law.

2.4.2.2 State Only: NWCAA 112 (11/12/99)

No person shall willfully make a false or misleading oral statement to the NWCAA Board, Control Officer, or their duly authorized representatives as to any matter within the jurisdiction of the Board.

No person shall reproduce or alter or cause to be reproduced or altered any order or other paper issued by the NWCAA if the purpose of such reproduction or alteration is to evade or violate any provision or Regulation of the NWCAA, or any other law.

2.4.3 Required Recordkeeping

WAC 173-401-615(2) (10/17/02)

Records of required monitoring information shall include, where applicable, the following:

- (i) Date, time, and location of sampling or measurements;
- (ii) Operating conditions existing at the time of sampling or measurement; and
- (iii) If analyses were performed, the date, company or entity performing the analyses, the analytical techniques or methods used, and the results of such analyses.

A record shall be kept describing changes made that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

Records of all required monitoring data and support information shall be retained for a period of five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

Directly Enforceable:

Monitoring and associated recordkeeping are not required when an emission unit is not operating and there are no emissions to the atmosphere unless such monitoring is specifically required by the NWCAA. The facility must record the time periods that a unit is shut down and not monitored, and include the time periods and a summary of why the emission unit was shut down in the periodic report of monitoring required by WAC 173-401-615(3)(a).

2.4.4 Pollutant Disclosure - Reporting by Air Contaminant Sources

2.4.4.1 NWCAA 150 (9/8/93), WAC 173-400-105(1) (9/20/93)

The permittee shall file annually at a time determined by the NWCAA and on forms furnished by the NWCAA a report setting forth:

- The nature of the enterprise;
- A list of process materials which are potentially significant sources of emissions used in, and incidental to, its manufacturing processes, including any by-products and waste products;
- An estimated annual total production of wastes discharged into the air in units and contaminants designated by the NWCAA that may include stack and fugitive emissions of particulate matter, PM₁₀, sulfur dioxide, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, and other contaminants.

Annual emission reports shall be submitted to the NWCAA within 105 days after the end of the previous calendar year. If the emission report is not submitted by the required date and the emissions are used to determine operating permit fees as described in NWCAA 324.126 then potential to emit will be used to determine said fees.

The permittee shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards.

2.4.4.2 State Only: WAC 173-400-105(1) (11/25/18)

In addition to the requirements of AOP Term 2.4.4.1, the permittee shall report PM_{2.5}, oxides of nitrogen, and ammonia on forms available from the NWCAA or Ecology. Emission estimates may be based on the most recent published EPA emission factors or other information available to the source, whichever is the better estimate.

2.4.4.3 State Only: NWCAA 150 (11/8/07)

Annual emission reports shall be submitted to the NWCAA no later than April 15 of the following calendar year. If the emission report is not submitted by the required date and the emissions are used to determine operating permit fees as described in NWCAA Regulation 322.4, then potential to emit may be used to determine said fees.

2.4.5 Greenhouse Gas (GHG) Reporting

2.4.5.1 State Only: WAC 173-441-030(1), (2), (4), and (5) (3/1/15)

GHG reporting is mandatory for:

- (i) An owner or operator of any facility listed in WAC 173-441-120 that emits ten thousand metric tons CO₂e or more per calendar year in total GHG emissions as calculated according to WAC 173-441-030(1)(b).
- (ii) Any supplier that supplies applicable fuels that are reported to DOL as sold in Washington state of which the complete combustion or oxidation would result in total calendar year emissions of ten thousand metric tons or more of carbon dioxide as calculated according to WAC 173-441-030(2)(b).

A person may choose to voluntarily report to Ecology GHG emissions that are not required to be reported under WAC 173-441-030(1) or (2). Persons voluntarily reporting GHG emissions must use the methods established in WAC 173-441-120(3) and 173-441-130 to calculate any voluntarily reported GHG emissions.

Once a facility or supplier is subject to the requirements of this chapter, the person must continue for each year thereafter to comply with all requirements of this chapter, including the requirement to submit annual GHG reports, even if the facility or supplier does not meet the applicability requirements in WAC 173-441-030(1) or (2) of this section in a future year, except as provided in WAC 173-441-030(5)(a)-(c).

2.4.5.2 State Only: WAC 173-441-050 (10/16/16)

Follow the procedures for emission calculation, monitoring, quality assurance, missing data, recordkeeping, and reporting that are specified in each relevant section of WAC 173-441.

Beginning calendar year 2012 for existing facilities or suppliers, the annual GHG report shall contain the information required per WAC 173-441-050(3) and (4) and be submitted to Ecology no later than:

- (i) March 31st of each calendar year for GHG emissions in the previous calendar year if the facility is required to report GHG emissions to the U.S. EPA per 40 CFR 98.
- (ii) October 31st of each calendar year for GHG emissions in the previous calendar year if the facility is not required to report GHG emissions to the U.S. EPA per 40 CFR Part 98.

For any facility or supplier that becomes subject to this rule because of a physical or operational change that is made after January 1, 2012, report emissions for the first calendar year in which the change occurs according to WAC 173-441-050(2)(b)(iii)(A) through (C).

Retain all required records for at least three years in a form that is suitable for expeditious inspection and review, including a GHG monitoring plan per WAC 173-441-050(6)(e).

Note: Under WAC 173-401-615(2), records of required monitoring data and support information shall be retained for a period of five years from the date of the monitoring sample, measurement, report, or application.

2.4.5.3 State Only: WAC 173-441-060 and -070 (3/1/15)

Each such submission shall be signed by a representative designated in accordance with WAC 173-441-060 and 40 CFR 3.10 as adopted on October 13, 2005 and shall include the following certification statement signed by the designated representative or any alternate designated representative:

"I am authorized to make this submission on behalf of the owners and operators of the facility or supplier, as applicable, for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

Each GHG report and certificate of representation for a facility or supplier must be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology.

2.4.5.4 State Only: WAC 173-441-100 (3/1/15)

All requests, notifications, and communications to Ecology pursuant to this chapter shall be submitted in a format as specified by Ecology to either of the following:

Greenhouse Gas Report, Air Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
ghgreporting@ecy.wa.gov

2.4.6 Reporting to Verify Emissions from Potential PSD Sources

State Only: WAC 173-400-720(4)(b)(iii) (7/1/16)

The owner or operator shall monitor the emissions of any regulated pollutants from all projects for which PSD applicability was determined according to the provisions of 40 CFR 52.21(b)(41)(ii)(a) through (c), and calculate and maintain a record of annual emissions on a calendar year basis.

The owner or operator shall submit a report to NWCAA within 60 days after the end of the year during which records must be generated under paragraph 40 CFR 52.21(r)(6)(iii) setting out the unit's annual emissions, as monitored pursuant to 40 CFR 52.21(r)(6)(iii), during the calendar year that preceded submission of the report. The report shall include the emissions in tons per year for the project, the baseline actual emissions and the pre-construction projected emissions.

2.4.7 Reporting of Deviations from Permit Conditions

WAC 173-401-615(3)(b) (10/17/02)

Prompt Reporting of Deviations: The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in this permit. The report shall include a description of the probable cause of such deviations, if known, and any corrective actions or preventive measures taken. Prompt means reporting according to the shortest time period listed below which applies to the situation:

- (i) In the case where the deviation represents a potential threat to human health or safety "prompt" means as soon as possible, but in no case later than twelve hours after the

deviation is discovered. The source shall maintain a contemporaneous record of all deviations.

- (ii) For all other deviations, the deviation shall be reported as part of the next routine monitoring report, but no later than 30 days after the end of the month during which the deviation is discovered.

Directly Enforceable:

For deviations that represent a potential threat to human health or safety, a follow up written report on the deviation shall be submitted no later than 30 days after the end of the month during which the deviation is discovered.

2.4.8 Report of Breakdown and Upset

2.4.8.1 NWCAA 340.1, 340.2 and 340.3 (10/13/94)

If a breakdown or upset condition occurs which results in or may have resulted in an emission and/or ambient air quality standard being exceeded, the owner or operator of the source shall take the following actions:

- The upset or breakdown shall be reported as promptly as possible and in no event later than twelve (12) hours to the NWCAA.
- The person responsible shall, upon the request of the Control Officer, submit a full report within ten (10) days including the known causes, corrective measures taken, and preventive measures to be taken to minimize or eliminate a recurrence.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with all the requirements of the NWCAA Regulation nor from the resulting liabilities for failure to comply.

It shall be prima facie evidence of violation of the NWCAA Regulation if any control equipment or other equipment creating emissions to the atmosphere is turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under NWCAA 340.1.

2.4.8.2 State Only: NWCAA 340.1, 340.2 and 340.3 (11/8/07)

If a breakdown or upset condition occurs which results in or may have resulted in an exceedance of an emission and/or ambient air quality standard, the owner or operator of the source shall take the following actions:

- The upset or breakdown shall be reported as promptly as possible and in no event later than twelve (12) hours to the NWCAA.
- The responsible official or his designee shall submit a full report on forms provided by the NWCAA within 30 days after the end of a calendar month in which the upset occurred and must include as a minimum the known causes, corrective action taken, preventive measures put in place to reduce the possibility of or eliminate a recurrence, and an estimate of the quantity of emissions above the applicable limit caused by the event.

In addition to the reporting requirements of the 10/13/94 version of NWCAA 340, the permittee must also report to the NWCAA if the emission release to the air requires agency notification as specified in 40 CFR 302 (CERCLA) or 40 CFR 355 (SARA).

It shall be prima facie evidence of violation of the NWCAA Regulation if:

- (i) Any control equipment is turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under NWCAA 340.1, or

- (ii) Any other equipment creates new or increased emissions to the atmosphere as the result of being turned off, broken down or otherwise inoperative, and a notice of breakdown has not been filed under NWCAA 340.1.

2.4.9 Report of Shutdown or Startup

2.4.9.1 NWCAA 341 (9/8/93)

If the permittee schedules a total or partial shutdown or startup of control or process equipment which may result in emissions or any additional emissions to the atmosphere which may temporarily exceed the emission standards of this Regulation, the permittee shall notify the NWCAA prior to the shutdown or startup.

Prompt notification shall be made and in no event less than 24 hours before the scheduled shutdown or startup. The permittee shall submit a general schedule of steps to be taken to minimize the release of air contaminants to the atmosphere including the reasons for and duration of the proposed shutdown or startup, the nature of the action to be taken, the date and time for the action and an estimate of the anticipated rate and concentration of emission.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with the requirements of this Regulation nor from the resulting liabilities for failure to comply.

2.4.9.2 State Only: NWCAA 341 (7/14/05)

If the permittee schedules a total or partial shutdown or startup of control or process equipment that the source reasonably believes would result in emissions which may temporarily exceed an emission standard of this Regulation, the operator or owner of the source shall notify the NWCAA in advance of the shutdown or startup.

The advanced notification shall include a general schedule of steps to be taken to minimize the release of air contaminants to the atmosphere including the reasons for and duration of the proposed shutdown or startup, the nature of the action to be taken, the date and time for the action and an estimate of the anticipated rate and concentration of emission.

Compliance with the requirements of this section does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with the requirements of this Regulation nor from the resulting liabilities for failure to comply.

Excess emissions due to shutdown or startup shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that the excess emissions could not have been prevented through careful planning and design, the emissions did not result in a violation of an ambient air quality standard and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

The responsible official or their designee shall submit a full report no later than 30 days after the end of the calendar month in which the shutdown or startup occurred that resulted in an exceedance of an ambient or emission standard of this Regulation. The report shall be submitted on forms provided by the NWCAA and must include, at minimum, the known causes, corrective action taken, preventive measures put in place to reduce the possibility of or eliminate a recurrence, and an estimate of the quantity of emissions above the applicable limit caused by the event.

2.4.10 Operation and Maintenance

2.4.10.1 NWCAA 342 (9/8/93)

Keep all process and/or air pollution control equipment in good operating condition and repair. If a breakdown or upset condition occurs and is determined by the Control Officer to be due to poor

operating and maintenance procedures, the Control Officer may take any legal steps necessary to prevent a recurrence of the breakdown or upset condition.

Operation and maintenance instructions and schedules for process and/or control equipment must be available and may be required to be posted on the site. This section is specifically applicable to the operation of equipment where untrained personnel may operate or otherwise have access to or use the equipment.

If a breakdown or violation occurs and is due to the improper operation or maintenance of equipment, the owner or operator of the source will, in addition to filing a report of breakdown under NWCAA 340, submit a report if requested by the Control Officer on what measures will be taken in training or re-orienting personnel to prevent a recurrence of the breakdown.

2.4.10.2 State Only: NWCAA 342 (7/14/05)

All air contaminant stationary sources are required to keep any process and/or air pollution control equipment in good operating condition and repair.

Operating instructions and maintenance schedules for process and/or control equipment must be available on site.

2.5 Excess Emissions

2.5.1 Excess Emission

WAC 173-400-107 (9/20/93) (State Only – 9/16/18)

The permittee shall have the burden of proving to Ecology or the NWCAA or the decision-making authority in an enforcement action that excess emissions were unavoidable. Excess emissions determined to be unavoidable under the procedures and criteria of this section shall be excused and not subject to penalty.

Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to the NWCAA as soon as possible. Other excess emissions shall be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by Ecology or the NWCAA, the permittee shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

Excess emissions due to scheduled maintenance shall be considered unavoidable provided the source reports as required and adequately demonstrates that the excess emissions could not have been prevented through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

Excess emissions due to upsets shall be considered unavoidable provided the source reports as required and adequately demonstrates that:

- (i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

- (iii) The permittee took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

2.5.2 Excess Emissions Due to Breakdowns, Upsets, Startup, or Shutdown

State Only: NWCAA 340.4 (11/8/07) and 341.4 (7/14/05)

Excess emissions due to breakdowns and upsets shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that:

- (i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (iii) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice; and
- (iv) The emissions did not result in a violation of an ambient air quality standard.

Excess emissions due to shutdown or startup shall be considered unavoidable, and not subject to penalty, provided the stationary source adequately demonstrates that the excess emissions could not have been prevented through careful planning and design, the emissions did not result in a violation of an ambient air quality standard and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

2.6 Duty to Supplement or Correct Information

WAC 173-401-500(6) (10/17/02)

Upon becoming aware that the source failed to submit any relevant facts in a permit application or that information submitted in a permit application is incorrect, the source shall promptly submit such supplementary facts or corrected information.

2.7 Prohibitions

2.7.1 Concealment and Masking

2.7.1.1 WAC 173-400-040(7) (9/20/93) and State Only: WAC 173-400-040(8) (9/16/18)

No person shall cause or permit the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of this chapter.

2.7.1.2 State Only: NWCAA 540 (1/8/69)

It shall be unlawful for any person to willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminant which would otherwise violate the emission standards of this Regulation.

It shall be unlawful for any person to cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which causes detriment to health, safety, or welfare of any person.

2.7.2 Adjustment for Atmospheric Conditions

WAC 173-400-205 (3/22/91)

The permittee shall not vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant except as directed according to air pollution episode regulations.

2.7.3 Outdoor Burning

2.7.3.1 WAC 173-425-036 (10/18/90) and WAC 173-425-045 (1/3/89), WAC 173-435-050(2) (1/3/89) Although SIP-Approved, WAC 173-425-036, -045, and -055 (referenced below) have been repealed.

No person shall conduct outdoor burning during an air pollution episode or a declared period of impaired air quality. Except as provided in WAC 173-425-055, the following materials shall not be burned in any open fire: (1) garbage, (2) dead animals, (3) asphaltic products, (4) waste petroleum products, (5) paints, (6) rubber products, (7) plastics, (8) treated wood, and (9) any substance, other than natural vegetation, which normally emits dense smoke or obnoxious odors.

2.7.3.2 State Only: WAC 173-425-040, 050, and 060 (4/1/11), NWCAA 502 (9/11/14)

No person shall conduct outdoor burning except in accordance with the applicable regulations listed above. Outdoor burning shall be conducted under a valid fire permit and shall not contain prohibited materials, unless specifically exempted. Emissions from burning shall not create a nuisance and/or interfere with visibility on any public road.

2.7.4 Asbestos

2.7.4.1 State Only: NWCAA 570 (9/11/14)

The permittee shall conduct all renovation or demolition projects in accordance with the applicable asbestos control standards listed in NWCAA 570.

2.7.4.2 40 CFR 61.145 (4/7/93), 61.148 (11/20/90) and 61.150 (9/18/03)

The permittee shall comply with 40 CFR Sections 61.145, 61.148 and 61.150 when conducting any renovation or demolition at the facility.

2.7.5 Stratospheric Ozone and Climate Protection

2.7.5.1 40 CFR 82 Subpart F (12/27/17)

The permittee shall comply with the standards for recycling and emissions reduction in accordance with the requirements listed in 40 CFR 82 Subpart F.

2.7.5.2 State Only: RCW 70.94.970 (1991 c 199 §602)

A person who services, repairs or disposes of a motor vehicle air conditioning system; commercial or industrial air conditioning, heating, or refrigeration system; or consumer appliance shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. This subsection does not apply to off-road commercial equipment.

The willful release of regulated refrigerant from a source listed in this section is prohibited.

2.7.6 Display of Orders, Certificates and Other Notices: Removal or Mutilation Prohibited

NWCAA 124 (2/14/73)

Any order or other certificate obtained from the NWCAA shall be available at the facility. If the NWCAA requires a notice to be displayed, it shall be posted. No one shall mutilate, obstruct or remove any notice unless authorized to do so by the NWCAA.

2.7.7 Obstruction of Access

State Only: RCW 70.94.200 (1987 c 109 §38)

The permittee shall not obstruct, hamper or interfere with any authorized representative of the NWCAA who requests entry for the purposes of inspection and who presents appropriate credential; nor shall any person obstruct, hamper, or interfere with any such inspection.

2.7.8 False Statement, Representation or Certification

State Only: WAC 173-400-105(6) (11/25/18)

No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

2.7.9 Inaccurate Monitoring

State Only: WAC 173-400-105(8) (11/25/18)

No person shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

2.7.10 Prevention of Accidental Release

40 CFR 68 (12/3/18)

This stationary source, as defined in 40 CFR 68.3, is subject to Part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR Part 70.

2.7.11 Cutback Asphalt Paving

NWCAA 580.7 (4/14/93)

The application of cutback asphalt in paving during the months of June, July, August and September is limited to use as prime coatings and patch mixes, or when the temperature is less than 50°F.

2.7.12 Creditable Stack Height and Dispersion Techniques

WAC 173-400-200 (3/22/91) (State Only - 2/10/05)

For stacks for which construction or reconstruction commenced, or for which major modifications were carried out, after December 31, 1970, no source may use dispersion techniques or excess stack height to meet ambient air quality standards or PSD increment limitations.

2.8 Notice of Construction and Application for Approval/New Source Review

2.8.1 Minor New Source Review (NSR)

2.8.1.1 NWCAA Sections 300, 301, 302 & 324.2 (10/13/94), and NWCAA Section 303 (8/9/78)

No person shall construct, install, establish, modify or alter an air contaminant source or an emission unit without filing a "Notice of Construction and Application for Approval" and receiving approval from the NWCAA in accordance with the cited regulations.

2.8.1.2 State Only: WAC 173-400-111 (7/1/16), WAC 173-400-113 (12/29/12), WAC 173-460-010 through -150 (6/20/09), NWCAA 300.1-300.14 (4/11/19), 303 (4/11/19), and 324.2 (9/11/14)

A Notice of Construction application must be filed by the owner or operator and an Order of Approval issued by the NWCAA prior to the establishment of any new source in accordance with the cited regulations. For purposes of this section "establishment" shall mean to "begin actual construction" as that phrase is defined in NWCAA 200, and "new source" shall include any "modification" to an existing "stationary source" as those terms are defined in NWCAA 200.

A temporary source not exempt under NWCAA 300.3 or 300.4 shall be allowed to operate at a temporary location without filing a NWCAA Notice of Construction application provided that the temporary source meets the applicable requirements of NWCAA 300.17, including notification.

2.8.2 Nonroad Engines

State Only: NWCAA Section 304 (4/11/19)

This section applies to nonroad engines, as defined in NWCAA Section 200. Nonroad engines are not subject to new source review, control technology determinations, or emission limits set by the state implementation plan, or chapter 173-460 WAC.

Nonroad engines must use ultra-low sulfur diesel or ultra-low sulfur bio-diesel, gasoline, natural gas, propane, liquefied petroleum gas, hydrogen, ethanol, methanol, or liquefied/compressed natural gas.

For each nonroad engine as specified in this section greater than 500 brake horsepower (bhp), the owner or operator must notify NWCAA within 15 calendar days prior to surpassing the engine remaining at a facility for 12 consecutive months. This notification must include the make, model, serial number, rating, fuel type, date the engine was brought to the facility, and engine function or purpose.

2.8.3 General Order

State Only: WAC 173-400-560 (12/29/12) and NWCAA 121.4 (3/14/13)

An owner or operator may apply for an applicable general order for approval to construct certain specified sources as defined in WAC 173-400-560. A general order of approval shall identify criteria by which an emission unit or source may qualify for coverage under a general order of approval and shall include terms and conditions for installing and/or operating the source.

2.8.4 Requirements to Comply

State Only: NWCAA 300.13 (4/11/19)

It shall be unlawful for an owner or operator of a source or emission unit to not abide by the operating and reporting conditions in the Order of Approval.

2.8.5 Prevention of Significant Deterioration (PSD)

State Only: WAC 173-400-117 (12/29/12), -700 (4/1/11), -710 (7/1/16), -720 (7/1/16), -730 (7/1/16), -740 (9/16/18), -750 (12/29/12)

A Prevention of Significant Deterioration (PSD) permit application must be filed by the owner or operator and a PSD permit issued by Ecology prior to the establishment of any new source in accordance with the cited regulations. No major stationary source or major modification as defined in the cited regulation shall begin actual construction without having received a PSD permit. Allowable emissions from the proposed major stationary source or major modification shall not cause or contribute to a violation of any ambient air quality standard.

An applicant for a PSD permit must submit an application that provides complete information for Department of Ecology to determine compliance with all PSD program requirements. Detailed procedures for submitting a complete application, for public review and involvement, and for revisions to an existing PSD permit are provided in the cited regulations (WAC 173-400-700 through 750).

2.8.6 Replacement or Substantial Alteration of Control Technology at an Existing Source

State Only: NWCAA 300.25 (4/11/19)

Any person proposing to replace or substantially alter emission control technology installed on an existing stationary source or emission unit shall file a Notice of Construction application with the NWCAA.

2.9 Greenhouse Gas Regulation

State Only: WAC 173-401-200(19) & (35) (3/5/16)

Greenhouse gases (GHGs), the air pollutant defined in 40 CFR 86.1818-12(a) as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation under this chapter unless, as of January 2, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tpy CO₂ equivalent emissions and the source is otherwise required to have an operating permit.

The term "tpy (tons per year) CO₂ equivalent emissions" (CO₂e) shall represent an amount of GHGs emitted, and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of 40 CFR Part 98 - Global Warming Potentials, and summing the resultant value for each to compute a tpy CO₂e.

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the FCAA, or a nationally applicable regulation codified by EPA in subchapter C of 40 CFR chapter 1 (in effect on October 6, 2010), that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity.

2.10 Greenhouse Gas Mitigation

State Only: WAC 173-442-210, 173-442-220, 173-442-250 (10/16/16)

The Clean Air Rule (CAR) establishes greenhouse gas (GHG) emission reduction pathways for covered parties in Washington. CAR applicability is based on a GHG emissions for a three calendar year rolling average, beginning with calendar year 2012. Covered parties with GHG emissions greater than or equal to compliance thresholds in Table 1 of WAC 173-442-030 are subject to the CAR.

Each covered party must submit a compliance report in a format prescribed by Ecology. The compliance report must include the verification requirements in chapter 173-220 WAC. The report must be submitted by the deadline in WAC 173-442-250.

A covered party may discontinue submitted a compliance report for the purposes of chapter 173-442 WAC after 3 consecutive years of reporting covered GHG emissions less than 50,000 MT CO₂e/yr and the covered party notifies ecology of its intent to discontinue the report by the compliance report deadline in WAC 173-442-250. Covered parties must continue to submit annual GHG reports required by chapter 173-441 WAC. A covered party must resume submitting a compliance report when total covered GHG emissions exceed 50,000 MT CO₂e/year.

SECTION 3 STANDARD TERMS AND CONDITIONS FOR NSPS AND NESHAP

Standard terms and conditions are administrative and/or other requirements that typically have no ongoing compliance monitoring requirements. The permittee must comply with the requirements listed below for specific “affected facilities” as defined in the New Source Performance Standards (NSPS) in 40 CFR Part 60.2, “affected sources” defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR Part 63.2, and owners or operators of any stationary source for which a standard is prescribed under 40 CFR Part 61. Some requirements from the regulations have been paraphrased for brevity; the language of the cited regulation takes precedence over a paraphrased requirement.

The affected facilities, affected sources, and stationary sources subject to these requirements are identified in AOP Section 5. The conditions in this section do not apply generally to all emission units at the facility.

The EPA delegates NSPS and NESHAP implementation and enforcement authority to NWCAA on a periodic basis. Some conditions in this section cite the NSPS delegation letter or the NESHAP delegation letter from EPA Region 10 to NWCAA because the letter clarifies certain Federal requirements. For example, the delegation letters state that NWCAA shall be the recipient of all notifications and reports and be the point of contact for questions and compliance issues regarding delegated standards. The delegation letters also specify the extent of NSPS and NESHAP delegation to the NWCAA. Current delegation letters are available for review on the NWCAA website and at the NWCAA office.

Some of the terms and conditions cited below refer to the “Administrator”. For delegated NSPS and NESHAP requirements, “Administrator” means NWCAA; for NSPS and NESHAP requirements that have not been delegated to NWCAA, “Administrator” means the Administrator of the United States Environmental Protection Agency.

All of the federal regulations listed in AOP Section 3 have been adopted by reference in Section 104.2 of the NWCAA Regulation. NWCAA 104.2 was last amended by the agency on April 11, 2019.

3.1 Part 60 – New Source Performance Standard Requirements

3.1.1 Address for Reports, Notifications, and Submittals

40 CFR 60.4(a) and (b) (4/25/75) (as amended by Delegation Letter dated 9/28/17 from Tim Hamlin, Director of the Office of Air and Waste, EPA Region 10 to Mark Buford, Director of NWCAA)

Notifications, reports, and applications for delegated New Source Performance Standards (NSPS) shall be sent to the NWCAA at the following address:

Northwest Clean Air Agency
1600 S. Second Street
Mount Vernon, WA 98273-5202

Notifications, reports, and applications under NSPS authorities that have been excluded from delegation shall be submitted to the EPA at the following address:

U.S. EPA Region 10, Mail Stop: OCE-101
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3140

3.1.2 Notification

40 CFR 60.7(a) (2/12/99) (as amended by Delegation Letter dated 9/28/17 from Tim Hamlin, Director of the Office of Air and Waste, EPA Region 10 to Mark Buford, Director of NWCAA)

Furnish written notification to the Administrator of the following:

- (i) The date construction (or reconstruction as defined by 40 CFR 60.15) of an affected facility commenced postmarked no later than 30 days after such date.
- (ii) Notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (iii) Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- (iv) Notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
- (v) Notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall be postmarked not less than 30 days prior to such date.
- (vi) Notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

3.1.3 Startup, Shutdown, and Malfunction Records

3.1.3.1 40 CFR 60.7(b) (2/12/99)

Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

3.1.3.2 40 CFR 60.8(c) (8/30/2016)

Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

3.1.4 Excess Emission Records

40 CFR 60.7(c) and (d) (2/12/99) (as amended by Delegation Letter dated 9/28/17 from Tim Hamlin, Director of the Office of Air and Waste, EPA Region 10 to Mark Buford, Director of NWCAA)

Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (as defined in applicable subparts) and/or summary report form (see 60.7(d)) to the Administrator semiannually, except when: more frequent

reporting is specifically required in any subpart; or the Administrator determines that more frequent reporting is necessary. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the information in 40 CFR 60.7(c)(1) through (4).

3.1.5 Maintenance of Records

40 CFR 60.7(f) (2/12/99)

Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as described in 60.7(f)(1) through (3).

Note: Under WAC 173-401-615(2), records of required monitoring data and support information shall be retained for a period of five years from the date of the monitoring sample, measurement, report, or application.

3.1.6 Performance Tests

40 CFR 60.8(a), (d), (e), and (f) (8/30/16)

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s), except as specified in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section.

The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

The owner or operator of an affected facility shall provide performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facility.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include:

- (1) Facility mailing address, physical address, owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.
- (2) Applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.
- (3) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.
- (4) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.
- (5) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.
- (6) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.

3.1.7 Test Method Performance Audit

40 CFR 60.8(g) (8/30/16)

Performance testing shall include a test method performance audit (PA) during the performance test, as specified in 40 CFR 60.8(g).

The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. See 40 CFR 60.8(g)(1) for a list of test methods excluded from this requirement.

If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, <https://www.epa.gov/emc/emc-technical-support#audit>, to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test.

The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP.

3.1.8 Compliance with Opacity Standards

40 CFR 60.11(b) and (c) (10/17/00)

Compliance with opacity standards in 40 CFR Part 60 shall be determined by EPA Method 9 in Appendix A. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

3.1.9 Operation and Maintenance

40 CFR 60.11(d) (10/17/00)

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

3.1.10 Credible Evidence

40 CFR 60.11(g) (10/17/00)

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

3.1.11 Circumvention

40 CFR 60.12 (3/8/74)

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

3.1.12 Monitoring Requirements

40 CFR 60.13 (6/30/16)

All continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to part 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to part 60, unless otherwise specified in an applicable subpart or by the Administrator.

The owner or operator of an affected facility shall conduct a performance evaluation of the continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, or at such other times as may be required by the Administrator under section 114 of the Act. The owner or operator of an affected facility shall furnish the Administrator within 60 days of completion a written report of the results of the performance evaluation.

Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under this section, all continuous monitoring systems for measuring emissions, except opacity, shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

Owners or operators of continuous monitoring systems for pollutants other than opacity shall reduce all data to 1-hour averages for time periods as defined in §60.2.

For continuous monitoring systems other than opacity, 1-hour averages shall be computed according to paragraphs (h)(2)(i) through (h)(2)(ix), except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations.

3.1.13 Modification

40 CFR 60.14 (10/17/00)

Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

3.2 Part 63 – National Emission Standard for Hazardous Air Pollutant Requirements

3.2.1 Prohibited Activities and Circumvention

40 CFR 63.4 (4/5/02)

No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance is not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under Section 112(i)(4) of the Act.

No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to –

- (i) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
- (ii) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.

Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

3.2.2 Requirements for Existing, Newly Constructed, and Reconstructed 40 CFR Part 63 NESHAPs Sources

40 CFR 63.5(b)(1), (3), (4), (6) (4/5/02)

A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures in paragraphs (d) and (e) of this Part 63.5, do any of the following:

- (i) Construct a new affected source that is major-emitting and subject to such standard;
- (ii) Reconstruct an affected source that is major-emitting and subject to such standard; or
- (iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the applicable procedures in 63.9(b).

After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

3.2.3 Operation and Maintenance

3.2.3.1 O&M for Part 63 NESHAP Sources (except for Subpart DDDDD) 40 CFR 63.6(e)(1)(i),(ii), and (iii) (4/20/06)

- (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators must operate and maintain any affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

- (iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

3.2.3.2 O&M for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources
40 CFR 63.1564(a)(3) & (c)(2) (11/26/18); 63.1565(a)(3) & (c)(2)
(11/26/18); 63.1566(a)(5) & (c)(2) (7/13/16); 63.1567(a)(3) & (c)(2)
(2/9/05); 63.1568(a)(3) & (c)(2) (7/13/16); 63.1569(a)(3) & (c)(2)
(11/26/18); 63.1574(f) (11/26/18); and 63.1576(e) (11/26/18)

Prepare and implement an operations, maintenance and monitoring plan (OMMP) for each control system and continuous monitoring system for each affected source and operate at all times according to the procedures in the plan. Demonstrate continuous compliance with this standard by complying and maintaining records to document conformance with the procedures in the OMMP.

Prepare and submit the OMMP to the NWCAA for review and approval along with the notification of compliance status. Submit any changes to the NWCAA for review and approval and comply with the plan until the change is approved.

The plan must include, at a minimum:

- (i) Process and control device parameters to be monitored for each affected source, along with established operating limits.
- (ii) Procedures for monitoring emissions and process and control device operating parameters for each affected source.
- (iii) Monitoring schedule, including when you will monitor and when you will not monitor an affected source (e.g., during the coke burn-off, regeneration process).
- (iv) Quality control plan for each CEMS, including procedures for calibrations, accuracy audits, and adjustments to the systems needed to meet applicable requirements for the system.
- (v) Maintenance schedule for each monitoring system and control device for each affected source that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

Keep a current copy of the OMMP onsite and available for inspection. Also keep records to show continuous compliance with the procedures in the OMMP.

3.2.3.3 O&M for 40 CFR 63 Subpart DDDDD (Boiler MACT)
40 CFR 63.7500(a)(3) (11/20/15)

At all times, any affected source (as defined in 63.7490), including associated air pollution control equipment and monitoring equipment, shall be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

3.2.4 Compliance With Nonopacity Emission Standards

Nonopacity Emission Standards for Part 63 NESHAP Sources (except for
Subpart UUU)
40 CFR 63.6(f)(1) (4/20/06)

The nonopacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart.

3.2.5 Compliance With Opacity and Visible Emission Standards

Opacity and Visible Emission Standards for Part 63 NESHAP Sources (except for Subpart UUU)
40 CFR 63.6(h)(1) (4/20/06)

The opacity and visible emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart.

3.2.6 Extension of Compliance for Early Reductions and Other Reductions

40 CFR 63.6(i) (4/20/06) and 63.9(c) (5/30/03)

Until a compliance extension has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with this part's applicable requirements. A compliance extension may be possible if a request for extension of compliance meets 63.6(i)(3) through 63.6(i)(6).

3.2.7 Notification of Performance Tests

3.2.7.1 Notification of Performance Tests for Part 63 NESHAP Sources
40 CFR 63.7(b) (11/14/18) and 63.9(e) (5/30/03)

The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under 40 CFR 63.7(c), if requested by the Administrator, and to have an observer present during the test.

3.2.7.2 Notification of Performance Tests for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources
40 CFR 63.1574(a)(2) (11/26/18)

The requirements for notification of performance tests for Subpart UUU affected sources are the same as noted in AOP Term 3.2.7.1 with the following clarifications, exceptions, or differences:

The notification of intent to conduct a performance test required in 63.7(b) must be submitted at least 30 days before the performance test is scheduled to begin (instead of 60 days).

3.2.8 Conduct of Performance Tests

3.2.8.1 Conduct of Performance Tests for Part 63 NESHAP Sources
40 CFR 63.7 (11/14/18), 63.9(e) (5/30/03)

If required to do performance testing by a relevant standard, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source. The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under 63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

The owner or operator of an affected facility shall provide performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facility.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

Unless otherwise specified in a relevant standard or test method, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard.

Performance testing shall include a test method performance audit (PA) during the performance test as specified in 40 CFR 63.7(c)(2)(iii).

The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. See 40 CFR 63.7(c)(2)(iii)(A) for a list of test methods excluded from this requirement.

If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, <https://www.epa.gov/emc/emc-technical-support#audit>, to confirm whether there is a source that can supply an audit sample for that method.

The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

3.2.8.2 Conduct of Performance Tests for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources
40 CFR 63.1571(b)(1) (11/14/18)

The requirements for conduct of performance tests for Subpart UUU affected sources are the same as noted in AOP Term 3.2.8.1 with the following clarifications, exceptions, or differences:

Performance tests shall be conducted according to the provisions of 63.7(e) except that performance tests shall be conducted at maximum representative operating capacity for the process. During the performance test, you must operate the control device at either maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction. You must not conduct a performance test during startup, shutdown, periods when the control device is bypassed or periods when the process, monitoring equipment or control device is not operating properly. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that the test was conducted at maximum representative operating capacity. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

3.2.9 Operation and Maintenance of Continuous Monitoring Systems (CMS)

O&M of CMS for Part 63 NESHAP Sources *40 CFR 63.8(c)(1), (2), (3), (4), and (6) (11/14/18)*

The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

- (i) The owner or operator of an affected source must maintain and operate each CMS as specified in 63.6(e)(1).
- (ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

All CMS must:

- (i) Be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).
- (ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

The owner or operator of a CMS which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified.

3.2.10 Continuous Monitoring Systems (CMS) Out of Control Periods

40 CFR 63.8(c)(7) and (8) (11/14/18)

A CMS is out of control if—

- (A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or
- (B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit.

When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in 63.10(e)(3).

3.2.11 Continuous Monitoring Systems (CMS) Quality Control Program

40 CFR 63.8(d) & (e) (11/14/18), 63.9(g)(1) (5/30/03)

The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

- (i) Initial and any subsequent calibration of the CMS;
- (ii) Determination and adjustment of the calibration drift of the CMS;
- (iii) Preventive maintenance of the CMS, including spare parts inventory;
- (iv) Data recording, calculations, and reporting;
- (v) Accuracy audit procedures, including sampling and analysis methods; and
- (vi) Program of corrective action for a malfunctioning CMS.

The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance

evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

- (A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or
- (B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.

The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation containing the information specified in §63.7(g)(2)(i) through (vi) simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard.

3.2.12 Continuous Monitoring Systems (CMS) Data Reduction

40 CFR 63.8(g) (11/14/18)

The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant).

All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

3.2.13 Address for Reports, Notifications and Submittals

40 CFR 63.9(a) (5/30/03), 63.10(a) (4/20/06), 63.12(c) (3/16/94), 63.13 (6/25/13), (as amended by Delegation Letter dated 9/28/17 from Tim Hamlin, Director of the Office of Air and Waste, EPA Region 10 to Mark Buford, Director of NWCAA)

Notifications, reports, and applications for delegated Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAPs) shall be sent to the NWCAA at the following address:

Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273-5202

Notifications, reports, and applications under NESHAP authorities that have been excluded from delegation shall be submitted to the EPA at the following address:

Director, Office of Air and Waste
U.S. EPA Region 10, Mail Stop: OCE-101
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3140

All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

3.2.14 Notification

3.2.14.1 Notification Requirements for New or Reconstructed Part 63 NESHAP Sources 40 CFR 63.9(b)(4) (5/30/03)

The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under 63.5(d) must provide the following information in writing to the Administrator:

- (i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in 63.5(d)(1)(i); and
- (ii) A notification of the actual date of startup of the source delivered or postmarked within 15 calendar days after that date.

3.2.14.2 Notification Requirements for Existing Part 63 NESHAP Sources Except 40 CFR Part 63 Subpart CC (Refinery MACT) Affected Sources 40 CFR 63.9(b)(2) and (j) (5/30/03)

The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard) shall provide the following information:

- (i) The name and address of the owner or operator;
- (ii) The address (i.e., physical location) of the affected source;
- (iii) An identification of the relevant standard, or other requirement that is the basis of notification and the source's compliance date;
- (iv) A brief description of the nature and size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and the types of hazardous air pollutants emitted; and
- (v) A statement of whether the affected source is a major source or an area source.

Any change in the information provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

3.2.14.3 Notification Requirements for New or Reconstructed Part 63 Subpart UUU (Refinery MACT II) Affected Sources 40 CFR 63.1574(c) (11/26/18)

The requirements for notification of startup of new or reconstructed affected sources for Subpart UUU affected sources are the same as noted in AOP Term 3.2.14.1 with the following clarifications, exceptions, or differences:

If the new or reconstructed affected source is started up after April 11, 2002, initial notification must be submitted no later than 120 days after the source becomes subject to Subpart UUU.

3.2.15 Recordkeeping

3.2.15.1 Recordkeeping for Part 63 NESHAP Sources (except for Subpart DDDDD) 40 CFR 63.10(b)(1) and (3) (4/20/06)

The owner or operator of an affected source shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date

of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any.

3.2.15.2 Recordkeeping for 40 CFR 63 Subpart UUU (Refinery MACT II)-Affected Sources 40 CFR 63.10(b)(2)(iii), (vi), & (vii)-(xiv) (4/20/06), 63.1576(a), (b), & (c) (11/26/18), 63.1577 (4/11/02) & Table 44 to 40 CFR 63 Subpart UUU (11/26/18)

The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of:

- (iii) All required maintenance performed on the air pollution control and monitoring equipment;
- (vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or

malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

- (viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- (ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (x) All CMS calibration checks;
- (xi) All adjustments and maintenance performed on CMS;
- (xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

Keep the following records:

- (i) Record the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the alternative applicable to startup and shutdown.
- (ii) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time and duration of each failure.
- (iii) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, and estimate of the volume of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
- (iv) Record actions taken to minimize emissions in accordance with 63.1570(c) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- (v) For each continuous emission monitoring system, keep records of the date and time that each deviation started and stopped.

3.2.15.3 Recordkeeping for 40 CFR 63 Subpart DDDDD-Affected Sources

40 CFR 63.10(b)(2)(i), (iii), (vi)-(xiv) (4/20/06); 63.7550(c)(5)(viii) (11/20/15); 63.7555(d)(7) & (d)(8) (11/20/15); 63.7565 (4/11/02) & Table 10 to 40 CFR 63 Subpart DDDDD (11/20/15)

The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of:

- (i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;
- (iii) All required maintenance performed on the air pollution control and monitoring equipment;

- (vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

- (viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- (ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (x) All CMS calibration checks;
- (xi) All adjustments and maintenance performed on CMS;
- (xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

3.2.16 Deviation Reporting

*Deviation Reporting Requirements for 40 CFR 63 Subpart UUU Affected Sources
40 CFR 63.1570(f) (12/1/15), 63.1575(a)-(q), (i), & (k) (11/26/18), and Table
43 (11/26/18)*

Report each instance in which each emissions limit and each operating limit was not met. This includes periods of startup, shutdown, and malfunction. Also, report each instance in which the work practice standards that apply were not met. These instances are deviations from the emission limitations and work practices.

Submit compliance reports covering the semiannual reporting period from January 1 through June 30 and from July 1 through December 31. The reports must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the period.

The compliance report must contain (1) the company name and address, (2) a statement by a responsible official, with the official's name, title, and signature, certifying the accuracy of the content of the report, and (3) the date of the report and the beginning and ending dates of the reporting period.

If there are no deviations, the report must contain a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

If there were deviations during the reporting period, the report must contain the information in 40 CFR 63.1575(d) and/or (e).

Include a copy of any performance test done during the reporting period as per 40 CFR 63.1575(f). The test results shall be submitted electronically to EPA's Central Data Exchange (www.cdx.epa.gov) within 60 days of test completion in accordance with 63.1575(k). Also report if there is any requested change in the applicability of an emission standard.

Reports required by other regulations may be submitted in place of or as part of the compliance report if they contain the required information.

3.2.17 Recordkeeping Requirements for Sources with Continuous Monitoring Systems

*Recordkeeping Requirements for Sources with CMS for Part 63 NESHAP
Sources
40 CFR 63.10(c) (4/20/06)*

In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of:

- (1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);
- (2)-(4) [Reserved]
- (5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
- (6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);
- (7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

- (8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;
- (9) [Reserved]
- (10) The nature and cause of any malfunction (if known);
- (11) The corrective action taken or preventive measures adopted;
- (12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;
- (13) The total process operating time during the reporting period; and
- (14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

3.2.18 Additional 40 CFR Part 63 Subpart CC (Refinery MACT) Process Units Added or Process Changes Not Meeting Construction or Reconstruction Definition

40 CFR 63.640(l) and (m) (12/1/15)

If an additional petroleum refining process unit or a process change is made that is subject to 63.640(l), the added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit are subject to the requirements for an existing source.

If a process unit is added to a plant site or an emission point(s) is added to any existing petroleum refining process unit, the added emission point(s) shall be in compliance upon initial startup.

If a deliberate operational process change to an existing petroleum refining process unit causes a Group 2 emission point to become a Group 1 emission point, the owner or operator shall be in compliance upon initial startup unless they demonstrate to the Administrator that achieving compliance will take longer than making the change. If this demonstration is made to the Administrator's satisfaction, the owner or operator shall follow the procedures as noted below to establish a compliance date:

- (i) The owner or operator shall submit a compliance schedule along with a justification for the schedule;
- (ii) The compliance schedule shall be submitted within 180 days after the change is made, unless the compliance schedule has been previously submitted to the NWCAA; and,
- (iii) The Administrator shall approve or deny the compliance schedule or request within 120 calendar days of receipt of the compliance schedule and justification.

The emission points are subject to the Notification of Compliance Status Report as required by 63.655 (f), Periodic Reports as required by 63.655 (g) and (h), and other reports as required by 40 CFR 63.640(l)(3)(i) through (vii) and Subpart A of Part 63. Pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, or instrumentation systems added to an existing source are subject to the equipment leak standards for existing sources in §63.648 but a notification of compliance status report is not required for such added equipment as provided by 40 CFR 63.640(l)(4).

3.2.19 Notification of Compliance Status (NCS)

3.2.19.1 NCS for Part 63 NESHAPs Sources 40 CFR 63.9(h) (5/30/03)

Each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list:

- the methods that were used to determine compliance;
- the results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
- the methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
- the type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
- if the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);
- a description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
- a statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

After the applicable requirements are incorporated into the affected source's title V permit, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

The NCS must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

3.2.19.2 NCS for 40 CFR 63 Subpart UUU (Refinery MACT II) Affected Sources
40 CFR 63.1574(a)(3) & (d) (11/26/18), and Table 42 (2/9/05); 63.1577
(4/11/02) and Table 44 (12/1/15)

The requirements for Notifications of Compliance Status for Subpart UUU affected sources are the same as noted in AOP Term 3.2.19.1 with the following clarifications, exceptions, or differences:

If a performance test, performance evaluation, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration is required, a Notification of Compliance Status is required. This information can be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, a separate Notification of Compliance Status is not required, just refer to earlier submissions instead of duplicating and resubmitting the previously submitted information.

For each initial compliance demonstration that does not include a performance test, the Notification of Compliance Status must be submitted no later than 30 calendar days following completion of the initial compliance demonstration.

For each initial compliance demonstration that includes a performance test, the Notification of Compliance Status, including the performance test results, must be submitted no later than 150 calendar days after the specified compliance date.

The initial Notification of Compliance Status shall include, as applicable, the information listed in 40 CFR 63 Subpart UUU Table 42.

3.2.19.3 NCS for 40 CFR 63 Subpart DDDDD (Boiler MACT) Affected Sources
40 CFR 63.7545(a), (e), (e)(1), (e)(6), & (e)(8) (11/20/15)

The requirements for Notifications of Compliance Status for Subpart DDDDD affected sources are the same as noted in AOP Term 3.2.19.1 with the following clarifications, exceptions, or differences:

The NCS shall be submitted by close of business on the 60th day after January 31, 2016 (i.e., March 31, 2016). It shall include a signed certification that all the work practice standards have been met. Also, it should include a description of the affected units including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the compliance demonstration.

The NCS must include the following certification(s) of compliance, as applicable, and be signed by a responsible official:

"This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)." and "This facility has had an energy assessment performed according to §63.7530(e)."

SECTION 4 GENERALLY APPLICABLE REQUIREMENTS

The requirements in the "Citation" column and incorporated herein by reference are applicable plant-wide at the source, including insignificant emission units. These requirements are federally enforceable unless identified as "State Only". A requirement designated "State Only" is enforceable only by the state or the NWCAA, and not by the EPA or through citizen suits. . "State Only" WAC citations are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended April 11, 2019. All of the federal regulations listed in Section 4 have been adopted by reference in NWCAA 104.2, as amended April 11, 2019.

The "Description" column is a brief description of the applicable requirements for informational purposes only and is not enforceable. Periodic or continuous monitoring requirements (including testing) are specified in the "Monitoring, Recordkeeping, & Reporting" column, which identifies monitoring, recordkeeping and reporting (MR&R) obligations the source must perform as required by the underlying requirement or by WAC 173-401-605(1) or -615. MR&R obligations do not apply to insignificant emission units.

The requirements in the MR&R column listed labeled as "*Directly Enforceable*" are legally enforceable requirements added under the NWCAA's "gap-filling" authority (WAC 173-401-615(1)(b) & (c), (10/17/02)). Other requirements not labeled "*Directly Enforceable*" are brief descriptions of the regulatory requirements for informational purposes, and are not enforceable. Unless the text of the MR&R column is specifically identified to be directly enforceable, the language of the cited regulation takes precedence over a paraphrased requirement.

MR&R requirements noted as "CAM" are part of the Compliance Assurance Monitoring (CAM) Plan for the specified unit(s) as required by 40 CFR 64.6(c) (10/22/97). The CAM plan submitted by the facility per 40 CFR 64.4 is included in the Statement of Basis document accompanying this permit.

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.1 General	WAC 173-401-615(3)(a) (10/17/02) 40 CFR 60 Subpart A 60.19(c) (2/12/99) 40 CFR 63 Subpart A 63.10(a)(5) (4/20/06)	<u>Required Monitoring Reports</u> Submit reports of any required monitoring to the NWCAA at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports.	<i>Directly Enforceable:</i> Monthly reports shall cover a calendar month, quarterly reports shall cover a calendar quarter, six-month reports shall cover January through June and July through December, and annual reports shall cover a calendar year. The reports shall be submitted within 30 days after the close of the period that the reports cover except as per the following AOP Terms: AOP Term 2.1.8.3 - Source testing AOP Term 2.4.1.1 - Annual AOP certification AOP Term 2.4.4.3 – Annual emissions inventory AOP Term 2.4.5.2 – Annual GHG emissions AOP Term 2.10 – GHG Clean Air Rule
4.2 General	NWCAA 342 (9/8/93) NWCAA 342 (7/14/05 State Only)	<u>Operation and Maintenance</u> Sources are required to keep any process and/or air pollution control equipment in good operating condition and repair.	Operating instructions and maintenance schedules for process and/or control equipment must be available on site. <i>Directly Enforceable:</i> Monitor, keep records and report in accordance with the terms of this permit.

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.3 Nuisance	NWCAA 530 (3/09/00 State Only)	<u>General Nuisance</u> No person shall discharge from any source quantities of air contaminants, with the exception of odors, in sufficient amounts and of such characteristics and duration as is likely to be injurious or cause damage to human health, plant or animal life, or property; or which unreasonably interferes with enjoyment of life and property. An air contaminant is defined as "dust, fumes, mist, smoke, other particulate matter, vapor gas, odorous substance, or any combination thereof".	<i>Directly Enforceable:</i> Upon receiving an air contaminant complaint from the NWCAA or the public, all possible sources of the nuisance emissions at the facility shall be checked for proper operation. Problems identified shall be repaired or corrected as soon as practicable. If the problems identified cannot be repaired or corrected within 4 hours, action shall be taken to minimize emissions until repairs can be made and NWCAA shall be notified within 12 hours with a description of the complaint and action being taken to resolve the problem. The results of the investigation, identification of any malfunctioning equipment or aberrant operation, and the date and time of repair or mitigation shall be recorded. A log of these records shall be maintained for inspection. Receipt of a nuisance complaint in itself shall not necessarily be a violation.
4.4 Nuisance	WAC 173-400-040(5) (9/20/93) WAC 173-400-040(6) (9/16/18 State Only)	<u>Emission Detrimental to Persons or Property</u> No person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	
4.5 Odor	NWCAA 535 (3/09/00 State Only)	<u>Odor Control Measures</u> Appropriate practices and control equipment shall be installed and operated to reduce odor-bearing gases emitted into the atmosphere to a reasonable minimum. Any person who shall cause the generation of any odor from any source which may reasonably interfere with any other property owner's use and enjoyment of their property must use recognized best practices and control equipment to reduce these odors to a reasonable minimum. No person shall cause or permit the emission of any odorous air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	
4.6 Odor	WAC 173-400-040(5) (9/16/18 State Only)	<u>Odors</u> Source may not generate odors which may unreasonably interfere with property use and must use recognized good practice and procedures to reduce odors to reasonable minimum.	

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.7 PM	NWCAA 550 (4/14/93)	<u>Preventing Particulate Matter from Becoming Airborne</u> Best Available Control Technology (BACT) required to prevent the release of fugitive matter to the ambient air. Nuisance particulate fallout is prohibited.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.3.
4.8 PM	NWCAA 550 (9/11/14 State Only)	<u>Preventing Particulate Matter from Becoming Airborne</u> The owner or operator of a source or activity that generates fugitive dust, including, but not limited to, material handling, building construction or demolition, abrasive blasting, roadways and lots, shall employ reasonable precautions to prevent fugitive dust from becoming airborne and must maintain and operate the source or activity to minimize emissions. It shall be unlawful for any person to cause or allow the emission of particulate matter which becomes deposited upon the property of others in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.	
4.9 PM	WAC 173-400-040(3) (9/16/18 State Only)	<u>Fallout</u> Source may not generate the emission of particulate matter to be deposited beyond the property line in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.	
4.10 PM	WAC 173-400-040(3)(a) (9/20/93) WAC 173-400-040(4)(a) (9/16/18 State Only)	<u>Fugitive Emissions</u> From an emissions unit engaging in materials handling, construction, demolition, or other operation which is a source of fugitive emissions, take reasonable precautions to prevent the release of air contaminants from the operation.	
4.11 PM	WAC 173-400-040(8)(a) (9/20/93) WAC 173-400-040(9)(a) (9/16/18 State Only)	<u>Fugitive Dust</u> Reasonable precautions to prevent release of fugitive dust required. Maintain and operate source to minimize emissions.	

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.12 Opacity	NWCAA 451.1 (10/13/94) NWCAA 451.1 (11/8/07 State Only)	<u>Emission of Air Contaminant - Visual Standard</u> No person shall cause or permit the emission, for any period aggregating more than 3 minutes in any 1 hour, of an air contaminant from any source which, at the point at emission, or within a reasonable distance of the point of emission, exceeds 20% opacity (Ecology Method 9A) except: When there is valid data to show that the opacity is in excess of 20% as a result of the presence of condensed water droplets, and that the concentration of the particulate matter, as shown by a source test approved by the Control Officer, is less than 0.10 (0.23 g/m ³) grain/dscf.	<i>Directly Enforceable:</i> At least once during each calendar month that an emission unit (e.g., SPU, SRU, SPU3 Startup Heater, Abatement Unit 10 and 11 Process Heaters, SRU Flare, SRU Auxiliary Boiler) operates, conduct qualitative visual observations on each stack while operating to determine whether there are visible emissions (VE). If, at any time, VE are observed, take one or more of the following actions within 24 hours or it will be considered prima facie evidence that all applicable opacity limits have been exceeded:
4.13 Opacity	WAC 173-400-040(1) (9/20/93) WAC 173-400-040(2) (9/16/18 State Only)	<u>Visible Emissions</u> No person shall cause or allow the emission for more than 3 minutes, in any 1 hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds 20% opacity (Ecology Method 9A) except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed 20%.	• Take corrective action as soon as practicable that returns VE to a non-visible level. • Shut the unit down until appropriate corrective actions can be taken. • Observe and record VE using a certified observer in accordance with EPA Method 9 (6 consecutive minutes). If any single reading is greater than an applicable numerical opacity limit, the certified observer shall determine opacity in accordance with the appropriate method for each opacity limit applicable to that emission unit. A certified observer shall determine opacity on a daily basis according to each applicable opacity limit until visible emissions are determined to be in compliance with each opacity limit.
4.14 PM	NWCAA 455.1 (4/14/93) NWCAA 455.1 (5/11/95 State Only)	<u>Emission of Particulate Matter</u> No person shall cause or permit emission of particulate matter in excess of 0.10 grain/dry standard cubic foot (dscf) (0.23 g/m ³) (combustion emissions shall be corrected to 7% O ₂) except: From all gaseous and distillate fuel burning equipment, emissions shall not exceed 0.05 grain/dscf (0.11 g/m ³) corrected to 7% oxygen.	For each qualitative VE observation, record the date and time of the observation, emission unit(s) observed, and name of observer. For stacks with VE, record any related equipment or operational failure, failure dates and times, duration of visible emissions, and corrective actions taken. The periodic VE observation frequency may be reduced from monthly to quarterly if no visible emissions are observed for six consecutive months. If visible emissions are observed, the observation frequency shall revert back to monthly. Compliance with this MR&R does not excuse an exceedance of the underlying opacity standard.
4.15 PM	WAC 173-400-060 (3/22/91) WAC 173-400-060 (11/25/18 State Only)	<u>Emission Standards for General Process Units</u> Particulate emissions greater than 0.1 grain/dscf prohibited.	
4.16 PM	WAC 173-400-050(1) and (3) (3/22/91) WAC 173-400-050(1) and (3) (9/16/18 State Only)	<u>Emission Standards for Combustion and Incineration Units</u> Particulate emissions from combustion units greater than 0.1 grains/dscf corrected to 7% oxygen prohibited.	

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.17 SO ₂	NWCAA 410 (4/14/93) NWCAA 465.21, 465.22, & 465.24 (4/14/93 State Only)	<u>Sulfur Oxide Standards</u> Unlawful for any person to cause or permit sulfur oxides to be emitted into the ambient air, calculated as sulfur dioxide, measured at an ambient air monitoring station to exceed: • 0.800 ppmv for any 5 minute average, not to be exceeded more than once per year • 0.400 ppmv for any hour average, not to be exceeded more than once per year • 0.250 ppmv for any one hour average, not to be exceeded more than twice in any 7 consecutive days • 0.100 ppmv for any one day (24 hours), not to be exceeded more than once per year • 0.020 ppmv for any one year (annual arithmetic mean)	The owner or operator shall install, calibrate, maintain and operate, monitoring equipment as approved by NWCAA as follows: • At least one continuous recording meteorological station equipped to record wind speeds and direction. • At least one continuous recording ground level sulfur dioxide monitor. • The monitoring equipment required to be installed shall comply with the equipment and performance specifications and reporting requirements as established by NWCAA. <i>Directly Enforceable:</i> Maintain and operate an ambient air monitor in accordance with NWCAA Section 367 and NWCAA Appendix A.
4.18 SO ₂	NWCAA 462 (10/13/94)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO₂, shall not exceed 1,000 ppmvd at 7% oxygen. This requirement is not violated if reasonable evidence is presented that concentrations will not exceed ambient standards and the permittee demonstrates that no practical method of reducing the concentration exists.	<i>Directly Enforceable:</i> Monitor and record the concentration of stack SO₂, or alternatively fuel gas H₂S, in accordance with the applicable permit terms listed in AOP Section 5.
4.19 SO ₂	NWCAA 462 (3/13/97 State Only)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO₂, shall not exceed 1,000 ppmvd at 7% oxygen averaged for a 60 consecutive minute period. This requirement is not violated if reasonable evidence is presented that concentrations will not exceed ambient standards and the permittee demonstrates that no practical method of reducing the concentration exists.	
4.20 SO ₂	WAC 173-400-040(6) first paragraph only (9/20/93) WAC 173-400-040(7) (9/16/18 State Only)	<u>Sulfur Dioxide</u> Sulfur dioxide emissions shall not exceed 1,000 ppmvd, corrected to 7% oxygen for combustion sources, based on the average of any 60 consecutive minute period.	

Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.21 SO ₂	NWCAA 520.11, 520.12, 520.13 and 520.15- (4/14/93)	<u>Sulfur Compounds in Fuel</u> ~~Prohibited to burn, sell, or make available for sale for burning in fuel burning equipment within the jurisdiction of the NWCAA, fuel containing sulfur in excess of the following for a time period not to exceed 30 days in a 12-month period:~~ ~~• #1 distillate — 0.3 wt%~~ ~~• #2 distillate — 0.5 wt%~~ ~~• other fuel oils — 2.0 wt%~~ ~~• gaseous fuels — 50 gr/100 scf (412 ppm at standard conditions)~~ ~~• solid fuels — 2.0 wt%~~	<i>Directly Enforceable:</i> Retain fuel specifications and purchase records verifying that fuel combusted has a sulfur content of no more than the allowable limits.
4.22 SO ₂	NWCAA 520.11, 520.12, 520.13, 520.14, 520.15, and 520.2 (5/9/96 State Only)	<u>Sulfur Compounds in Fuel</u> Prohibited to burn, sell, or make available for sale for burning in fuel burning equipment within the jurisdiction of the NWCAA, fuel containing sulfur in excess of: • #1 distillate – 0.3 wt% • #2 distillate – 0.5 wt% • other fuel oils – 2.0 wt% • gaseous fuels – 50 gr/100 scf (412 ppm at standard conditions) • solid fuels – 2.0 wt% Ocean-going vessels are exempt.	

SECTION 5 SPECIFICALLY APPLICABLE REQUIREMENTS

The requirements in the "Citation" column and incorporated herein by reference are applicable to the emission units specified within each table. These requirements are federally enforceable unless identified as "State Only". A requirement designated "State Only" is enforceable only by the state or the NWCAA, and not by the EPA or through citizen suits. "State Only" WAC citations are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended April 11, 2019. All of the federal regulations listed in Section 5 have been adopted by reference in NWCAA 104.2, as amended April 11, 2019.

The "Description" column is a brief description of the applicable requirements for informational purposes only and is not enforceable. Periodic or continuous monitoring requirements (including testing) are specified in the "Monitoring, Recordkeeping, & Reporting" column, which identifies monitoring, recordkeeping and reporting (MR&R) obligations the source must perform as required by the underlying requirement or by WAC 173-401-605(1) or -615. MR&R obligations do not apply to insignificant emission units.

The requirements in the MR&R column labeled as "*Directly Enforceable*:" are legally enforceable requirements added under the NWCAA's "gap-filling" authority (WAC 173-401-615(1)(b) & (c) (10/17/02)). MR&R requirements labeled as "CAM:" are part of the Compliance Assurance Monitoring (CAM) Plan for the specified unit(s) as required by 40 CFR 64.6(c) (10/22/97) and WAC 173-401-615(4). The CAM plan submitted by the facility per 40 CFR 64.4 is included in the Statement of Basis document accompanying this permit. Other requirements not labeled "*Directly Enforceable*:" or "CAM:" are brief descriptions of the regulatory requirements for informational purposes, and are not enforceable, unless identical to the cited requirement; the language of the cited regulation takes precedence over a paraphrased requirement.

A few of the federal standards in the following tables refer to other standards, which, in turn, refer to yet other standards. For example, in AOP Term 5.2.9 the citation for 60.590-60.593 of 40 CFR 60 Subpart GGG refers to 60.482-60.487 of 40 CFR 60 Subpart VV. The symbol → is used in place of "which refers to."

5.1 Sulfuric Acid Plant

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
Note: 40 CFR 60 General Provisions included in AOP Section 3 apply to this affected facility			
5.1.1 General	PSD 94-01 Amendment 1 Condition 6 (1/14/98)	Operating and maintenance manuals for all equipment that has the potential to affect emission to the atmosphere have been developed and will be followed. Emissions that result from a failure to follow the requirements of the manuals may be considered proof that the equipment was not properly operated and maintained.	Copies of the manuals shall be available to NWCAA and Ecology.

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.1.2 General	PSD 94-01 Amendment 1 Conditions 4 & 5 (1/14/98)	CEMS and process data shall be reported in written form to NWCAA at least monthly within 30 days of the end of each calendar month.	The monthly report shall include: • Monthly average in units of the standard for each pollutant monitored; • Duration of CEM monitor downtime, due to: ○ Monitor equipment malfunction, ○ Non-monitor equipment malfunction, ○ Quality assurance calibration, ○ Other causes, and ○ Percentage of time the monitor was not operating as compared to total source operating time; • Results of any monitor audits or accuracy checks; • Results of any stack tests. For each occurrence of monitored emissions in excess of the standard, the monthly report shall include: • The time of the occurrence; • Magnitude of the emission or process parameters excess; • Duration of the excess; • The probable cause, including startup/shutdown, control equipment problems, process equipment problems, other causes and the percentages of time of excess emissions as compared to total operating time; • Corrective actions taken or planned; and • Any other agency contacted

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.1.3 SO ₂	40 CFR 60 Subpart H 60.82(a) (6/14/74) and 60.84(a), (b), (c), & (e) (2/27/14) NWCAA 465.11, 465.23, & 465.24 (4/14/93 State Only)	Sulfuric acid plant emissions shall not exceed 4 lb SO₂/ton of sulfuric acid produced (production expressed as 100% H₂SO₄). Establish a conversion factor to convert the SO₂ monitoring data into units of the standard (lb SO₂/ton of sulfuric acid produced). The conversion factor shall be determined, at a minimum, three times daily by measuring the concentration of SO₂ entering the converter using suitable methods and calculating the appropriate conversion factor for each eight-hour period as follows: $CF = k[(1.000 - 0.015r)/(r - s)]$ where: CF=conversion factor (lb/ton per ppm) k=0.1306 (constant derived from material balance) r=%vol SO₂ entering the gas converter s=%vol SO₂ to the atmosphere determined by the CEMS Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the standard.	Install, calibrate, maintain and operate a continuous monitoring system to measure SO₂. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 60.13(d) shall be SO₂. The span value shall be set at 1000 ppm SO₂. Record all conversion factors and values from which they were computed. <i>Directly Enforceable:</i> The monitoring equipment required to be installed shall comply with the equipment and performance specifications and reporting requirements in NWCAA Section 367. Conduct annual performance tests to demonstrate compliance with the standard according to 40 CFR 60 Appendix A, Test Methods 1-4 and 6 or 6C.
5.1.4 SO ₂	PSD 94-01 Amendment 1 Condition 1 (1/14/98)	SO ₂ emissions from the acid plant common stack shall not exceed 315 ppmvd on a 3-hour average or 59.9 lb/hr on a 3-hour average, whichever is more stringent.	Compliance shall be determined by a CEMS. The CEMS used to measure SO₂ emissions shall, at a minimum, conform with 40 CFR 60 Appendix B Performance Specifications. The CEMS quality control plan conforming to 40 CFR 60 Appendix F may be required to be periodically updated. <i>Directly Enforceable:</i> Conduct annual performance tests to demonstrate compliance with the standard according to 40 CFR Part 60 Appendix A, Test Methods 1-4 and 6 or 6C.

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.1.5 H ₂ SO ₄	OAC 458d Conditions (1) & (3) (6/25/15) (CAM)	Sulfuric acid mist emissions from the acid plant common stack shall not exceed 1.5×10^{-6} lb/dscf hourly average expressed as 100% H ₂ SO ₄ . In addition, sulfuric acid mist emissions from the stack shall not exceed 0.105 pounds per ton of sulfuric acid produced on an hourly average.	Determine compliance using the arithmetic average of three one-hour test runs conducted during annual performance testing. Performance tests shall be performed according to 40 CFR 60 Appendix A Method 8. <i>Directly Enforceable:</i> Daily sulfuric acid production on a facility-wide basis may be a suitable method to determine production rate of 100% H ₂ SO ₄ for each test run. CAM:
5.1.6 H ₂ SO ₄	40 CFR 60 Subpart H 60.83(a)(1) (10/6/75) and 60.85(a) & (b) (2/14/89) (CAM)	Sulfuric acid plant emissions shall not contain acid mist, expressed as H ₂ SO ₄ , in excess of 0.15 lb/ton of acid produced (production expressed as 100% H ₂ SO ₄). Acid mist means sulfuric acid mist, as measured by Method 8.	Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with the date, time, and reader initials.
5.1.7 H ₂ SO ₄	NWCAA 465.12 (4/14/93 State Only) (CAM)	Sulfuric acid mist emissions (including sulfur trioxide) from the sulfuric acid plant shall not exceed 0.15 lb/ton of sulfuric acid produced, expressed as 100% sulfuric acid.	A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H ₂ O for Abatement Unit 10 or 0.4" H ₂ O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.1.8 H ₂ SO ₄	40 CFR 60 Subpart H 60.83(a)(2) (10/6/75) and 60.85(a) & (b)(4) (2/14/89) (CAM)	Sulfuric acid plant tailgas emissions shall not exhibit 10% opacity or greater using Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16. <i>CAM:</i> Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with date, time, and reader initials. A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H₂O for Abatement Unit 10 or 0.4" H₂O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.
5.1.9 H ₂ SO ₄	OAC 458d Condition (2) (6/25/15) (CAM)	Visible emissions from the acid plant common stack shall not exceed an average of ten percent opacity in any consecutive six-minute period as determined by 40 CFR 60 Appendix A Method 9.	
5.1.10 H ₂ SO ₄	PSD 94-01 Amendment 1 Condition 2 (1/14/98) (CAM)	Opacity from the acid plant common stack shall not exceed 10 percent for more than six minutes in any one-hour period as measured by EPA Method 9.	
5.1.11 H ₂ SO ₄	NWCAA 465.13 (4/14/93 State Only) (CAM)	Visible emissions from the sulfuric acid plant shall not exceed 10% opacity or greater for three minutes.	
5.1.12 Opacity	NWCAA 451.1 (10/13/94) NWCAA 451.1 (11/8/07 State Only)	<u>Emission of Air Contaminant - Visual Standard</u> No person shall cause or permit the emission, for any period aggregating more than 3 minutes in any 1 hour, of an air contaminant from any source which, at the point at emission, or within a reasonable distance of the point of emission, exceeds 20% opacity (Ecology Method 9A) except: When there is valid data to show that the opacity is in excess of 20% as a result of the presence of condensed water droplets, and that the concentration of the particulate matter, as shown by a source test approved by the Control Officer, is less than 0.10 (0.23 g/m³) grain/dscf.	
5.1.13 Opacity	WAC 173-400-040(1) (9/20/93) WAC 173-400-040(2) (9/16/18 State Only)	<u>Visible Emissions</u> No person shall cause or allow the emission for more than 3 minutes, in any 1 hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds 20% opacity (Ecology Method 9A) except: When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed 20%.	

Sulfuric Acid Plant			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
SPU3 Startup Heater			
5.1.14 General	OAC 880c Condition (1) (6/25/15)	The startup heater shall not operate for more than 1,000 hours in any 12-month period.	Records documenting operation time shall be updated at least monthly and include the date of operation and total hours of operation on each calendar day the unit is run. Operation records shall be kept on-site and available for review by NWCAA.
5.1.15 Opacity	OAC 880c Condition (2) (6/25/15)	Visible emissions from the startup heater stack shall not exceed an average of ten percent opacity in any consecutive six minute period as determined by 40 CFR 60 Appendix A Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16.

5.2 Sulfur Recovery Unit (SRU)

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
Note: 40 CFR 60 and 63 General Provisions included in AOP Section 3 apply to this affected facility			
5.2.1 Opacity	OAC 650d Condition (8) (6/25/15)	Visible emissions from the incinerator stack shall not exceed an average of ten percent opacity in any consecutive 6-minute period as determined by 40 CFR 60 Appendix A Method 9.	<i>Directly Enforceable:</i> Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16.
5.2.2 SO ₂	OAC 650d Condition (7) (6/25/15)	The sulfur dioxide (SO ₂) emissions from the SRU shall not exceed 40 tons during any consecutive 12-month period.	<i>Directly Enforceable:</i> Determine compliance using the 1-hour average SO ₂ CEMS concentration data under AOP Term 5.2.5 multiplied by an average stack flow for the most recent 12 passing performance tests under AOP Term 5.2.3 summed over the 12-month period.
5.2.3 SO ₂	OAC 650d Conditions (2) & (6) (6/25/15)	Emissions of SO ₂ from the SRU shall not exceed 9.2 pounds per hour SO ₂ on a one-hour basis.	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 6 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.2.4 SO ₂	40 CFR 60 Subpart J 60.104(a)(2)(i) (6/24/08), 60.105(a)(5) & (e)(4)(i) (12/1/15); and 60.107(d) (6/24/08) 40 CFR 63 Subpart UUU 63.1568(a)(1) (7/13/16), Table 29 Line 1a (12/1/15), (a)(2) (7/13/16), Table 30 Lines 1 & 6 (12/1/15), (a)(4) (7/13/16), (b)(1) (7/13/16), Table 31 Lines 1a & 5 (12/1/15), (c)(1) (7/13/16), Table 34 Line 1a (12/1/15), and Table 35 Lines 1, 5a, & 5b (12/1/15); 63.1570(a) & (c) (12/1/15); 63.1572(a) (12/26/18), Table 40 Lines 5 & 9 (12/1/15), (c) (12/26/18), Table 41 Lines 9 & 10 (12/1/15), & (d) (12/26/18); and 63.1576(d), (f), (g), (h), & (i) (12/26/18)	<u>Sulfur Recovery Units – SO₂</u> <u>Sulfur Recovery Units – HAP Emissions</u> SO₂ from the sulfur recovery unit shall not exceed 250 ppmvd at 0% excess air based on 12-hour rolling average at all times including startup and shutdown. Alternatively, startup and shutdown purge gases may be sent to a thermal oxidizer or incinerator operated at a minimum hourly average temperature of 1,200 degrees Fahrenheit in the firebox and a minimum hourly average outlet oxygen (O₂) concentration of 2 volume percent (dry basis).	Install, operate, and maintain a continuous monitoring system to measure SO₂ emissions and O₂ for correcting the data for excess air. Collect hourly average SO₂ (dry basis) and percent excess air data; determine and record each 12-hour rolling average concentration of SO₂. Install, operate, and maintain a continuous parameter monitoring systems to measure and record the firebox temperature of each thermal incinerator or oxidizer and the oxygen content (percent, dry basis) in the exhaust vent from the incinerator or oxidizer. The SO₂ CEMS and O₂ monitor shall be installed, operated, and maintained in accordance with 40 CFR 60 Appendix B Performance Specification 2 using a span value of 500 ppm SO₂ and 25% O₂ and 40 CFR 60 Appendix F Procedure 1. The monitoring system shall be certified using 40 CFR 60 Appendix A Methods 6 or 6C and 3A or 3B. Relative accuracy audits are required annually instead of quarterly. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), conduct all monitoring in continuous operation at all times the source is operating. For any periods for which sulfur dioxide or oxides emissions data are not available, submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability.

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.2.5 SO ₂	OAC 650d Conditions (1), (5), & (6) (6/25/15)	Emissions of sulfur dioxide (SO ₂) from the incinerator stack shall not exceed 250 ppm by volume (dry basis) at zero percent excess air, for any 12-hour period (measured as 12-hour rolling average).	Determine compliance using a certified continuous emission monitoring system (CEMS) for SO ₂ and O ₂ . The CEMS shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60.105, the appropriate specifications of 40 CFR 60 Appendices B and F, NWCAA Section 367 and NWCAA Appendix A. Also, determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 6 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
5.2.6 H ₂ SO ₄	OAC 650d Conditions (3) & (6) (6/25/15)	Emissions of sulfuric acid mist from the SRU shall not exceed 0.45 pounds acid per ton of sulfur produced on an hourly average.	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, and 8 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
5.2.7 HAP	40 CFR 63 Subpart UUU 63.1569(a)(1)(ii) (11/26/18), Table 36 Line 2 (2/9/05), (c)(1) (11/26/18), & Table 39 Lines 2 & 5 (2/9/05); and 63.1576(d), (g), (h), & (i) (11/26/18)	<u>Sulfur Recovery Unit Bypass Lines – HAP Emissions</u> Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	Visually inspect the seal or closure mechanism at least once every month; and record whether the bypass line valve is maintained in the closed position and whether flow is present in the line. Record and report the time and duration of any bypass.

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.2.8 General	OAC 650d Conditions (4) & (6) (6/25/15)	The SRU sulfur recovery efficiency shall not be less than 99 percent. The sulfur recovery efficiency shall be calculated as follows: $e = \frac{S_{\text{recovered}}}{S_{\text{recovered}} + S_{\text{incinerator}}} \times 100$ Where: e = sulfur recovery efficiency, % $S_{\text{recovered}}$ = elemental sulfur in pit, lb/hr $S_{\text{incinerator}}$ = sulfur in incinerator stack, lb/hr	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, 6, and 8 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum production rate of 25 tons per day (100% H ₂ S basis).
Fugitive Components in VOC service			
Note: 40 CFR 60 General Provisions included in AOP Section 3 apply to this affected facility			
5.2.9 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.482-8 (11/16/07), 60.485(a) & (b) (11/16/07); and 60.486(a), (b), (c) & (e) (11/16/07)	<u>Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors</u> If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, within 5 days, either monitor using EPA Method 21 or eliminate the visual, audible, olfactory, or other indication of potential leak. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected, except for units with a leak definition of 2,000 ppm. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided under delay of repair in AOP Term 5.2.10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	Instrument monitor using EPA Method 21 as indicated. The instrument used to monitor leaks shall be calibrated before use each day of use. The following calibration gases shall be used: Zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but not less than, 10,000 ppm methane or n-hexane. When a leak is detected, comply with AOP Term 5.2.11. Record in a log in a readily accessible location the information required in 60.486(e).

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.2.10 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.482-9 (11/16/07); 60.486(a) & (c) (11/16/07); and 60.487(a) & (c) (11/16/07)	<u>Delay of Repair</u> Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit. Delay is also allowed for equipment isolated from the process and which does not remain in VOC service. Valves: Delay of repair will be allowed if (1) it is demonstrated that purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and (2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device. Delay of repair beyond a process unit shutdown will be allowed if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and supplies had been sufficiently stocked before they were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. Pumps: Delay of repair will be allowed if (1) repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and (2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected. A leaking valve or pump may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly instrument readings are below the leak definition.	When each leak is detected and a delay of repair is utilized, record in a log in a readily accessible location: "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery, the signature of the person whose decision it was that repair could not be effected without a process shutdown, the expected date of successful repair of the leak if a leak is not repaired within 15 days, dates of process unit shutdowns that occur while the equipment is unrepaired, and date of successful repair of the leak. Submit a semiannual report as required in AOP Term 5.2.12.

Sulfur Recovery Unit (SRU)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
5.2.11 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.486(a), (b) & (c) (11/16/07)	<u>Maintain Records for Equipment Found Leaking</u> When each leak is detected, attach a weatherproof and readily visible identification, marked with the equipment identification number to the leaking equipment. The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected. Identification on equipment except valves may be removed after it has been repaired.	When each leak is detected, record in a log in a readily accessible location: the instrument and operator identification numbers and equipment identification number, date of leak detection and each attempt at repair, repair methods applied for each attempt, instrument leak reading, and date of successful repair of leak.
5.2.12 VOC	40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) → 40 CFR 60 Subpart VV 60.487(a) & (c) (11/16/07)	<u>Semiannual Report</u> Submit semiannual reports to the NWCAA beginning 6 months after the initial startup date.	The semiannual reports shall include the following information: (1) Process unit identification. (2) For each month during the semiannual reporting period, the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. (3) Dates of process unit shutdowns which occurred within the semiannual reporting period. (4) Revisions to items in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.
SRU Auxiliary Boiler			
Note: 40 CFR 63 General Provisions included in AOP Section 3 apply to this affected facility			
5.2.13 HAP	40 CFR 63 Subpart DDDDD 63.7500(a), (e), Table 3 Line 1, & (f); 63.7505(a); 63.7510(e); 63.7515(d) & (g); 63.7530(f); 63.7540(a) & (b); 63.7545(a) (b), & (e); 63.7550(a), (b), Table 9, (c), & (h)(3); 63.7555(a) (11/20/15)	<u>Boilers & Process Heaters</u> Conduct a tune-up of the boiler or process heater every ~~5~~ -2 years. Tune-ups shall be conducted no more than ~~61~~ -25 months after the previous tune-up. The inspection shall include: inspect the burner, clean and replace components as necessary; inspect the flame pattern, adjust as necessary; inspect air-to-fuel ratio system control, as applicable, to ensure it is correctly calibrated and functioning properly; optimize total emissions of CO; measure CO concentrations before and after adjustments are made; and maintain on-site an annual report including the items in 63.7540(a)(10)(vi).	Submit a compliance report every ~~five~~ -two calendar years. Reports are due, in accordance with AOP Term 4.1, 30 days after the close of the period that the reports cover. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx). The compliance report shall include, among other things (see 63.7550(c)), the date of the most recent tune-up and burner inspection; if applicable, a statement that no deviations occurred; and be certified by the Responsible Official.

5.3 Gasoline Dispensing Facility (GDF)

Gasoline Dispensing Facility (GDF)			
Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
Note: 40 CFR 63 General Provisions included in AOP Section 3 apply to this affected facility			
5.3.1 VOC	NWCAA 580.6(E) (9/13/18)	All gasoline storage tanks at gasoline dispensing facilities shall be maintained in a vapor-tight condition and in good working order. This includes, but is not limited to, caps, adaptors, and drain valves.	<i>Directly Enforceable:</i> At each gasoline delivery, inspect to make sure fill and recovery caps are on, PV cap is not damaged, poppet is operating properly, dispensing hoses are not cracked or excessively worn, and no visual leaks are occurring.
5.3.2 VOC	WAC 173-491-040(1)(c) (6/25/15)	<u>Fixed-roof Gasoline Storage Tanks</u> All openings not related to safety are to be sealed with suitable closures.	
5.3.3 HAP	40 CFR 63 Subpart CCCCC 63.11115 (1/24/11)	At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Determination of whether such operation and maintenance procedures are being used will be based on information available to NWCAA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
5.3.4 HAP	40 CFR 63 Subpart CCCCC 63.11116 (1/24/11)	<u>GDF with Monthly Throughput Less Than 10,000 Gallons of Gasoline</u> Gasoline must not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (1) Minimize gasoline spills; (2) Clean up spills as expeditiously as practicable; (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirements of 40 CFR 59 Subpart F are considered acceptable; and (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.	Records must be available within 24 hours of a request by NWCAA to document the gasoline throughput.

SECTION 6 INAPPLICABLE REQUIREMENTS

The regulations identified in this section do not apply to Chemtrade as of the date of permit issuance. The basis for each determination is specified in the Reason(s) for Inapplicability column.

Citation	Title or Applicability	Reason(s) for Inapplicability
NWCAA Regulation		
NWCAA Sections 320 – 321, 324.1	General Requirements for Registration	The registration requirements do not apply to sources or emission units subject to Air Operating Permits.
NWCAA Section 458	Incinerators – Wood Waste Burners	Facility does not have this source category.
NWCAA Section 460	Weight/Heat Standard-Emission of Sulfur Compounds	Facility is not a petroleum refinery under NWCAA regulation.
NWCAA Section 560	Storage of Organic Liquid	Facility does not have this source category.
NWCAA Section 580 (except 580.6 & 580.7)	Volatile Organic Compound Control	Facility does not have this source category.
State of Washington Regulations		
WAC 173-400-100 through -104	Registration	The registration requirements do not apply to sources or emission units subject to Air Operating Permits.
Chapter 173-434 WAC	Solid Waste Incineration	Facility does not have this source category.
Federal Regulations		
Standard of Performance for New Stationary Sources (NSPS)		
40 CFR 60 Subpart Cd	Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units	Facility does not operate any of the designated facilities.
40 CFR 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Da	Standards of Performance for Electric Utility Steam Generating Units	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Facility does not operate any of the affected sources.

Citation	Title or Applicability	Reason(s) for Inapplicability
40 CFR 60 Subpart Ja	Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	Facility does not operate any of the affected sources that have been constructed, reconstructed, or modified after May 14, 2007.
40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	Facility does not operate any of the affected sources. Spent acid does not qualify as a "petroleum liquid".
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Facility does not operate any of the affected sources. Spent acid does not qualify as a "petroleum liquid".
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After 7/23/84	Facility does not operate any of the affected sources.
40 CFR 60 Subpart Kc	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023	Facility does not operate any of the affected sources.
40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	Facility does not operate any of the affected sources.

40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry	Facility does not operate any of the affected sources.
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Citation	Title or Applicability	Reason(s) for Inapplicability
40 CFR 60 Subpart GGGa	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	Facility does not operate any of the affected sources that have been constructed, reconstructed, or modified after November 7, 2006.
40 CFR 60 Subpart QQQ	Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems	Facility does not operate any of the affected sources.
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Facility does not operate any subject stationary compression ignition internal combustion engines.
40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Facility does not operate any subject stationary spark ignition internal combustion engines.
National Emission Standards for Hazardous Air Pollutants (NESHAPs)		
40 CFR 61 Subpart FF	National Emission Standard for Benzene Waste Operations	Facility does not handle or process oil or hydrocarbon that contains benzene.
40 CFR 63 Subpart Q	Industrial Process Cooling Towers	Did not use chromium-based treatment chemicals as of the specified date.
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	Facility does not maintain any process streams in HAP service.
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines	Facility does not operate any subject stationary reciprocating internal combustion engines.

Attachment B – SRU Auxiliary Boiler Potential-to-Emit

Chemtrade Logistics
Anacortes, WA
SRU Auxillary Boiler

Heat Input	9.90	MMBtu/hr
Annual Operating Hours	8,760	Hours
Potential Annual Throughput	86,724	MMBtu

Pollutant	Type	Emission Factor			Potential Emissions	
		(lb/Unit)	Unit	Note	(lb/hr)	(tons/yr)
Nitrogen dioxide (NOx)	[NOx]	3.65E-02	MMBtu	[3][4]	0.36	1.58
Carbon Monoxide	[CO]	7.40E-02	MMBtu	[3][4]	0.73	3.21
Sulfur dioxide	[SO2]	5.88E-04	MMBtu	[2][5]	0.01	0.03
PM	[PM]	1.86E-03	MMBtu	[2][5]	0.02	0.08
PM10	[PM10]	7.45E-03	MMBtu	[2][5]	0.07	0.32
PM2.5	[PM2.5]	7.45E-03	MMBtu	[2][5]	0.07	0.32
VOC	[VOC]	5.39E-03	MMBtu	[2][5]	0.05	0.23
Lead & compounds, NOS	[Pb]	4.90E-07	MMBtu	[2][5]	4.85E-06	2.13E-05
CO2	[CO2]	1.18E+02	MMBtu	[2][5]	1,164.71	5,101.41
N2O	[N2O]	2.16E-03	MMBtu	[2][5]	2.14E-02	0.09
CH4	[CH4]	2.25E-03	MMBtu	[2][5]	2.23E-02	0.10
CO2e	[CO2e]			[10]	1,171.63	5,131.73
Total HAPs					1.83E-02	8.03E-02
Benzene	[HAP]	2.06E-06	MMBtu	[2][6]	2.04E-05	8.93E-05
Dichlorobenzene	[HAP]	1.18E-06	MMBtu	[2][6]	1.16E-05	5.10E-05
Formaldehyde	[HAP]	7.35E-05	MMBtu	[2][6]	7.28E-04	3.19E-03
Hexane	[HAP]	1.76E-03	MMBtu	[2][6]	1.75E-02	7.65E-02
Naphthalene	[HAP]	5.98E-07	MMBtu	[2][6]	5.92E-06	2.59E-05
Butane		2.06E-03	MMBtu	[2][6]	2.04E-02	8.93E-02
Ethane		3.04E-03	MMBtu	[2][6]	3.01E-02	0.13
3-Methylchloranthrene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
2-methylnaphthalene	[HAP]	2.35E-08	MMBtu	[2][6][8]	2.33E-07	1.02E-06
Pentane		2.55E-03	MMBtu	[2][6]	2.52E-02	0.11
Propane		1.57E-03	MMBtu	[2][6]	1.55E-02	6.80E-02
Toluene	[HAP]	3.33E-06	MMBtu	[2][6]	3.30E-05	1.45E-04
Benz(a)anthracene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Benzo(a)pyrene	[HAP]	1.18E-09	MMBtu	[2][6][8]	1.16E-08	5.10E-08
Benzo(b)fluoranthene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Benzo(k)fluoranthene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Chrysene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Dibenzo(a,h)anthracene	[HAP]	1.18E-09	MMBtu	[2][6][8]	1.16E-08	5.10E-08
Indeno(1,2,3-cd)pyrene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Arsenic & inorganic arsenic compounds, NOS	[HAP]	1.96E-07	MMBtu	[2][7]	1.94E-06	8.50E-06
Barium	[Ba]	4.31E-06	MMBtu	[2][7]	4.27E-05	1.87E-04
Beryllium & compounds, NOS	[HAP]	1.18E-08	MMBtu	[2][7]	1.16E-07	5.10E-07
Cadmium & compounds, NOS	[HAP]	1.08E-06	MMBtu	[2][7]	1.07E-05	4.68E-05
Chromium	[HAP]	1.37E-06	MMBtu	[2][7]	1.36E-05	5.95E-05
Chromium (VI)	[HAP]	2.75E-07	MMBtu	[11]	2.72E-06	1.19E-05
Cobalt and compounds, NOS	[HAP]	8.24E-08	MMBtu	[2][7]	8.15E-07	3.57E-06
Copper & compounds	[Cu]	8.33E-07	MMBtu	[2][7]	8.25E-06	3.61E-05
Manganese & compounds	[HAP]	3.73E-07	MMBtu	[2][7]	3.69E-06	1.62E-05
Mercury, elemental	[HAP]	2.55E-07	MMBtu	[2][7]	2.52E-06	1.11E-05
Molybdenum		1.08E-06	MMBtu	[2][7]	1.07E-05	4.68E-05

Chemtrade Logistics
Anacortes, WA
SRU Auxillary Boiler

Heat Input	9.90	MMBtu/hr
Annual Operating Hours	8,760	Hours
Potential Annual Throughput	86,724	MMBtu

Pollutant	Type	Emission Factor			Potential Emissions	
		(lb/Unit)	Unit	Note	(lb/hr)	(tons/yr)
Nickel & compounds, NOS	[HAP]	2.06E-06	MMBtu	[2][7]	2.04E-05	8.93E-05
Selenium & selenium compounds (other than hydrogen selenide)	[HAP]	2.35E-08	MMBtu	[2][7]	2.33E-07	1.02E-06
Vanadium		2.25E-06	MMBtu	[2][7]	2.23E-05	9.78E-05
Zinc	[Zn]	2.84E-05	MMBtu	[2][7]	2.81E-04	1.23E-03
Acenaphthene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Acenaphthylene	[HAP]	1.76E-09	MMBtu	[2][6][8]	1.75E-08	7.65E-08
Anthracene	[HAP]	2.35E-09	MMBtu	[2][6][8]	2.33E-08	1.02E-07
Benzo(g,h,i)perylene	[HAP]	1.18E-09	MMBtu	[2][6][8]	1.16E-08	5.10E-08
Fluoranthene	[HAP]	2.94E-09	MMBtu	[2][6][8]	2.91E-08	1.28E-07
Fluorene	[HAP]	2.75E-09	MMBtu	[2][6][8]	2.72E-08	1.19E-07
Phenanthrene	[HAP]	1.67E-08	MMBtu	[2][6][8]	1.65E-07	7.23E-07
Pyrene	[HAP]	4.90E-09	MMBtu	[2][6][8]	4.85E-08	2.13E-07
7,12-dimethylbenz(a)anthracene	[HAP]	1.57E-08	MMBtu	[2][6][8]	1.553E-07	6.80E-07

NOTES:

[1] Unit is a CleaverBrooks model FLX-JT-700-1000-150ST derated to 9.90 MMBtu/hr heat input.

[2] Natural gas heat content = 1020 MMBTU/MMCF

[3] Boiler vendor estimate of 30 ppmv and 100 ppmv for NOx and CO, respectively.

[4] Emission Factor (lb/MMBtu) = ppm/10⁶/molar volume conversion factor (385 dscf/lb-mol) x Molecular Weight x Fd (8,710 dscf/MMBtu) x 20.9/(20.9-3)

[5] AP-42 Table 1.4-2 Emission Factors for Criteria Pollutants and GHG from Natural Gas Combustion

[6] AP-42 Table 1.4-3 Emission Factors from Speciated Organic Compounds from Natural Gas Combustion

[7] AP-42 Table 1.4-4 Emission Factors for Metals from Natural Gas Combustion

[8] Designated as a HAP because it is Polycyclic Organic Matter (POM)

[9] Emission Estimation Protocol for Petroleum Refineries Table 4.3

[10] CO2e Pollutants Global Warming Potential from 40 CFR Part 98

	GWP	Source
CH4	25	78 FR 71948, 11/29/13
N2O	298	78 FR 71948, 11/29/13
CO2	1	78 FR 71948, 11/29/13

[11] EPA Emissions Estimation Protocol for Petroleum Refineries Table 4-3 Summary of Emission Factors for Boilers and Process Heaters Firing Various Fuels

Attachment C – 2024 Annual Compliance Certification



CHEMTRADE

Environmental Protection Agency, Region 10
Suite 900, AWT - 107
Attn: Air Operating Permits
1200 Sixth Avenue -
Seattle, WA 98101

February 14, 2025

Subject: Annual Title V Compliance Certification - 2024

Chemtrade Solutions, LLC, Anacortes plant is submitting this Title V Operating Permit compliance certification for reporting year 2024. This document has been reviewed and signed by a responsible official as defined in WAC 173-401-200.

If you have any questions or need additional information regarding this report, please contact Duane Hartman at (409) 670-6592.

Sincerely,

Howard Powell
Regional Manufacturing Manager
Responsible Official

Cc: Duane Hartman, EHS Manager, Chemtrade Solutions, LLC

9589 0710 5270 1566 0203 17

U.S. Postal Service CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com	
Seattle, WA 98101	
Certified Mail Fee \$4.85	0270
Extra Services & Fees (check box, add fee as appropriate)	03
☐ Return Receipt (hardcopy) \$0.00	Postmark
☐ Return Receipt (electronic) \$0.00	Date
☐ Certified Mail Restricted Delivery \$0.00	
☐ Adult Signature Required \$0.00	
☐ Adult Signature Restricted Delivery \$0.00	
Postage \$3.43	02/14/2025
Total Postage and Fees \$12.38	
Sent To EPA Region 10	
Street and Apt. No., or PO Box No. 1200 6th Ave	
City, State, ZIP+4® Seattle, WA 98101	
PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions	

Hartman, Duane

From: Facility Reports <facilityreports@nwcleanairwa.gov>
Sent: Friday, February 14, 2025 9:44 AM
To: Hartman, Duane
Subject: Automatic Reply: AOP Reports

CAUTION: This email is from outside of Chemtrade. Do not click links or open attachments unless you recognize the sender's email address. For additional details on this alert, please see the helpdesk [link](#)

Thank you. Your email was received by NWCAA.

Hartman, Duane

From: Hartman, Duane
Sent: Friday, February 14, 2025 9:40 AM
To: facilityreports@nwcleanairwa.gov
Subject: AOP Reports
Attachments: Chemtrade Logistics Annual Title V Compliance Certificate 2024.pdf; Chemtrade Logistics - Semi Annual MACT II 2nd Half 2024.pdf; Chemtrade Logistics - Semi Annual Title V Compliance Certificate 2nd Half 2024.pdf

Title V Annual Compliance Certificate 2024

Title V Semi-annual MACT II 2nd Half 2024

Title V Semi-Annual Compliance Certificate 2nd Half 2024

Check (X) by all included	Reports
	Aerospace - 40 CFR 63 GG
x	AOP Annual Compliance Certification
x	AOP Semiannual Report and/or Certification
	AOP Quarterly
	AOP Monthly
	Asbestos
	Boat Manufacturing - 40 CFR 63 4V
	Boilers & Heaters - 40 CFR 63 5D
	Boilers - 40 CFR 60 Db, 60 Dc
	Excess Emission Report (Part 2)
	LDAR - May include 40 CFR 60 VV, 60 VVa, 60 GGG, 60 GGGa, 63 CC, NWCAA 580
	Miscellaneous Organic Chemical Manufacturing (MON) - 40 CFR 63 4F
	Permit: OAC, PSD, or Regulatory Order
	Reciprocating Engines - May include 40 CFR 63 4Z, 60 4I, 60 4J
	Reinforced Plastic Composites - 40 CFR 63 4W
	Sewage Sludge Incinerator - 40 CFR 62 LLL
	Sewage Treatment Plants - 40 CFR 60 O
	Site Remediation - 40 CFR 63 5G
	Stationary Combustion Turbines - 40 CFR 60 GG
	Utility Steam Contributions
	Other (please describe):
Check (X) by all included	Notifications
	AOP Responsible Official Change



Mr. Mark Buford, Director
Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273

February 14, 2025

Subject: Annual Title V Compliance Certification – 2024

Chemtrade Solutions, LLC, Anacortes plant is submitting this Title V Operating Permit compliance certification for reporting year 2024. This document has been reviewed and signed by a responsible official as defined in WAC 173-401-200.

If you have any questions or need additional information regarding this report, please contact Duane Hartman at (409) 670-6592.

Sincerely,

Howard Powell
Regional Manufacturing Manager
Responsible Official

Cc: Duane Hartman, EHS Manager, Chemtrade Solutions, LLC

Permit Number: 009R2
 Name of Facility: Chemtrade Solutions LLC – (Anacortes facility)

Washington Air Operating Permit Terms & conditions and Compliance Status

Table 1

Complete this table for all terms and conditions under the facility's air operating permit.

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent? ¹
2.1.1 Duty to Comply	There are no monitoring, record keeping or reporting (MR&R) requirements associated with this term.		Continuous
2.1.2 Civil and Criminal Penalties	There are no MR&R requirements for this term.		Continuous
2.1.3 Need to Halt or Reduce Activity Not a Defense.	There are no MR&R requirements for this term.		Continuous
2.1.4 Duty to Provide Information	There are no MR&R requirements for this term.		Continuous
2.1.5 Confidential Information.	There are no MR&R requirements for this term.		Continuous
2.1.6 Inspection and Entry	There are no MR&R requirements for this term.		Continuous
2.1.7 Investigation and Studies	There are no MR&R requirements for this term.		Continuous
2.1.8 Source Testing	Annual Performance Test Requirements		Continuous
2.1.9 Testing and Sampling	Continuous Emission Monitoring and recording		Continuous

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent?¹
2.1.10 Ambient Air and Continuous Emission Monitoring	Continuous monitoring and recording		Continuous
2.1.11 Credible Evidence	There are no MR&R requirements of this term.		Continuous
2.2.1 Permit Expiration and Renewal	There are no MR&R requirements of this term.		Continuous
2.2.2 Permit Actions	There are no MR&R requirements of this term.		Continuous
2.2.3 Emissions Trading	There are no MR&R requirements of this term.		Continuous
2.2.4 Emission Reduction Credits	There are no MR&R requirements of this term.		Continuous
2.2.5 Severability	There are no MR&R requirements of this term.		Continuous
2.2.6 Permit Appeals	There are no MR&R requirements of this term.		Continuous
2.2.7 Permit Continuation	There are no MR&R requirements of this term.		Continuous
2.2.8 Reopening for Cause	There are no MR&R requirements of this term.		Continuous
2.2.9 Changes Not Requiring Permit Revisions/Off-Permit Changes	There are no MR&R requirements of this term.		Continuous
2.2.10 Permit Modifications	There are no MR&R requirements of this term.		Continuous
2.2.11 Property Rights	There are no MR&R requirements of this term.		Continuous

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent?¹
2.2.12 Definitions	There are no MR&R requirements of this term.		Continuous
2.2.13 Compliance Schedule	There are no MR&R requirements of this term.		Continuous
2.2.14 Permit Fees	There are no MR&R requirements of this term.		Continuous
2.2.15 Transfer or Permanent Shutdown	There are no MR&R requirements of this term.		Continuous
2.3.1 Shield Requirement	There are no MR&R requirements of this term.		Continuous
2.3.2 Inapplicable Requirements	There are no MR&R requirements of this term.		Continuous
2.3.3 Exclusions	There are no MR&R requirements of this term.		Continuous
2.3.4 Reasonably Available Control Technology	There are no MR&R requirements of this term		Continuous
2.3.5 Emergencies	There are no MR&R requirements of this term		Continuous
2.4.1 Compliance Certification	There are no MR&R requirements of this term		Continuous
2.4.2 False and Misleading Oral Statement: Unlawful Reproduction or Alteration of Documents	There are no MR&R requirements of this term		Continuous
2.4.3 Required Record keeping	Periodic monitoring, recording and reporting.		Continuous
2.4.4 Pollutant Disclosure – Reporting by Air	Annual reporting.		Continuous

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent?¹
Contaminant Sources			
2.4.5 Greenhouse Gas (GHG) Reporting	Monitoring, recording and reporting.		Continuous
2.4.6 Reporting to Verify Emissions from Potential PSD Sources	Monitoring, recording and reporting.		Continuous
2.4.7 Reporting of Deviations from Permit Conditions	Requires recording and reporting.		Continuous
2.4.8 Report of Breakdown and Upset	Requires recording and reporting.		Continuous
2.4.9 Report of Shutdown or Startup	Requires recording and reporting.		Continuous
2.4.10 Operation and Maintenance	Requires recording and reporting.		Continuous
2.5.1 Excess Emissions	There are no MR&R requirements of this term		Continuous
2.5.2 Excess Emissions Due to Breakdowns, Upsets, Startup, or Shutdown	There are no MR&R requirements of this term		Continuous
2.6 Duty to Supplement or Correct Information	There are no MR&R requirements of this term		Continuous

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent?¹
2.7.1 Concealment and Masking	There are no MR&R requirements of this term		Continuous
2.7.2 Adjustment for Atmospheric Conditions	There are no MR&R requirements of this term		Continuous
2.7.3 Outdoor Burning	There are no MR&R requirements of this term		Continuous
2.7.4. Asbestos	There are no MR&R requirements of this term		Continuous
2.7.5 Stratospheric Ozone and Climate Protection	There are no MR&R requirements of this term		Continuous
2.7.6 Display of Orders, Certificates, and Other Notices: Removal or Mutilation Prohibited	There are no MR&R requirements of this term		Continuous
2.7.7 Obstruction of Access	There are no MR&R requirements of this term		Continuous
2.7.8 False Statement, Representation or Certification	There are no MR&R requirements of this term		Continuous
2.7.9 Inaccurate Monitoring	There are no MR&R requirements of this term		Continuous
2.7.10 Prevention of Accidental Release	There are no MR&R requirements of this term		Continuous
2.7.11 Cutback Asphalt Paving	There are no MR&R requirements of this term		Continuous

Term or condition of permit	Method Used for Determination of Compliance	Identify any other information reasonably available or otherwise known relating to the compliance status. (Optional).	During the reporting period, was compliance continuous or intermittent?¹
2.7.12 Creditable Stack Height and Dispersion Techniques	There are no MR&R requirements of this term		Continuous
2.8 Notice of Construction and Application for Approval/New Source Review	There are no MR&R requirements of this term		Continuous
2.8.1 Minor New Source Review (NSR)	There are no MR&R requirements of this term		Continuous
2.8.2 Nonroad Engines	There are no MR&R requirements of this term		Continuous
2.8.3 General Order	There are no MR&R requirements of this term		Continuous
2.8.4 Requirements to Comply	There are no MR&R requirements of this term		Continuous
2.8.5 Prevention of Significant Deterioration (PSD)	There are no MR&R requirements of this term		Continuous
2.8.6 Replacement or Substantial Alteration of Control Technology at an Existing Source	There are no MR&R requirements of this term		Continuous
2.9 Greenhouse Gas Regulation	There are no MR&R requirements of this term		Continuous
2.10 Greenhouse Gas Mitigation	There are no MR&R requirements of this term		Continuous

SECTION 3: GENERALLY APPLICABLE REQUIREMENTS

3.1.1 Address for Reports, Notifications, and Submittals	Reports and correspondence regarding NSPS and NESHAP are sent to: NWCAA and reports and correspondence regarding NSPS/NESHAP not delegated to NWCAA are sent to U.S. EPA, Region 10		Continuous
3.1.2 Notification	Notifications are made to NWCAA regarding: initial date of construction or reconstruction, physical or operational changes, demonstration of continuous monitoring system performance tests, opacity observations and monitoring system data results.		Continuous
3.1.3 Startup, Shutdown, and Malfunction Records	Records and documentation is maintained for all startup, shutdown, and malfunction of all process operation, including pollution control and continuous monitoring systems.		Continuous
3.1.4 Excess Emission Records	Excess emissions and monitoring system performance reports, including data assessment summaries, are submitted to NWCAA on a monthly and quarterly basis.		Continuous
3.1.5 Maintenance of Records	Files are maintained for a minimum of five years for all environmental matters, including but not limited to: continuous monitoring systems equipment; performance test results; monitor calibrations, adjustments, and maintenance.		Continuous
3.1.6 Performance Tests	Performance tests shall be conducted under representative and normal operating conditions.		Continuous

3.1.7 Test Method Performance Audit	Compliance with applicable requirements unless otherwise granted by NWCAA.		Continuous
3.1.8 Compliance and Opacity Standards	Compliance shown through EPA Method 9 Visual Evaluation.		Continuous
3.1.9 Operation and Maintenance	Process and pollution control equipment are kept in good operating condition and repair and logs kept.		Continuous
3.1.10 Credible Evidence	All environmental performance and compliance test data is certified as accurate and correct by a responsible official.		Continuous
3.1.11 Circumvention	As owner/operator we do not use methods which would conceal or alter emissions to achieve compliance.		Continuous
3.1.12 Monitoring Requirements	Compliance with applicable requirements unless otherwise granted by NWCAA.		Continuous
3.1.13 Modification	Compliance with applicable requirements unless otherwise granted by NWCAA.		Continuous
3.2.1 Prohibited Activities and Circumvention	We maintain full compliance regarding requirements of recordkeeping, notification, and reporting and at no time would conceal an emission that would otherwise constitute a violation.		Continuous
3.2.2 Requirements for Existing, Newly Constructed, and Reconstructed Part 63 NESHAP Sources	Written approval as required under Part 63.5 is obtained prior to all construction and reconstruction, irrespective of whether there are any changes in emissions of hazardous air pollutants.		Continuous
3.2.3 Operation and Maintenance of Continuous	All CEMS equipment maintained, calibrated, and operated in accordance with permit standards and written plant operations and maintenance protocols.		Continuous

Monitoring Systems (CMS)			
3.2.4 Compliance with Non-opacity Emission Standards	Compliance to permitted non-opacity emission standards, with exception of periods of startup, shutdown, and malfunctions.		Continuous
3.2.5 Compliance With Opacity and Visible Emission Standards	Compliance to permitted opacity emission standards, with exception of periods of startup, shutdown, and malfunctions.		Continuous
3.2.6 Extension of Compliance for Early Reductions and Other Reductions	Compliance with applicable requirements unless otherwise granted by NWCAA.		Continuous
3.2.7 Notification of Performance Tests	Notification in writing of the site-specific test plan is to be made to NWCAA of intention to conduct performance tests at least 30 days in advance of when tests are scheduled.		Continuous
3.2.8 Conduct of Performance Tests	Performance tests shall be conducted under representative and normal operating conditions.		Continuous
3.2.9 Operation and Maintenance of Continuous Monitoring Systems (CMS)	Equipment are kept in good operating condition and repair and logs kept.		Continuous
3.2.10 Continuous Monitoring Systems (CMS) Out of Control Periods	Corrective action is taken to include evaluation, maintenance, testing, and reporting for out-of-control periods as defined in the applicable regulation.		Continuous
3.2.11 Continuous Monitoring Systems (CMS) Quality Control Program	Site specific written quality control program, including a performance evaluation test plan and protocol for CMS calibration and corrective action.		Continuous

3.2.12 Continuous Monitoring Systems (CMS) Data reduction	Emission data other than opacity shall be recorded at 1-hour averages, computed from four or more data points, equally spaced over each 1-hour Period.		Continuous
3.2.13 Address for Reports, Notifications, and Submittals	Notifications, reports and applications for delegated Part 63 (NESHAP) shall be sent to NWCAA. Those applications not falling within the delegation of NWCAA will be sent to U.S. EPA, Region 10.		Continuous
3.2.14 Notification Requirements for New or Reconstructed Part 63 NESHAPS Sources	An application is submitted to NWCAA for new construction or reconstruction as required under Part 63.5 (d).		Continuous
3.2.15 Recordkeeping	Records are maintained and reports submitted for startup, shutdown, and malfunctions as required in 63.10(d)(5).		Continuous
3.2.16 Deviation Reporting	Notification shall be made to NWCAA in which each emissions limit and each operating limit was not met. Submit compliance reports as required or a relevant standard.		Continuous
3.2.17 Recordkeeping Requirements for Sources with Continuous Monitoring Systems	Records and documentation is maintained for a minimum of five years for all startup, shutdown, and malfunction of all process operations, including pollution control, emissions, and continuous monitoring systems, with applicable reports being submitted to NWCAA as required.		Continuous
3.2.18 Additional 40 CFR Part 63 Subpart CC (Refinery MACT)	Notification shall be made to NWCAA in which a process units added or process changes not meeting Construction or reconstruction definition. Company will		Continuous

Process Units Added or Process Changes Not Meeting Construction or Reconstruction Definition.	submit a compliance schedule and any other reporting requirements.		
3.2.19 Notification of Compliance Status (NCS)	Notifications, status reports and applications to certify its accuracy, attesting to whether the source has complied with the relevant standard. The NCS must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard.		Continuous

SECTION 4: GENERALLY APPLICABLE REQUIREMENTS

Term or condition of permit	Method of Compliance Determination	Identify any other information reasonably available or otherwise known relating to the compliance status.	During the reporting period, was compliance continuous or intermittent?
4.1 General – Required Monitoring Reports	Submit reports of any required monitoring to the NWCAA at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports.		Continuous
4.2 General - Operation and Maintenance	All process and or air pollution control equipment is kept in good operating condition and repair. Operation and maintenance schedules are made available to employees.		Continuous

4.3, 4.4 General – Nuisance & Emissions Detrimental to persons or property	No air contaminants are purposely discharged in sufficient quantities as to be injurious or cause damage to human health.		Continuous
4.5, 4.6 Odors	Odorous air contaminates are strictly controlled.		Continuous
4.7, 4.8, 4.9 Particulate Matter	Nuisance particulate and fugitive dust is controlled to prevent release.		Continuous
4.10, 4.11, 4.12, 4.13 Opacity of 20%	Visible emissions are controlled below the standard.		Continuous
4.14, 4.15, 4.16, Particulate Matter	Nuisance particulate and fugitive dust is controlled to prevent release.		Continuous
4.17 SO2 NWCAA 410 (4/14/93) NWCAA 465.21, 465.22, & 465.24 (4/14/93 State Only)	Maintain and operate an ambient air monitor in accordance with NWCAA Section 367 and NWCAA Appendix A.		Continuous
4.18 SO2 NWCAA 462 (10/13/94) 4.19 SO2 NWCAA 462 (3/13/97 State Only) 4.20 SO2 WAC 173-400-040(6) first paragraph only (9/20/93) WAC 173-400-040(7) (9/16/18 State Only) SO2 not to exceed 1,000 ppm/hour at 7% oxygen	Compliance determined by continuous emission monitors. Monitor and record the concentration of stack SO2, or alternatively fuel gas H2S, in accordance with the applicable permit terms listed in AOP Section 5.	See table 2 – Deviation report Actual dates of emissions: • 07/09/2025 • 11/04/2025	Intermittent
4.21 SO2 NWCAA 520.11, 520.12, 520.13 and 520.15 (4/14/93)	Retain fuel specifications and purchase records verifying that fuel combusted has a sulfur content of no more than the allowable limits.		Continuous

4.22 SO2 NWCAA 520.11, 520.12, 520.13 and 520.15 (5/9/96 State Only)			
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SECTION 5: SPECIFICALLY APPLICABLE REQUIREMENTS- Sulfuric Acid Plant

Term or condition of permit	Method of Compliance Determination	Identify any other information reasonably available or otherwise known relating to the compliance status.	During the reporting period, was compliance continuous or intermittent?
5.1.1 General – OAC 458C Condition 7(11/05/01), PSD 94-01, Condition 6 (01/14/98)	An Operation and Maintenance manual that identifies procedures and practices is kept on site and available upon request to NWCAA and Ecology.		Continuous
5.1.2 General: PSD 94-01 Amendment 1 Conditions 4 & 5 (1/14/98); CEMS and process data shall be reported to the NWCAA monthly within 30 days of the end of the previous calendar month.	Monthly environmental summary reports are submitted to NWCAA within the required time period.		Continuous
5.1.3, SO2; NWCAA 465.11, 453.23 and 453.24 (4/14/93 - state only); 40 CFR 60.82(a) (6/14/74) and 40 CFR 60.84(a), (b), and (e) (10/17/00) Sulfuric acid plant emissions shall not exceed 4 lb	Compliance determined by certified CEM for SO2, conversion calculations, and daily/hourly production measurements.		Continuous

SO ₂ /ton of sulfuric acid produced (production expressed as 100% H ₂ SO ₄)			
5.1.4, 5.1.5, 5.1.6, 5.1.7 SO₂; OAC 458c Conditions 4(a), 8, & 9(b) (11/5/01), PSD 94-01 Amendment 1 Condition 1 (1/14/98) SO₂ emissions from the acid plant stack shall not exceed 315 ppm_{dv} or 59.9 lb/hr on a 3-hr rolling average, whichever is more stringent. OAC 458d conditions (1) & (3) (6/25/15) (CAM) Sulfuric acid mist emissions from the acid plant common stack shall not exceed 1.5×10⁻⁶ lb/dscf hourly average expressed as 100% H₂SO₄. 40 CFR 60 Subpart H 60.83(a)(1) (10/6/75) and 60.85(a) & (b) (2/14/89) (CAM) Sulfuric acid plant emissions shall not contain acid mist, expressed as	Compliance determined by certified CEM for SO₂, conversion calculations, and daily/hourly production measurements. Determine compliance using the arithmetic average of three one-hour test runs conducted during annual performance testing. Performance tests shall be performed according to 40 CFR 60 Appendix A Method 8. CAM: Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with the date, time, and reader initials. A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H₂O for Abatement Unit 10 or 0.4" H₂O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an		Continuous

H₂SO₄, in excess of 0.15 lb/ton of acid produced (production expressed as 100% H₂SO₄). NWCAA 465.12 (4/14/93 State Only) (CAM) Sulfuric acid mist emissions (including sulfur trioxide) from the sulfuric acid plant shall not exceed 0.15 lb/ton of sulfuric acid produced, expressed as 100% sulfuric acid	excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred.		
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5.1.8 H2SO4 40 CFR 60 Subpart H 60.83(a)(2) (10/6/75) and 60.85(a) & (b)(4) (2/14/89) (CAM) 5.1.9 H2SO4 OAC 458d Condition (2) (6/25/15) (CAM) 5.1.10 H2SO4 PSD 94-01 Amendment 1 Condition 2 (1/14/98) (CAM) 5.1.11 H2SO4 NWCAA 465.13 (4/14/93 State Only) (CAM) 5.1.12 H2SO4 NWCAA 451.1 (10/13/94) NWCAA 451.1 (11/8/07 State Only) 5.1.13 Opacity WAC 173-400-040(1) (9/20/93) WAC 173-400-040(2) (9/16/18 State Only)	Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16. CAM: Install, calibrate, maintain, and operate differential pressure monitoring devices measuring the differential pressure across Abatement Unit 10 and 11 mist eliminator pads in accordance with manufacturer's specifications. Calibrate the differential pressure monitoring devices in accordance with manufacturer's specifications but no less frequently than once every 12 months. Calibration information shall be recorded. When the abatement unit is operating, measure and record the differential pressure of the associated mist eliminator pad daily in a written log, along with date, time, and reader initials. A potential excursion is defined as two consecutive daily differential pressure readings below 0.2" H2O for Abatement Unit 10 or 0.4" H2O for Abatement Unit 11. Potential excursions trigger an inspection. If it is determined that the decreased differential pressure is due to a decrease in SPU operation, this is not an excursion but shall be noted in a log and daily qualitative visible emission observations of the Sulfuric Acid Plant stack shall commence. If there is no corresponding SPU operation decrease, this is an excursion which requires corrective action as soon as practicable and reporting. A visible emissions (VE) observation excursion is defined as a single daily qualitative reading where opacity is observed. A VE excursion triggers an		Continuous
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	inspection, corrective action as soon as practicable, and reporting. Daily VE observations will end for that abatement unit when the daily differential pressure reading rises above the designated threshold. While Method 9 certification is not required, staff conducting the VE observations shall be trained with respect to the general procedures for determining the presence of visible emissions. Staff shall be trained initially and have a refresher at least once every 12 months. Keep records of training. If the corrective action requires the unit be shut down, the issue shall be corrected during the next shutdown of the unit but no later than 90 days after the initial excursion. The date and a description of the corrective actions taken in response to each excursion shall be documented. Chemtrade may source test at any time and submit the results to NWCAA for approval to adjust the differential pressure thresholds in this term. Excursions and associated corrective actions will be reported in writing to NWCAA within 30 days after the end of the calendar month in which the excursion occurred		
5.1.14 General OAC 880c condition (1) (6/25/15)	The startup heater shall not operate for more than 1,000 hours in any 12-month period. Operation records shall be kept on-site and available for review by NWCAA.		Continuous
5.1.15 Opacity OAC 880c Condition (2) (6/25/15)	Visible emissions from the startup heater stack shall not exceed an average of ten percent opacity in any consecutive six-minute period as determined by 40 CFR 60 Appendix A Method 9.		Continuous

	Monitor visible emissions in accordance with AOP Terms 4.12 through 4.16.		
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SECTION 5: SPECIFICALLY APPLICABLE REQUIREMENTS- Sulfur Recovery Unit & Gasoline Dispensing Facility (GDF)

Term or condition of permit	Method of Compliance Determination	Identify any other information reasonably available or otherwise known relating to the compliance status.	During the reporting period, was compliance continuous or intermittent?
5.2.1 General; OAC 650c Conditions 10 & 11 (12/13/2001); Monthly reports are submitted to NWCAA within 20 days of the end of the previous calendar month.	Monthly environmental summary reports are submitted to NWCAA within the required time period		Continuous
5.2.2 H ₂ SO ₄ ; OAC 307a Condition 1 (5/14/2007) Total SO ₂ emissions from the Sulfur Recovery Unit shall not exceed 40 tons per year.	Compliance determined by annual submittal of emissions inventory.		Continuous
5.2.3 H ₂ SO ₄ ; OAC 650c Conditions 4, 7, & 9 (12/13/2001); SO ₂ emissions from the SRU shall not exceed 9.2 lb/hr on a one-hour basis.	Compliance demonstrated by annual performance tests at a minimum production rate of 25 tons/day and using engineering calculations during periods of deviation.		Continuous
5.2.4 SO ₂ ; 5.2.5, HAP OAC 307a Conditions 2 and 4 (5/14/2007) OAC 650c Conditions 2, 7, 8, & 9 (12/13/2001) 40 CFR 60.104(a)(2)(i) (6/24/08), 60.105(a)(5) and (e)(4) (6/24/08) 60.107(d), (f), & (g) (6/24/08); 40 CFR 63.1568 (a)(1) (4/11/2002) Table 29 item 1 (2/9/05) 40 CFR 63.1568 (c)(1) (4/11/2002) Table 34 item 1 (2/9/05)	Compliance determined by certified CEMS for SO ₂ and Oxygen, conversion calculations, and verified by annual performance tests.	See table 2 – Deviation report Actual dates of emissions: • 1/13/2024 • 7/9/2024 • 11/4/2024	Intermittent

40 CFR 63.1568 (b)(1) Table 31 item 1(2/9/05) 40 CFR 63.1572 (a)(1) Table 40 item 4 (2/9/2005) SO ₂ emissions from the SRU(incinerator stack) shall not exceed an average of 250 ppmdv corrected to 0% excess air during any 12-hour rolling period.			
5.2.6 H ₂ SO ₄ ; OAC 650c Conditions 5, 7, and 9 (12/13/2001); Sulfuric acid (H ₂ SO ₄) Mist: emissions shall not exceed 0.45 lb/ton of sulfur produced (hourly average).	Compliance determined by conducting annual performance test using an outside testing firm.		Continuous
5.2.7 HAP; 40 CFR 63.1569(a)(1)(ii) Table 36 Option 2 (2/9/05) and (b)(2) Table 38 (2/9/05) and (c)(1) Table 39 items 2 and 5 (2/9/05); Install a car-seal or lock-and-key device on the mechanism by which the bypass device flow position is controlled when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device	Compliance was demonstrated by notification to NWCAA of the installation of a car-seal device by the original compliance date and continuing monthly inspection thereafter to document and record the status of the bypass line valve.		Continuous
5.2.8 General – The SRU sulfur recovery efficiency shall not be less than 99 percent.	Determine compliance using the average of three 1-hour test runs conducted during annual performance tests performed within 12 months of the previous test. Performance tests shall be conducted according to EPA Methods 1, 2, 3A, 4, 6, and 8 and NWCAA Section 367 and NWCAA Appendix A. Testing shall be conducted while operating at a minimum		Continuous

	production rate of 25 tons per day (100% H ₂ S basis).		
5.2.9 VOC 40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) 40 CFR 60 Subpart VV 60.482-8 (11/16/07), 60.485(a) & (b) (11/16/07); and 60.486(a), (b), (c) & (e) (11/16/07)	Instrument monitor using EPA Method 21 as indicated. The instrument used to monitor leaks shall be calibrated before use each day of use. The following calibration gases shall be used: Zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but not less than, 10,000 ppm methane or n-hexane. When a leak is detected, comply with AOP Term 5.2.11. Record in a log in a readily accessible location the information required in 60.486(e).		Continuous
5.2.10 VOC CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) 40 CFR 60 Subpart VV 60.482-9 (11/16/07); 60.486(a) & (c) (11/16/07); and 60.487(a) & (c) (11/16/07)	When each leak is detected and a delay of repair is utilized, record in a log in a readily accessible location: "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery, the signature of the person whose decision it was that repair could not be effected without a process shutdown, the expected date of successful repair of the leak if a leak is not repaired within 15 days, dates of process unit shutdowns that occur while the equipment is unrepaired, and date of successful repair of the leak. Submit a semiannual report as required in AOP Term 5.2.12.		Continuous
5.2.11 VOC 40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) 40 CFR 60 Subpart VV 60.486(a), (b) & (c) (11/16/07)	When each leak is detected, record in a log in a readily accessible location: the instrument and operator identification numbers and equipment identification number, date of leak detection and		Continuous

	each attempt at repair, repair methods applied for each attempt, instrument leak reading, and date of successful repair of leak.		
5.2.12 VOC 40 CFR 60 Subpart GGG 60.590-60.593 (6/2/08, 11/16/07) 40 CFR 60 Subpart VV 60.487(a) & (c) (11/16/07)	The semiannual reports shall include the following information: (1) Process unit identification. (2) For each month during the semiannual reporting period, the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. (3) Dates of process unit shutdowns which occurred within the semiannual reporting period. (4) Revisions to items in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.		Continuous
5.2.13 HAP 40 CFR 63 Subpart DDDDD 63.7500(a), (e), Table 3 Line 1, & (f); 63.7505(a); 63.7510(e); 63.7515(d) & (g); 63.7530(f); 63.7540(a) & (b); 63.7545(a) (b), & (e); 63.7550(a), (b), Table 9, (c), & (h)(3); 63.7555(a) (11/20/15)	Submit a compliance report every five calendar years. Reports are due, in accordance with AOP Term 4.1, 30 days after the close of the period that the reports cover. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx). The compliance report shall include, among other things (see 63.7550(c)), the date of the most recent tune-up and burner inspection; if applicable, a statement that no deviations occurred; and be certified by the Responsible Official.		Continuous
5.3.1, 5.3.2 VOC NWCAA 580.6(E) (9/13/18) WAC 173-491-040(1)(c) (6/25/15)	At each gasoline delivery, inspect to make sure fill and recovery caps are on, PV cap is not damaged, poppet is		Continuous

	operating properly, dispensing hoses are not cracked or excessively worn, and no visual leaks are occurring.		
5.3.3 HAP 40 CFR 63 Subpart CCCCCC 63.11115 (1/24/11)	Determination of whether such operation and maintenance procedures are being used will be based on information available to NWCAA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.		Continuous
5.3.4 HAP 40 CFR 63 Subpart CCCCCC 63.11116 (1/24/11)	Records must be available within 24 hours of a request by NWCAA to document the gasoline throughput.		Continuous

Table 2 Deviation reports listed below were attached to the reports listed in column #3 "Report Description" and are only summarized in the annual Title-V submittal:

SRU Incinerator – 1/13/2024
SRU Incinerator – 7/9/2024
SRU Incinerator – 11/4/2024

Permit Number: 009R2
 Name of Facility: Chemtrade Solutions LLC (Anacortes location)

Table 2

Washington Air Operating Permit Deviation Report Summary Table 2
 For each deviation from any term or condition, complete the following:

Permit Term or condition (# and/or Title)	Date the report was submitted	Report description (Briefly describe content. Was deviation previously reported to the agency?)	Additional information (Has the agency taken enforcement action, such as issuing an NOV? If yes, discuss.)
AOP 009R2 – 5.2.4	Reports submitted to NWCAA on 2/16/2024 Actual dates of emissions: 1/13/2024	Air Emission Monthly Report – January 2024 WAC 173-400/WAC 173-401/NWCAA, Air Operating Permit Excess Emissions Report Form Part II	No information has been provided from NWCAA on violation evaluation.
AOP 009R2 – 4.18, 4.19, 4.20, & 5.2.4	Reports submitted to NWCAA on 8/8/2024 Actual dates of emissions: 7/9/2024	Air Emission Monthly Report – July 2024 WAC 173-400/WAC 173-401/NWCAA, Air Operating Permit Excess Emissions Report Form Part II	No information has been provided from NWCAA on violation evaluation.
APO 009R2 - 4.18, 4.19, 4.20, 5.2.4, & 5.2.5	Reports submitted to NWCAA on 12/19/2024 Actual dates of emissions: 11/4/2024	Air Emission Monthly Report – November 2024 WAC 173-400/WAC 173-401/NWCAA, Air Operating Permit Excess Emissions Report Form Part II	NWCCA issued NOV on 1/28/2025