



PUBLIC NOTICE

NORTHWEST CLEAN AIR AGENCY DRAFT RENEWAL TO THE AIR OPERATING PERMIT

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:

**Sierra Pacific Industries
14654 Ovenell Road
Mount Vernon, WA 98273**

This action is issuance of a draft renewal of the existing Sierra Pacific Industries (SPI) AOP. The existing AOP was previously finalized on July 2, 2024.

The AOP renewal compiles existing air quality requirements and permits into one comprehensive document. It establishes monitoring, recordkeeping and reporting procedures to ensure that compliance with all applicable requirements can be determined. The AOP renewal does not approve any air emission increases or decreases or new construction activities.

SPI owns and operates a lumber manufacturing facility in Skagit County, Washington. A biomass-fired cogeneration facility produces steam for heating on-site lumber drying kilns and for powering a steam turbine capable of generating 28 MW of electricity. A 95 MMBtu/hr natural gas boiler is used to produce steam for the kilns when the biomass-fired boiler is undergoing maintenance.

SPI is subject to the Air Operating Permit (aka Title V) program because potential annual emissions of nitrogen oxides, carbon monoxide, hydrogen chloride, and total Hazardous Air Pollutants (HAP) exceed the applicability thresholds.

Copies of the draft AOP renewal, technical support document, and the SPI AOP renewal application, are available online for review at <https://nwcleanairwa.gov/public-notices/>. Written comments relating to the issuance of this AOP renewal must be sent by end-of-day May 10, 2026 (public comment period open from April 10 to May 10) to:

Robyn Nabstedt
Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273
robynn@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 70A.15). The AOP renewal is issued pursuant to Chapter 173-401 WAC and Title V of the federal Clean Air Act Amendments of 1990.

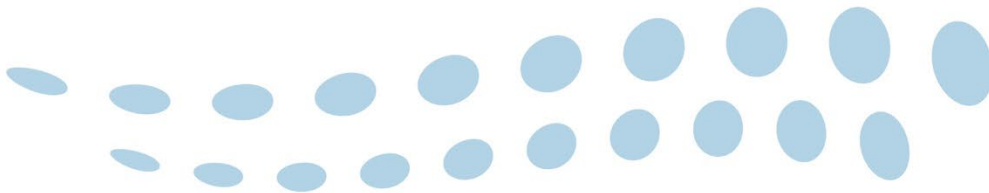


Serving Island, San Juan, Skagit and Whatcom Counties

Air Operating Permit – Draft 019R3

Sierra Pacific Industries Burlington Division

Mount Vernon, WA
April 10, 2026



PERMIT INFORMATION
SIERRA PACIFIC INDUSTRIES
14353 McFarland Road, Mount Vernon, WA 98273

Responsible Official

David S. North
Division Manager
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1403

Facility Inspection Contact

Tyler Moriarty
Co-Gen Supervisor
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1434

Northwest Clean Air Agency

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

Prepared by

Robyn Nabstedt, EIT
Environmental Engineer
(360) 419-6844

Expires: XX/XX/2031

Renewal Application Due: XX/XX/2030

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, Sierra Pacific Industries is authorized to operate subject to the terms and conditions of this permit.

Northwest Clean Air Agency Approval:

Date:

Robyn Nabstedt, EIT
Environmental Engineer

Date:

Agata McIntyre, P.E.
Engineering Manager

Table of Contents

SECTION 1	Emission Unit Descriptions	5
SECTION 2	Standard Terms and Conditions	6
2.1	Compliance Requirements	6
2.2	Permit Terms.....	11
2.3	Permit Shield.....	14
2.4	Recordkeeping and Reporting	15
2.5	Excess Emissions	22
2.6	Duty to Supplement or Correct Information.....	24
2.7	Prohibitions	25
2.8	Notice of Construction and Application for Approval/New Source Review	27
2.9	Greenhouse Gas Regulation.....	29
SECTION 3	Standard Terms and Conditions for NSPS and NESHAP	30
3.1	Part 60 – New Source Performance Standard Requirements	30
3.2	Part 63 – National Emission Standard for Hazardous Air Pollutant Requirements	35
SECTION 4	Generally Applicable Requirements	45
SECTION 5	Specifically Applicable Requirements	57
SECTION 6	Inapplicable requirements.....	87

Tables

Table 1-1	Emission Units.....	5
Table 4-1	Generally Applicable Requirements.....	46
Table 5-1	Specifically Applicable Requirements – EU-1, cogeneration facility.....	58
Table 5-2	Specifically Applicable Requirements – EU-2, Cooling Towers.....	79
Table 5-3	Specifically Applicable Requirements – EU-3, Planer Mill	80
Table 5-4	Specifically Applicable Requirements – EU-4, Dry Kilns	81
Table 5-5	Specifically Applicable Requirements – EU-5, Anti-mold Spray Chamber	83
Table 5-6	Specifically Applicable Requirements – EU-6, Natural Gas Package Boiler	85
Table 6-1	Inapplicable Requirements	87

SECTION 1 EMISSION UNIT DESCRIPTIONS

This table lists emission units and activities included in the Air Operating Permit (AOP) that are located at the Sierra Pacific Industries (SPI) facility located at 14353 McFarland Road, Mount Vernon, Washington, hereinafter referred to as SPI, the facility, owner or operator, or the permittee. The information presented here in Section 1 is for informational purposes only.

Table 1-1 Emission Units

Emission Unit Name/Description	Constructed/Modified Date	Control Device	Monitoring Device	Applicable Orders/Permits	Process Description
EU-1 Cogeneration Facility	2005	SNCR, Multiclone/ESP	COMS, NO _x , CO, O ₂ CEMS	OAC 938c, PSD 05-04 Amendment 3 (A3)	Electrical generation using a turbine and high-pressure steam provided by a biomass-fired, 430 MMBtu/hr, 250,000 lb/hr steam, McBurney Corp, water-wall boiler with a vibrating grate, a steam turbine, and a generator. Generates up to 28 MW of electricity. Provides 2,190 MMlb per year of low-pressure steam for heating.
EU-2 Cooling Tower	2005	None	None	OAC 938c	Condense steam
EU-3 Planer Mill	2005	Baghouse	Magnehelic Pressure Differential Readings	PSD 05-04 A3	The sawmill is currently permitted to process 400 MMbf/yr of dimensional lumber.
EU-4 Dry Kilns	2005	None	None	OAC 938c, PSD 05-04 A3	The dry kilns are currently permitted to process 400 MMbf/yr of dimensional lumber.
EU-5 Anti-mold Spray Chamber	2005	Mist eliminator pad	None	OAC 938c, PSD 05-04 A3	Treat all cut lumber to protect the wood and improve lumber appearance.
EU-6 Natural Gas Package Boiler	2011	Low NO _x burner/FGR	None	OAC 1089b	Natural gas fired package boiler (95 MMBtu/hr).

SECTION 2 STANDARD TERMS AND CONDITIONS

Terms and conditions in this section are administrative requirements, applicable when triggered, or generally applicable requirements 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 Revised Code of Washington (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 (NOV) 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 (7/10/2025)*

Penalties, decisions, and orders issued may be appealed to the PCHB within 30 days after the NOV 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 NWCAA, 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 which are adopted by reference or approved procedures published by 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," published by Ecology. All other language is the same as AOP Term 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. Failure to respond shall not constitute acceptance.
- (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 (OAC) or the AOP.

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

All ambient monitoring, compliance testing, continuous emission monitoring systems (CEMS) and continuous opacity monitoring systems (COMS) required by a regulation, order, 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 NWCAA Section 367 and Appendix A are in addition to any monitoring, testing, calibration or quality assurance/quality control requirements that otherwise apply.

Any person operating an AOP 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 AOP 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 may be cause for a NOV to be issued.

All data and records shall be made available to the Control Officer upon request.

All instruments used to monitor compliance or for special studies must meet appropriate EPA performance specifications (40 CFR 60, Appendix B) and shall be calibrated and maintained in accordance with 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 ensure compliance with 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 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 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.

COMS 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 (RATA), Relative Accuracy Audits (RAA) and Cylinder Gas Audits (CGA) 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 percent data availability on a monthly basis. A supplemental report shall be submitted if during any calendar month a CEMS fails to produce 90 percent 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 CEMS downtime not associated with routine QA or maintenance operations.
- (iv) Data availability for each CEMS, listed by unit and parameter.
- (v) Supplemental report for system with less than or equal to 90 percent 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 and WAC 173-401-725 (3/15/2025)

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 (7/10/2025)

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.

2.2.13. 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 AOP fees for sources in its jurisdiction that are required to have a Title V AOP (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 90 days of shutdown or transfer. The new owner of a registered source shall file a written report with the NWCAA within 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 OAC 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(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 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;
- (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 NWCAA 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
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Northwest Clean Air Agency
Preferred:
facilityreports@nwcleanairwa.gov
Alternative:
Air Operating Permits
1600 South Second Street
Mount Vernon, WA 98273-5202

2.4.1.2. 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. Certification by Responsible Official

2.4.2.1. 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.

2.4.2.2. 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)

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.

2.4.3. 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.

2.4.4. Required Recordkeeping

2.4.4.1. 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 recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

2.4.4.2. 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).

2.4.4.3. PSD 05-04 A3 Conditions B.18.3.1, B.18.3.2, and B.18.3.4 (4/23/2024)

SPI-Burlington will maintain monitoring, source test, CEMS audit tests, and process records at the Skagit County facility for at least five years. SPI-Burlington will provide Ecology and the NWCAA with the monitoring and process records for any period within the five-year archive, within 10 working days of request.

2.4.5. **Pollutant Disclosure - Reporting by Air Contaminant Sources**

2.4.5.1. 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;
- (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, VOC, 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 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.

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

In addition to the requirements of 2.4.5.1, 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.

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

In addition to the requirements of 2.4.5.1, 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 including 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.

2.4.6. Greenhouse Gas (GHG) Reporting

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

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). Reporters with a compliance obligation under Chapter 70A.65 RCW, as described in WAC 173-446, must continue to report for any year with a compliance obligation.

2.4.6.2. 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).

2.4.6.3. 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.

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.

2.4.6.4. 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:

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

2.4.7. 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.

2.4.8. 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.

2.4.9. Report of Breakdown and Upset

2.4.9.1. 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.

*2.4.9.2. State Only: NWCAA 340.1, 340.2 and 340.3 (7/10/2025)
Directly enforceable under WAC 173-401-615(1)(b) & (c) (10/17/2002)*

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:

- (iii) The upset or breakdown shall be reported as promptly as possible and in no event later than 12 hours to the NWCAA. Initial notification may be made by phone or by email.
- (iv) 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:

- (v) 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
- (vi) 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.

2.4.10. Report of Shutdown or Startup

2.4.10.1. 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.

2.4.10.2. 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.

2.4.11. Operation and Maintenance

2.4.11.1. 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.

2.4.11.2. 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 Emission

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
- (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.

2.5.1.2. State Only: WAC 173-400-108 and -109 (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 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.

2.5.1.3. PSD 05-04 A3 Condition B18.2.3 (04/23/2024)

Each occurrence of monitored emissions measured in excess of the limits shall be reported in writing to Ecology and the NWCAA after the respective exceedance in accordance with WAC 173-400-107(3). Such reports shall, as a minimum, include:

- (i) The time of the occurrence.
- (ii) Magnitude of excess from the emission limit.
- (iii) The duration of the excess.
- (iv) The probable cause.
- (v) Corrective actions taken or planned.
- (vi) Any other agency contacted.

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 70A.25 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 70A.25 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)

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Section 68.10 and 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 (NOC) application must be filed by the owner or operator, all fees paid, and an OAC 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 OAC 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), and NWCAA Sections 300, 303, and 324.2 (7/10/2025)

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 OAC shall identify criteria by which an emission unit or source may qualify for coverage under a general OAC 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 OAC.

2.8.5. Prevention of Significant Deterioration (PSD)

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

State Only: WAC 173-400-700 (4/1/2011), -710 (7/1/2016), -720 (1/19/23), -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 NOC 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, -840, -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 SIP 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**

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

Terms and conditions in this section are administrative requirements, applicable when triggered, or generally applicable requirements from the New Source Performance Standards (NSPS) in 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR Parts 61 or 63. The permittee must comply with the requirements listed below for specific “affected facilities” as defined in 40 CFR Part 60.2, “affected sources” as defined in 40 CFR Part 63.2, and owners or operators of any stationary source for which a standard applies under 40 CFR Part 61. The affected facilities, affected sources, and stationary sources subject to these requirements are identified as emission units in the permit. The conditions in this section do not apply generally to all emission units at the facility. Some requirements have been paraphrased for brevity. The language of the cited regulation takes precedence over a paraphrased requirement.

On December 14, 2023, NWCAA adopted by reference select NSPS and NESHAP in effect on October 18, 2023 into NWCAA 104.2 and requested delegation of these NSPS and NESHAP from the Environmental Protection Agency (EPA). On January 7, 2025, EPA concurred and delegated certain authorities to implement and enforce some of the adopted NSPS and NESHAP to NWCAA¹. For delegated NSPS and NESHAP requirements, “Administrator” means NWCAA, and NWCAA has the authority to enforce these federal requirements directly.

NWCAA subsequently amended Section 104.2 on July 10, 2025, adopting by reference select NSPS and NESHAP in effect as of March 15, 2025. EPA has not delegated authority for NSPS and NESHAP promulgated after October 18, 2023 to NWCAA. For requirements promulgated after October 18, 2023, “Administrator” means the Administrator of EPA.

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)

Send notifications, reports, and applications for delegated New Source Performance Standards (NSPS) 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

¹ Current NSPS and NESHAP delegation letters are available for review on the NWCAA website: nwcleanairwa.gov

Send notifications, reports, and applications under NSPS authorities that have been excluded from delegation to the EPA at the following address:

Preferred:

Through the Compliance and Emissions Data Reporting Interface (CEDRI) at cdx.epa.gov

Alternative:

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 within 30 days after such date.
- (ii) The actual date of initial startup of an affected facility, postmarked within 15 days after such date.
- (iii) 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, postmarked 60 days or as soon as practicable before the change is commenced. 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) The date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c), postmarked at least 30 days prior to such date.
- (v) The anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1), postmarked at least 30 days prior to such date.
- (vi) If COMS data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5), postmarked at least 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)

If a continuous monitoring device is required, submit an excess emissions and monitoring systems performance report (as defined in applicable subparts) and/or a summary report form 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. Postmark all reports by the 30th day following the end of each six-month period. Include the information in 40 CFR 60.7(c)(1)-(4) in the excess emissions report. Include the information in 60.7(d)(1)-(2) and 60.7(d) Figure 1 in the summary report.

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. Retain the file in accordance with 60.7(f).

Note: Under AOP Term 2.4.3, 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 as specified by 40 CFR Part 60, and as required by the Administrator, conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s), except as specified in paragraphs 60.8(a)(1)-(4).

Provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts. 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.

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), and,
- (iv) Utilities for sampling and testing equipment.

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

Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, include the elements identified in 60.8(f)(2)(i)-(vi) in the performance test report.

3.1.7. Test Method Performance Audit

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

Include a test method performance audit (PA) during the performance test, as specified in 40 CFR 60.8(g).

Obtain an audit sample, if commercially available, from an Accredited Audit Sample Provider (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 no audit sample for a specific method can be found, 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. If the EPA website does not list an available audit sample at least 60 days prior to the beginning of the compliance test, no audit sample is required as part of the quality assurance program for the compliance test.

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 report the results of the audit sample to the AASP.

3.1.8. Compliance with Opacity Standards

40 CFR 60.11(b) and (c) (10/17/2000)

Determine compliance with opacity standards in 40 CFR Part 60 using 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 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)

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 at all times, including periods of startup, shutdown, and malfunction.

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**

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 COMS used to comply with an opacity standard, conduct a performance evaluation as specified in 40 CFR Part 60 Appendix B prior to performance testing per 60.8. Furnish the Administrator with a written report of the results of the performance evaluation at least 10 days before the performance test required under 60.8 is conducted.

For all continuous monitoring systems subject to 60.13, conduct a performance evaluation of the COMS or 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.

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 60 Appendix B. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

Owners and operators of a COMS installed in accordance with the provisions of this part must check the zero and upscale calibration drifts at least once daily for comparison with the acceptable range as defined in the applicable version of PS 1 in 40 CFR 60 Appendix B, and the optical surfaces must be cleaned as detailed in 60.13(d)(1). Unless otherwise approved by the EPA, minimum procedures for the COMS must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition as specified in 60.13(d)(2).

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. For COMS, 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 six-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 emissions 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 the EPA.

Reduce all COMS data to six-minute averages calculated from 36 or more data points equally spaced over each six-minute period. Reduce all data for pollutants other than opacity to one-hour averages for time periods as defined in §60.2, calculated according to 60.13(h)(2).

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 60.14(e) and 60.14(f), 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 is considered a modification. Upon modification, an existing facility becomes 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.

Achieve compliance with all applicable standards within 180 days of the completion of any modification.

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. 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)

Do not 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 granted by the Administrator or the President are not in violation of the requirements of this part.

Keep records, notify, report, or revise reports as required under this part.

Do not 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 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 or to achieve compliance with a relevant standard for visible emissions.

Fragmentation after November 15, 1990 will not affect applicability. Do 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 procedures in 63.5(d) and (e). Notify the Administrator of intended construction or reconstruction 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.

3.2.4. Operation and Maintenance

O&M for 40 CFR 63 Subpart DDDDD Affected Sources
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 Subpart DDDDD Sources
40 CFR 63.6(f)(2) and (3) (3/11/2021), 40 CFR 63.7500(a)(3), (f), 40 CFR 63.7505(a) (10/6/2022)

The Administrator will determine compliance with nonopacity emission standards, design, equipment, and work practice standards in 40 CFR 63 Subpart DDDDD based on the results of performance tests conducted according to the procedures in 40 CFR 63.7, except as specified in 40 CFR 63.7520(a)-(c), review of records, inspection of the source, and by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in 40 CFR 63 DDDDD.

At all times, you must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

An affected source must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These emission and operating limits apply at all times the affected unit is operating except during periods of startup and shutdown during which time the affected source must comply only with items 5 and 6 of Table 3 to 40 CFR 63 Subpart DDDDD.

3.2.6. 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, 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.

3.2.7. Notification of Performance Tests

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. Conduct of Performance Tests

Conduct of Performance Tests for Part 63 DDDDD Sources
40 CFR 63.7(a)-(d), (e)(2)-(h) (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 and under conditions as specified in 40 CFR 63.7520(a)-(c).

Provide performance testing facilities:

- (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. 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. 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 an audit sample can't be found consult <https://www.epa.gov/emc/emc-technical-support#audit> to confirm whether there is a source that can supply an audit sample.

Report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the Administrator and 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.

3.2.9. Operation and Maintenance of Continuous Monitoring Systems

O&M of CMS for Part 63 DDDDD Sources 40 CFR 63.8(c)(1), 63.8(c)(1)(ii), 63.8(c)(2)-(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.

The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

All CMS must 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).

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 six-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.

Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

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. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds four percent opacity.

3.2.10. **Continuous Monitoring Systems (CMS) Out of Control Periods**

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).

3.2.11. **Continuous Monitoring Systems (CMS) Quality Control Program**

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 five 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:

- (vii) 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,
- (viii) 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) (11/14/2018)

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 one-hour averages computed from four or more data points equally spaced over each one-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 one-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 one 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) (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)

Send notifications, reports, and applications for delegated Part 63 NESHAP to the NWCAA at the following address:

Preferred:

Via email at facilityreports@nwcleanairwa.gov

Alternative:

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

Send notifications, reports, and applications under Part 63 NESHAP authorities that have been excluded from delegation to the EPA at the following address:

Preferred:

Through the Compliance and Emissions Data Reporting Interface (CEDRI) at cdx.epa.gov

Alternative:

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

3.2.14. **Notification Requirements for New or Reconstructed Sources**

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. **Recordkeeping for Part 63 NESHAP Sources**

40 CFR 63.10(b)(1) 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 five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three 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.

3.2.16. **Startup, Shutdown, and Malfunction Recordkeeping and Reports for Boiler MACT Affected Sources**

40 CFR 63.10(b)(2)(i), (iii), (vi)-(xiv) (11/19/2020), 40 CFR 63.7555(d)(7) and 63.7550(c)(5)(xiii) and (xviii) (11/20/2015)

Maintain the following relevant records for each affected source:

- (i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limit;
- (ii) All required maintenance performed on the air pollution control and monitoring equipment;
- (iii) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (iv) 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. For automated CEMS, 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, 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.
- (v) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- (vi) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (vii) All CMS calibration checks;
- (viii) All adjustments and maintenance performed on CMS;
- (ix) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under 63.8(f)(6);
- (x) All documentation supporting initial notifications and notifications of compliance status under 63.9; and,
- (xi) Actions taken during periods of malfunction to minimize emission in accordance with the general duty to minimize emissions in 40 CFR 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.

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.

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. Recordkeeping Requirements for Boiler MACT Affected Sources with Continuous Monitoring Systems

40 CFR 63.10(c)(1)-(9), (12), (13) (11/19/2020), 40 CFR 63.7555(d)(7) and (8) (10/6/2022)

The owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records specified in 40 CFR 63 Subpart DDDDD and Subpart A as applicable.

3.2.18. Compliance Report Requirements for Part 63 Boiler MACT Affected Sources

40 CFR 63.7550 and Table 9 (11/20/2015)

Submit each report in Table 9 to 40 CFR 63 DDDDD that applies in accordance with Section 2.4, Recordkeeping and Reporting.

Submit all reports required by Table 9 of this subpart electronically via CEDRI (www.epa.gov/cdx). 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.

3.2.19. Notification of Compliance Status (NCS) for Boiler MACT Affected Sources

40 CFR 63.7545(a), (e), (e)(1), and (e)(6) (10/6/2022)

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.

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 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).

SECTION 4 GENERALLY APPLICABLE REQUIREMENTS

The cited requirements in the "Regulatory 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 March 15, 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 listed in Section 4 in effect as of March 15, 2025 have been adopted by reference in NWCAA 104.2, as amended July 10, 2025.

The "Regulatory Description" column is a brief paraphrase 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 Requirements" 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 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. 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.

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.

Table 4-1 Generally Applicable Requirements

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.1 General	WAC 173-401-615(3) (10/17/02) 40 CFR 60 Subpart A 60.19(c) (2/12/99) 40 CFR 61 Subpart A 61.10(g) (3/16/94) 40 CFR 63 Subpart A 63.10(a)(5) (11/19/20) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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- Source testing Term 2.4.1- Annual AOP Certification Term 2.4.5- Annual Emissions Inventory Term 2.4.6- Annual GHG Emissions All required reports must be certified by a responsible official consistent with Term 2.4.2.
4.2 General	NWCAA Section 342 (9/8/93) (7/10/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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. Keep records of maintenance and repair work on process and air pollution control equipment.

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.3 Nuisance	NWCAA Section 530 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.
4.4 Nuisance	WAC 173-400-040(5) (3/22/91) WAC 173-400-040(6) (3/15/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.	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.
4.5 Odor	NWCAA Section 535 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.	

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.6 Odor	WAC 173-400-040(5) (3/15/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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 (4/14/93) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.	
4.8 PM	NWCAA Section 550 (7/10/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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) (3/15/2025 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.	

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.10 PM	WAC 173-400-040(3)(a) (3/22/91) WAC 173-400-040(4)(a) (3/15/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.3.
4.11 PM	WAC 173-400-040(8)(a) (3/22/91) WAC 173-400-040(9)(a) (3/15/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Fugitive Dust</u> Reasonable precautions to prevent release of fugitive dust required. Maintain and operate source to minimize emissions.	
4.12 VE	NWCAA 451.1 (10/13/94); (7/10/25 State Only) CAM: 40 CFR 64.3(b), 64.6(c), 64.7(c)-(e), 64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c) (10/17/02)	<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 percent opacity (Ecology Method 9A) except: When there is valid data to show that the opacity is in excess of 20 percent 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. <ul style="list-style-type: none"> • Complete action that returns visible emissions to a non-visible level. <i>Continued on next page</i>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.13 VE	WAC 173-400-040(1) (3/22/91) WAC 173-400-040(2) (3/15/25 State Only) CAM: 40 CFR 64.3(b), 64.6(c), 64.7(c)-(e), 64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c) (10/17/02)	<p><u>Visible Emissions</u></p> <p>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 20 percent.</p>	<p><i>Continued from previous page</i></p> <ul style="list-style-type: none"> • 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. <p><i>Continued on next page</i></p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.14 VE	<p>NWCAA 455.1 (4/14/93) (7/10/25 State Only)</p> <p>WAC 173-400-060 (11/25/18) (3/15/25 State Only)</p> <p>CAM: 40 CFR 64.3(b), 64.6(c), 64.7(c)-(e), 64.9(a)-(b) (10/22/97)</p> <p>WAC 173-401-615(4) (10/17/02)</p>	<p><u>Emission of Particulate Matter</u></p> <p>Emissions shall not exceed 0.10 grain/dscf (0.23 g/dry m³) (combustion emissions shall be corrected to seven percent oxygen) except gaseous and distillate fuel burning equipment (not including internal combustion engines) shall not exceed 0.05 grain/dscf (0.11 g/dry m³) corrected to seven percent oxygen.</p>	<p><i>Continued from previous page</i></p> <p>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.</p> <p>Compliance with this MR&R does not excuse an exceedance of the underlying opacity standard.</p> <p><i>Compliance Assurance Monitoring: Planer Mill</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p>Once per operating day, check the pressure taps for plugging, and check and record the differential pressure under which the baghouse is operating. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair. Report according to the provisions of AOP Term 2.4.9.</p> <p><i>Compliance Assurance Monitoring: Biomass Boiler</i> Demonstrate compliance with the opacity standard following the CAM MR&R of AOP term 5.1.8. Demonstrate compliance with the PM standard following the CAM MR&R of AOP term 5.1.14.</p>

<p>4.15 PM</p>	<p>WAC 173-400-050(1) and (3) (9/16/18) (3/15/25 State Only) WAC 173-400-030 (3/15/25) CAM: 40 CFR 64.3(b), 64.6(c), 64.7(c)-(e), 64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c) (10/17/02)</p>	<p><u>Emission Standards for Combustion and Incineration Units</u> <u>When combusting wood as defined in WAC 173-400-030 (105) to produce steam:</u> Particulate emissions in excess of 0.2 grains/dscf corrected to seven percent oxygen are prohibited.</p>	<p><i>Directly Enforceable:</i> Conduct a facility-wide inspection at least once per calendar month during each month of operation for visible emissions, odors, prohibited activities under AOP Term 2.7 and activities that require additional approval under AOP Term 2.8. The inspections shall also examine the general state of compliance with Operation and Maintenance (O&M) Manuals. Keep records of the inspections, including the date, person conducting the inspection and the results of the inspections. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p><i>Compliance Assurance Monitoring: Planer Mill</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken. Once per operating day, check the pressure taps for plugging, and check and record the differential pressure under which the baghouse is operating. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair. Report according to the provisions of AOP Term 2.4.9.</p> <p><i>Compliance Assurance Monitoring: Biomass Boiler</i> Demonstrate compliance with the opacity standard following the CAM MR&R of AOP Term 5.1.8. Demonstrate compliance with the PM standard following the CAM MR&R of AOP Term 5.1.14.</p>
--------------------	---	---	---

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.16 PM	WAC 173-400-060 (11/25/18) (3/15/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Emission Standards for General Process Units</u> Particulate emissions greater than 0.1 grain/dscf prohibited.	<i>Directly Enforceable:</i> Follow MR&R under AOP Term 4.12.
4.17 SO ₂	NWCAA Section 462 (10/13/94) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , shall not exceed 1,000 ppmvd at seven percent 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> Burn biomass or pipeline grade natural gas only.
4.18 SO ₂	NWCAA Section 462 (7/10/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , shall not exceed 1,000 ppmvd at seven percent 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.	
4.19 SO ₂	WAC 173-400-040(6) first paragraph only (3/22/91) WAC 173-401-615(1)(b) & (c) (10/17/02)	Sulfur Dioxide Sulfur dioxide emissions shall not exceed 1,000 ppmvd, corrected to seven percent oxygen for combustion sources, based on the average of any 60 consecutive minute period.	

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.20 SO ₂	NWCAA 520.11, 520.12, 520.13, and 520.15 (4/14/93) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Sulfur Compounds in Fuel</u> It is 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: <ul style="list-style-type: none"> • #1 Distillate – 0.3 weight percent • #2 Distillate – 0.5 weight percent • Other fuel oils – 2.0 weight percent • Solid fuels – 2.0 weight percent 	<i>Directly Enforceable:</i> Burn biomass or natural gas only.
4.21 SO ₂	NWCAA 520.11, 520.12, 520.13, 520.15, 520.2 (7/10/25 State Only) WAC 173-401-615(1)(b) & (c) (10/17/02)	<u>Sulfur Compounds in Fuel</u> It is 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: <ul style="list-style-type: none"> • #1 Distillate – 0.3 weight percent • #2 Distillate – 0.5 weight percent • Other fuel oils – 2.0 weight percent • Solid fuels – 2.0 weight percent Ocean-going vessels are exempt.	

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.22	<p>OAC 938c Condition 1 (5/8/13)</p> <p>WAC 173-401-615(1)(b) & (c) (10/17/02)</p>	<p><u>Fugitive Emissions</u> Fugitive emissions, including but not limited to any of the following, shall be controlled at all times as specified below such that no visible emissions are detected at any point beyond the plant property line as determined using 40 CFR 60 Appendix A Method 22.</p> <ul style="list-style-type: none"> • Dust from unpaved roads or any other non-vegetation-covered area; • Fugitive sawdust from fuel-handling devices and/or storage areas; • Ash which is processed by the ash handling system or is removed from the wood-fired boiler by other means. Such ash shall be stored in closed containers and disposed of in such a manner so as to not create a public nuisance. Ash shall be transported in a wet condition in covered containers at all times. It shall be the responsibility of the plant owner/operator to insure that any and all contract or company carriers adhere to this condition; • Accumulation of sawdust or ash on outside surfaces, including but not limited to the main building, boilers, electrostatic precipitator, support pads, road areas. Surfaces shall be cleaned on a regular basis to prevent the build-up of ash and/or fugitive dust. 	<p><i>Directly Enforceable:</i> Comply with the MR&R requirements of AOP Terms 4.3 and 4.12 (except CAM requirements).</p>

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, & Reporting Requirements
4.23	OAC 938c, Condition 2 (5/8/13)	<p><u>HAP emission limits</u></p> <p>a) Emissions of acetaldehyde from the facility shall not exceed 33,844 lb/yr, 12-month total, calculated on a rolling monthly basis.</p> <p>b) Emissions of acrolein from the facility shall not exceed 588 lb/yr, 12-month total, calculated on a rolling monthly basis.</p> <p>c) Emissions of formaldehyde from the facility shall not exceed 6,917 lb/yr, 12-month total, calculated on a rolling monthly basis.</p>	<p>Each month, SPI shall determine compliance with the emission limits using kiln throughput data, boiler operation data, and the emission factors listed below, unless otherwise approved by the NWCAA. SPI shall include the monthly compliance determination with the quarterly reports required by PSD 05-04 A3 (see AOP Term 5.1.17)</p> <p>a) Acetaldehyde emission factors: i) 1.64E-04 lb/MMBtu for the wood-fired boiler ii) 113 lb/MMbf for kiln-drying Western hemlock iii) 57 lb/MMbf for kiln-drying Douglas fir</p> <p>b) Acrolein emission factors: i) 3.15E-05 lb/MMBtu for the wood-fired boiler ii) 1.6 lb/MMbf for kiln-drying Western hemlock iii) 0.65 lb/MMbf for kiln-drying Douglas fir</p> <p>c) Formaldehyde emission factors: i) 1.72E-03 lb/MMBtu for the wood-fired boiler ii) 1.24 lb/MMbf for kiln-drying Western hemlock iii) 1.0 lb/MMbf for kiln-drying Douglas fir</p>
4.24	PSD 05-04 A3 Condition B.19 (4/23/24)	<p><u>O&M Manual</u></p> <p>Prepare an O&M manual that includes operational parameters and practices for the planer mill bag house, drying kilns, anti-mold spray system, and wood-fired cogeneration unit, including inspection and maintenance procedures and schedule, prescribed acceptable ranges for operation based on manufacturer recommendations, and maintenance and calibration of all monitoring. Keep the O&M manual up to date to reflect any modifications of the equipment or its operating procedures.</p>	<p>Keep the O&M manual readily available at the facility for review by state, federal, and local agencies.</p>

SECTION 5 SPECIFICALLY APPLICABLE REQUIREMENTS

The cited requirements in the "Regulatory 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 March 15, 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 March 15, 2025 listed in Section 5 have been adopted by reference in NWCAA 104.2, as amended July 10, 2025.

The "Regulatory Description" column is a brief paraphrase 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 Requirements" (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 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. 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.

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.

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", adopted on July 10, 2025. The new regulations are "State Only" until incorporated into the State Implementation Plan.

Table 5-1 Specifically Applicable Requirements – EU-1, cogeneration facility

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.1	OAC 938c Conditions 7, 8, 9, and 10 (5/8/13)	<p><u>Boiler fuel requirements</u> At least 50 percent of fuel burned in the boiler on a calendar year basis shall be clean hog fuel consisting of bark, sawdust, chips, and other wood waste from wood products industries. Clean hog fuel for purposes of this condition shall meet the following criteria:</p> <ul style="list-style-type: none"> • Derived from wood and is of a suitable size and moisture content to sustain adequate combustion; • Free of contamination including, but not limited to, non-wood man-made materials, painted wood, wood treated with creosote or other wood preservatives, wood from construction/demolition activities, and wood contaminated with petroleum products. <p>Up to 50 percent of fuel burned in the boiler on a calendar year basis shall be clean cellulosic biomass, resinated wood debris, and/or biomass-derived non-hazardous secondary materials (NHSM) as defined, processed, and managed according to 40 CFR Part 241 Solid Wastes Used as Fuels or Ingredients in Combustion Units. This fraction of boiler fuel shall be referred to as "alternative fuel".</p>	<p>When utilizing alternative fuels, operate in accordance to the following: Inspect all purchased fuel prior to acceptance. Prior to combusting any alternative fuel, SPI shall develop and implement an alternative fuel quality assurance plan subject to prior approval by the NWCAA. The plan shall clearly describe how SPI will evaluate potential alternative fuel and alternative fuel suppliers to assure that the boiler will not combust solid or hazardous waste. Changes to the plan shall be approved by the NWCAA prior to implementation. The following elements shall be included in the plan:</p> <ul style="list-style-type: none"> • Procedure for alternative fuel handling at the SPI facility; • Procedure for SPI inspection of alternative fuel sources/suppliers; • Procedure for inspecting individual alternative fuel loads, including how to identify different levels of contamination by visual inspection, how to document the inspection, and how to identify loads with unacceptable levels of contamination. "Contamination" includes plastics, asbestos-containing material, preservative-treated wood, painted wood, rubber, metals, non-wood roofing materials, or any other material that is not a non-waste fuel according to 40 CFR 241.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.2	<p>OAC 938c Conditions 12, 13, and 14 (5/8/13)</p> <p>WAC 173-401-630(1) (3/5/16)</p>	<p>Rejected fuel loads must be removed from the SPI facility by the close of business on the business day following the day in which the fuel was received.</p> <p>Combustion of wet fuel, i.e., fuel with moisture content greater than or equal to 55 percent, shall not be considered as an affirmative defense to an excess emission condition for the wood-fired boiler. Use of such fuels is a foreseeable occurrence, and as such, compliance with all permit limits and applicable regulations shall be required at all times unless the NWCAA has determined that the cause of the wet fuel condition is due to an unavoidable or emergency situation.</p>	<p>Submit to the NWCAA by February 28 for the previous calendar year a summary describing the source and quantities of all alternative fuel combusted in the boiler. The report shall include information on all loads of fuel rejected and the reason the fuel was rejected, information on the types of contaminants found in the fuel from each source of fuel (e.g. plastic, rubber, painted wood, asbestos-containing materials, salts, etc.), and the results of the bucket tests recorded during the year.</p> <p><i>Directly enforceable:</i></p> <p>Keep records of rejected fuel loads.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.3	PSD 05-04 A3 Condition B.10 (4/23/24)	<p><u>Boiler fuel data conversions</u> "per MMBtu" basis shall be determined by:</p> <ul style="list-style-type: none"> • 40 CFR Part 60 Appendix A, Method 19 titled "Determined F Factors" (in the 2004 version of 40 CFR Part 60: Paragraph 12.3.2), or • 40 CFR Part 60 Appendix A, Method 19 Factors from table "F Factors for Various Fuels" (Table 19-2). The factor shall reflect the proportions of wood, bark, and natural gas in the fuel by either: <ul style="list-style-type: none"> ○ Determining the wood and bark proportions of the fuel used during the test based on randomized fuel sampling following procedure outlined in the corresponding test plan approved by Ecology and NWCAA, or ○ A default assumption of equal proportions of wood and bark. Example: a 50:50 wood/bark mixture with no natural gas will have an F_d factor of 9,420 dscf/MMBtu. 	Maintain records of MMBtu determinations as required in the 40 CFR Part 60 Appendix A Method 19.
5.1.4	PSD 05-04 A3 Conditions B.5 & B.18.3.3 (4/23/24)	<p><u>Boiler fuel - natural gas limitation</u></p> <p>The wood-fired cogeneration unit may burn natural gas in the wood-fired cogeneration unit only to ignite the fuel or to maintain good combustion.</p>	Maintain records of natural gas consumed by the cogeneration unit. Records shall include date, times, quantity and the reason for use of natural gas by the cogeneration unit.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.5	40 CFR Part 60 Subpart Db 60.42b(k)(2), 60.44b(d), 60.49b(d)(1) and (r)(1) (2/16/12)	<p><u>Boiler fuel - NO_x and SO₂ limitation</u></p> <p>The annual capacity factor for natural gas shall not exceed 10 percent (0.10).</p> <p>The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.</p>	<p>Record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood for the reporting period.</p> <p>Obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas.</p> <p>Reports shall be submitted to the Administrator certifying that only natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period.</p> <p><i>Annual capacity factor</i> means the ratio between the actual heat input to a steam generating unit from the fuels listed in 60.42b(a), 60.43b(a), or 60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.6	<p>PSD 05-04 A3 Conditions B.4.1.1 and B.4.2.1 (4/23/24)</p> <p>WAC 173-401-615(1)(b) & (c) (10/17/02)</p>	<p><u>Boiler startup</u> defined: Cold startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is 150°F or lower. A cold startup ends upon the earlier of:</p> <ul style="list-style-type: none"> • Four hours after starting wood fuel feed to the boiler, • Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11 percent and less than or equal to 13 percent for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppm_{dv}, • Steam flow exceeded 150,000 pounds over the previous hour, or • 24 hours after starting or resuming feeding fuel of any type. <p>A warm startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is higher than 150 °F. A warm startup ends upon the earlier of:</p> <ul style="list-style-type: none"> • Four hours after starting wood fuel feed to the boiler, • Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11 percent and less than or equal to 13 percent for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppm_{dv}, • Steam flow exceeded 150,000 pounds over the previous hour, or • Eight hours after starting or resuming feeding fuel of any type. 	<p><i>Directly Enforceable:</i></p> <p>Maintain records in accordance with AOP Term 2.4; furnace temperature, fuel feed start and stop and steam production including times and dates to demonstrate that a startup has occurred.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.7	<p>PSD 05-04 A3 Conditions B.4.1.2 and B.4.2.2 (4/23/24)</p> <p>WAC 173-401-615(1)(b) & (c) (10/17/02)</p>	<p><u>Boiler shutdown</u> defined:</p> <p>A cold shutdown is one wherein wood fuel feed stops, and the furnace is allowed to cool to 150 °F or lower. A cold shutdown ends when:</p> <ul style="list-style-type: none"> • No fuel of any type is being feed, and the furnace temperature is 150 °F or lower and the FD fan is off-line, or • 24 hours after wood fuel feed was stopped, whichever comes first. <p>A warm shutdown is one wherein wood fuel feed stops, but the furnace temperature does not cool to 150 °F or lower before wood fuel feed is resumed.</p> <p>A warm shutdown ends when:</p> <ul style="list-style-type: none"> • Wood fuel feed is resumed, • No fuel of any type is being feed, and the furnace temperature is 150 °F or lower (at which point the shutdown becomes a "cold shutdown"), or • 24 hours after wood fuel feed was stopped, whichever comes first. 	<p><i>Directly enforceable:</i></p> <p>Maintain records of furnace temperature, fuel feed start and stop, and steam production, including times and dates to demonstrate that a shutdown has occurred.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.8	<p>OAC 938c Conditions 3 and 4 (05/08/13)</p> <p>NWCAA 367 (7/10/25 State Only)</p> <p>CAM 40 CFR 64.3(b); 64.6(c), 64.7(c), (d), and (e), 64.9(a) and (b) (10/22/97)</p> <p>WAC 173-401-615(4) (10/17/02)</p>	<p><u>Boiler stack opacity</u></p> <p>The exhaust stack from the wood-fired boiler shall not emit any air pollutants which exhibit greater than the following opacity limitations:</p> <ul style="list-style-type: none"> a) 20 percent opacity for a period or periods aggregating more than three minutes in any one hour as measured by a continuous opacity monitoring system (COMS). b) Five percent opacity (one-hour average) as measured by a COMS, except for periods of soot-blowing. c) 10 percent opacity (aggregated three minutes in any one hour) as measured by WA DOE Method 9A. <p>Soot-blowing shall occur as a regularly scheduled event and shall not exceed one hour per eight-hour shift.</p> <p>Soot-blowing shall not cause the boiler stack to exceed 10 percent opacity (one-hour average) as measured by COMS. Deviations from the regular soot-blowing schedule that result in excess emissions shall trigger agency notification.</p>	<p>Install and operate a COMS for measurement of opacity at the wood-fired boiler/ESP exhaust stack, downstream from the particulate matter control device in accordance with NWCAA Regulation 367 and Appendix A and applicable 40 CFR Part 60 Appendix A and B specifications.</p> <p>Record and maintain a soot-blowing schedule. Maintain records of soot-blowing including start and stop times.</p> <p>Annually, conduct a 40 CFR 60 Appendix A Method 9 test. Notification and reports shall be provided to the NWCAA as specified in NWCAA Regulation Appendix A.</p> <p><i>Compliance assurance monitoring (applies to opacity limit under c):</i></p> <p>Monitor opacity using the COMS as per non-CAM monitoring in AOP term 5.1.8.</p> <p>Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within four hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift.</p> <p>Keep records of hourly voltage measurements. Keep records of any repairs.</p> <p>Report according to the provisions of AOP term 2.4.9.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.9	40 CFR Part 60 Subpart Db 60.43b(f) and (g) (2/16/12) 60.46b(d)(7) (2/27/14) 60.48b(a), (e)(1), 60.49b(d), (f), (h)(3), and (w) (2/16/12) NWCAA 367 (7/10/25 State Only)	<p><u>Boiler stack opacity</u></p> <p>SPI shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity.</p> <p>Standard applies at all times, except during periods of startup, shutdown or malfunction.</p>	<p>Install and operate a COMS for measurement of opacity at the wood-fired boiler/ESP exhaust stack, downstream from the particulate matter control device in accordance with NWCAA Regulation 367 and Appendix A and applicable 40 CFR Part 60 Appendix A and B specifications.</p> <p>Maintain records of opacity.</p> <p>Submit excess emission reports for all six-minute periods during which average opacity exceeds standards. The reporting period for the reports required under 40 CFR 60 Subpart Db is each six month period. All reports shall be submitted to the NWCAA and shall be postmarked by the 30th day following the end of the reporting period.</p>
5.1.10	OAC 938c Conditions 5 and 6 (05/03/13)	<p><u>Boiler stack ammonia limit</u></p> <p>Emissions of ammonia from the wood-fired boiler shall not exceed 50 ppmvd NH₃ corrected to seven percent O₂ as a 24-hour average.</p>	<p>Demonstrate compliance at least once every twelve months in accordance with Bay Area Air Quality Management District Source Test Procedure #1B (BAAQMD ST-1B) or alternative method approved by NWCAA. Monitor and record SNCR feed rate (ammonia or urea) and NO_x emissions during the tests.</p> <p>Maintain and operate the boiler and urea injection system (SNCR system) in accordance with good air pollution control practices and in a manner minimizing particulate and visible emissions from the unit.</p> <p>At least 30 days prior to any modification of the SNCR injection system, a written notification to the NWCAA is required and an updated Ammonia Emissions Monitoring Plan must be submitted evaluating a predictive relationship between boiler and SNCR parameters and emissions of ammonia.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.11	PSD 05-04 A3 Conditions B.6.1, B.11, B.17.1, B.17.3, and B.18.2.2. (4/23/24) NWCAA 367 (7/10/25 State Only)	<p><u>Boiler stack NO_x limits</u> NO_x emissions shall not exceed, on a daily average:</p> <ul style="list-style-type: none"> • 0.13 lb NO_x/MMBtu based on the heat input value of the fuel, and, • 56 lb NO_x/hr 	<p>Monitor continuing compliance with a CEMS that satisfies the requirements of 40 CFR 60.48b(b) through (f) and AOP Term 2.1.9. Compliance will be determined from the arithmetic mean of the hours of valid NO_x emissions data in lb NO_x/MMBtu. Data that is "valid" shall be as defined in 40 CFR 60.13(h). A calendar day used for compliance monitoring shall have at least 18 hours of valid data. Valid data from any calendar day having fewer than 18 hours of valid data shall be included in either the following or preceding day's data, whichever is contiguous, and the 24-hour average calculated using the cumulative hours of the conjoined periods. Follow AOP Term 5.1.3 (EPA Method 19) for calculation of lb/MMBtu from ppm.</p> <p>Annual NO_x CEMS RATA certification shall be conducted concurrently with CO CEMS RATA certification.</p> <p>Quarterly, submit NO_x emissions data in continuing performance monitoring reports in accordance with AOP Term 5.1.17.</p>
5.1.12	PSD 05-04 A3 Conditions B.6.4, B.15.1.1, B.15.1.3, B.15.1.4, B.18.2.2.2.7, and B.18.2.2.2.8 (4/23/24)	<p><u>Boiler stack SO₂ limits</u> SO₂ emissions shall not exceed:</p> <ul style="list-style-type: none"> • 0.025 lb SO₂/MMBtu on a three-hour average, based on the heat input value of the fuel, and • 47.1 tons SO₂ over any consecutive 12-month period. 	<p>Demonstrate continuing compliance with the arithmetic mean of not less than three one-hour Method 6, 6A, or 6C samples (unless an equivalent test method has been approved by Ecology and NWCAA) by an independent testing vendor at least once every 12 months. Follow AOP Term 5.1.3 (EPA Method 19) to develop a lb/MMBtu emission factor. Multiply emission factor by fuel heat input rate to determine SO₂ mass emissions.</p> <p>If three consecutive tests (each test being the average of three one-hour samples) have emissions less than 0.019 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.019 lb SO₂/MMBtu or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Monitor continuous compliance on a monthly basis by multiplying SO₂ emission factor (developed during the most recent compliance test) by monthly average firing rates (unless an equivalent test method has been approved by Ecology and NWCAA). Calculate and show mass emission rates determined monthly using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19, unless otherwise approved by Ecology and NWCAA.</p> <p>Quarterly, submit SO₂ emissions data in continuing performance monitoring reports in accordance with AOP Term 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.13	PSD 05-04 A3 Conditions B.6.2, B.12, B.17.2, B.17.3, B.18.2.2.2.2, B.18.2.2.2.3, and B.18.2.2.2.4 (4/23/24) NWCAA 367 (7/10/25 State Only)	<p><u>Boiler stack CO limits</u></p> <p>CO emissions shall not exceed;</p> <ul style="list-style-type: none"> • 0.28 lb CO/MMBtu, 24-hour rolling average based on the heat input value of the fuel except during startup and shutdown, • 400 lb CO/hr one-hour average, during cold startups and shutdowns, • 300 lb CO/hr one-hour average, during warm startups and shutdowns, and • 659 tons CO in any consecutive 12-month period (including startups and shutdowns). 	<p>Monitor CO continuing compliance at all times the furnace temperature exceeds 150 °F by a CEMS that satisfies the requirements in 40 CFR 60, Appendix B, Performance Specification 4, 40 CFR 60, Appendix F and AOP Term 2.1.9.</p> <p>Compliance shall be demonstrated by averaging the arithmetic mean of the emissions data for each operating scenario and averaging period.</p> <p>The span and linearity calibration gas concentrations in Method 10 will be appropriate to the CO concentration limits specified in this condition.</p> <p>Follow AOP Term 5.1.3 (EPA Method 19) for calculation of CO emission factor in lb/MMBtu from ppm, using a value of 7.270E-08 pound of CO per standard cubic foot of stack gas. Multiply CO emission factor in lb/MMBtu by fuel input rate in MMBtu/hr to get CO emission rate in pounds per hour.</p> <p>Quarterly, submit CO emissions (lb/MMBtu and 12-month total data, as well as times, durations, and average hourly CO mass emissions for any cold or warm start-ups and shutdowns) in continuing performance monitoring reports in accordance with AOP Term 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.14	<p>PSD 05-04 A3 Conditions B.6.3, B.13.1, B.18.2.2.2.5 and B.18.2.2.2.6 (4/23/24)</p> <p>CAM 40 CFR 64.3(b), 64.6(c), 64.7(c), (d), and (e), 64.9(a) and (b) (10/22/97)</p> <p>WAC 173-401-615(4) (10/17/02)</p>	<p><u>Boiler stack PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀ emissions shall not exceed:</u></p> <ul style="list-style-type: none"> 0.02 lb PM₁₀/MMBtu 24-hour average, based on the heat input value of the fuel, and 37.7 tons PM₁₀ in any consecutive 12-month period 	<p>Monitor continuing compliance by conducting 40 CFR Part 60 Appendix A Methods 5 (in the manner prescribed in 40 CFR 60.46b(d)) and 202 by an independent testing vendor at least once every 12 months. Compliance will be demonstrated from the arithmetic mean of not less than three two-hour test samples. The emission rate expressed in lb PM₁₀/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6). Equivalent concentration test methods may be used if approved in advance by Ecology and NWCAA. Monitor compliance with the mass emission limit calculating the arithmetic mean of the test results in tpy PM₁₀ based on monthly average firing rates. If three consecutive tests (each test being the average of three two-hour samples) have emissions less than 0.015 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.015 lb/MMBtu or greater causes the testing interval to go back to at least once every 12 months. Quarterly, submit PM₁₀ emissions (12-month total data) in continuing performance monitoring reports in accordance with 5.1.17.</p> <p><i>Compliance Assurance Monitoring:</i> Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within four hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift. Keep records of hourly voltage measurements. Keep records of any repairs. Report according to the provisions of AOP term 2.4.9.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.15	40 CFR Part 60 Subpart Db 60.43b(g), 60.43b(h)(4) (2/16/12), 60.46b(b), (d)(1)-(6), (j) (2/17/14) 60.49b(d) (2/16/12) CAM 40 CFR 64.3(b), 64.6(c), 64.7(c), (d), and (e), 64.9(a) and (b) (10/22/97) WAC 173-401-615(4) (10/17/02)	<p><u>Boiler stack PM limit</u></p> <p>Emission of particulate matter shall not exceed</p> <ul style="list-style-type: none"> • 0.085 lb PM/MMBtu <p>Standard applies at all times, except during periods of startup, shutdown or malfunction.</p>	<p>Demonstrate compliance by performance testing in accordance with 40 CFR Part 60 Appendix A, Methods 1, 3 and 5 upon request by the administrator.</p> <p>Maintain records of each fuel combusted on a daily basis as required in AOP Term 2.4.</p> <p><i>Compliance Assurance Monitoring:</i></p> <p>Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within four hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift.</p> <p>Keep records of hourly voltage measurements. Keep records of any repairs.</p> <p>Report according to the provisions of AOP term 2.4.9.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.16	PSD 05-04 A3 Conditions B.6.5, B.16.1, B.18.2.2.2.9, and B.18.2.2.2.10 (4/23/24)	<p><u>Boiler stack VOC limits</u></p> <p>Emissions calculated as propane (MW 44) shall not exceed:</p> <ul style="list-style-type: none"> • 0.019 lb VOC/MMBtu one-hour average, based on the heat input value of the fuel, and • 35.8 tons VOC in any consecutive 12-month period 	<p>Monitor continuous compliance with the arithmetic mean of not less than three Method 25, 25A, or 25B samples (unless an equivalent test method has been approved by Ecology) by an independent testing vendor at least once every 12 months, to coincide with RATA for the CEMS. Use Method 19 (with VOC as propane) and fuel heat input rate to determine VOC mass emissions.</p> <p>If three consecutive tests (each test being the average of three one-hour samples) have emissions less than 0.014 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.014 lb/MMBtu or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Monitor continuous compliance on an hourly basis by multiplying VOC emission factor (developed during most recent compliance test) by hourly average firing rates (unless an equivalent test method has been approved by Ecology and NWCAA).</p> <p>Monitor continuous compliance on a monthly basis from the arithmetic mean of the most recent test results and monthly average firing rates. Mass emission rates will be determined using Method 19 with indicated calculations modified to be applicable to VOC measured as propane (unless an equivalent test method has been approved by Ecology and NWCAA).</p> <p>Quarterly, submit VOC emissions (12-month total data) in continuing performance monitoring reports in accordance with AOP Term 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.17	PSD 05-04 A3 Conditions B.18.1 and B.18.2 (4/23/24)	<p><u>Boiler reports:</u></p> <p>Quarterly, submit continuing written compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).</p>	<p>The report shall include:</p> <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O&M Manual. • NOx emissions (lb/MMBtu) since the last report • CO emission (lb/MMBtu) since the last report • For each month since the last report, show the 12-month CO mass emissions ending with that month • The times, durations, and average hourly CO mass emissions for any cold or warm start-ups and shutdowns • Results of any required source tests for PM₁₀ since the last report. • 12-month PM₁₀ mass emissions ending with that month • Results of any required source tests for SO₂ since the last report • For each month since the last report, show the 12-month SO₂ mass emissions ending with that month • Results of any required source tests for VOC since the last report • For each month since the last report, show the 12-month VOC mass emissions ending with that month. • The duration and nature of any CEMS down-time excluding zero and span checks • Results of any CEMS audits or accuracy checks
5.1.18	40 CFR 72.6(b)(4)(ii) (3/1/01) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Cogeneration unit regulatory status:</u></p> <p>Supply equal to or less than one-third the potential electrical output capacity or equal to or less than 219,000 MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis).</p> <p>If in any three calendar year period, the unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the Acid Rain Program.</p>	<p><i>Directly enforceable:</i></p> <p>Maintain records of electricity generation and sales in accordance with AOP Term 2.4.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.19	40 CFR 60.40Da(a) (2/16/12) WAC 173-401-615(1)(b) & (c), (10/17/02)	If SPI sells to a utility power distribution system an annual average of more than one-third of a unit’s potential electrical output capacity and more than 25 MW net-electrical output, that unit shall be an affected unit, subject to the applicable requirements of 40 CFR 60 Subpart Da.	<i>Directly Enforceable:</i> Comply with the MR&R requirements of AOP Term 5.1.18.
Provisions of 40 CFR 63 Subpart DDDDD (Boiler MACT)			
5.1.20	40 CFR 63 Subpart DDDDD 63.7500(a), 63.7505(a), 63.7515(d), 63.7540(a)(12) and (b), 63.7545(a) and (e)(8)(i), 63.7550(a), (b), (c)(1), (c)(5)(i)-(iii), (xiv), (xvii), and (h)(3), 63.7555(a), Table 3 Line 1, Table 9 (10/6/22)	<u>Boiler Tune-Up – with Continuous Oxygen Trim</u> Conduct a tune-up of the boiler every five years. Conduct subsequent annual tune-ups no more than 61 months after the previous tune-up. The tune-up 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 summarizing inspection.	Submit a signed certification in the Notification of Compliance Status (NCS) in accordance with AOP Term 3.2.18 that indicates a tune-up was completed. Include a statement in the NCS, as applicable, “This facility complies with the initial tune-up according to the procedures in 63.7540(a)(10)(i) through (iv).” Submit a compliance report every five calendar years. The compliance report shall include, among other things, the date of the most recent tune-up and burner inspection and if applicable, a statement that no deviations occurred. The compliance report shall be certified by the Responsible Official. 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).

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.21	40 CFR 63 Subpart DDDDD 63.7500(f), 63.7505(e) (10/6/22) 63.7535(b) (11/20/15) 63.7555(d)(10)-(13), Table 3 Lines 5 and 6 (10/6/22)	<u>Startup and shutdown provisions</u> Emission limitations, work practice standards, and operating limits apply at all times the affected unit is operating except during periods of startup and shutdown during which time you must comply only with the work practice standards in Table 3, lines 5 and 6 of 40 CFR 63 Subpart DDDDD.	Operate all CMS during startup and shutdowns. Use only natural gas for startups. Maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. Maintain records of the type and amount of fuels used during each startup and shutdown. If you choose to comply using definition (1) of "startup" in 63.7575: <ul style="list-style-type: none"> Vent all emissions to the main stack once you fire non-clean fuels, and engage all applicable control devices. If you choose to rely on definition (2) of "startup" in 63.7575: <ul style="list-style-type: none"> Vent all emissions to the main stack once you fire non-clean fuels, and engage all applicable control devices so as to comply with emission limits within four hours of start of supplying useful thermal energy. Engage and operate PM control within one hour of first feeding non-clean fuels. Develop and implement a written startup and shutdown plan as specified in 63.7505(e). Collect monitoring data during startups as specified in 63.7535(b) and 63.7555(d)(10)-(13)
5.1.22	40 CFR 63 Subpart DDDDD 63.7505(c), 63.7515(e), (f), 63.7521(a), (c) - (e), 63.7530(c) (10/6/22) Table 6 (11/14/18)	<u>Fuel analysis</u> If the emission rate calculated according to 63.7530(c) is less than the applicable emission limit, you may comply with the limits in 5.1.25, 5.1.26, or 5.1.27 through a fuel analysis. Conduct fuel analyses for chloride and mercury according to the procedures in 63.7521(c) - (e) and Table 6. Conduct analysis for TSM if you are opting to comply with the TSM alternative standard.	Calculate emission rates based on 63.7530(c). Conduct fuel analyses monthly. Complete the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If multiple samples are taken per month, the 14-day restriction does not apply. Determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu. Report results of fuel analyses to NWCAA within 60 days after completion. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.23	<p>40 CFR 63 Subpart DDDDD</p> <p>63.7515(a)-(c), 63.7520 (a)-(e), 63.7555(a)(2) (10/6/22)</p> <p>63.7560 (5/18/11)</p> <p>Tables 2 and 4 (10/6/22)</p> <p>Table 5 (11/20/15)</p> <p>Table 7 and Table 8 line 10a (10/6/22)</p>	<p><u>Stack testing:</u></p> <p>If complying with the limits in 5.1.25, 5.1.26, or 5.1.27 through stack testing:</p> <p>Conduct each performance test required by AOP terms 5.1.25, 5.1.26, or 5.1.27 according to the requirements in Tables 5 and 7 to 40 CFR 63 Subpart DDDDD. Conduct tests at representative operating load conditions.</p> <p>Conduct a minimum of three separate test runs for each performance test required. Each test run must comply with the minimum sampling times or volumes specified in Table 2.</p> <p>Conduct tests annually. The first test must be completed not later than 180 days after 1/31/2016, and subsequent tests must be completed no more than 13 months after the previous performance test.</p> <p>If your performance tests for at least two consecutive years show that your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.</p> <p>If a performance test shows emissions exceeded 75 percent of the emission limit for the pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive two-year period are at or below 75 percent of the emission limit.</p>	<p>Keep records of performance tests in a form suitable and readily available for expeditious review.</p> <p>Keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>Keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. You can keep the records off site for the remaining three years.</p> <p>Collect operating load data or steam generation data every 15 minutes.</p> <p>Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.</p> <p>Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.24	40 CFR 63 Subpart DDDDD 63.7500(a), 63.7505(a), (c), 63.7510(e), 63.7525(a), (d), Table 2 line 7a (10/6/22)	<u>CO limit</u> Demonstrate compliance with the following CO limit using CEMS: 720 ppm by volume on a dry basis corrected to three percent oxygen, 30-day rolling average.	Follow MR&R under AOP term 5.1.29.
5.1.25	40 CFR 63 Subpart DDDDD 63.7490(d), 63.7500(a), 63.7505(a), (c), 63.7510(b), (e), 63.7515(a), (b), (c) and (f), 63.7520, 63.7530(c), Table 2 line 7b, Table 4 line 7 (10/6/22) Table 5 line 1, and Table 6 line 4 (11/20/15)	<u>Filterable PM/TSM limit</u> Demonstrate compliance with one of the following: <ul style="list-style-type: none"> filterable PM limit using a stack test: 3.4E-02 lb/MMBtu of heat input. TSM² limit using a stack test: 2.0E-04 lb/MMBtu of heat input. Use fuel analysis if the emission rate of TSM calculated according to 63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to 63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.	If demonstrating compliance through stack testing: <ul style="list-style-type: none"> Follow MR&R under AOP term 5.1.23. For filterable PM testing use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 5 or 17, and 19 of 40 CFR Part 60 Appendix A using specific sampling volumes from Table 2 Line 7. For TSM testing use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 29, and 19 of 40 CFR Part 60 Appendix A. Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx). If you elect to demonstrate compliance using fuel analysis, use the methods in line 4 of Table 6 and follow MR&R under AOP term 5.1.22.

² *Total selected metals (TSM)* means the sum of the following metallic hazardous air pollutants: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.26	40 CFR 63 Subpart DDDDD 63.7490(d) (1/31/13) 63.7495(b) (11/20/15) 63.7500(a), 63.7505(a), (c), 63.7510(b), (e), 63.7515(a), (b), (c) and (f), 63.7520, 63.7530(c), Table 2 line 1a, Table 4 line 7 (10/6/22) Table 5 line 3 (11/20/15) Table 6 line 2 (11/14/18)	<p><u>HCl limit</u></p> <p>Demonstrate compliance with one of the following</p> <ul style="list-style-type: none"> HCl limit using a stack test: 2.0E-02 lb/MMBtu of heat input. <p>Use fuel analysis if the emission rate of HCl calculated according to 63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to 63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.</p>	<p>If demonstrating compliance through stack testing:</p> <ul style="list-style-type: none"> Follow MR&R under AOP term 5.1.23. Use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 19, and 26 or 26A of 40 CFR Part 60 Appendix A, using specific sampling volumes from Table 2 Line 1. <p>Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx).</p> <p>If you elect to demonstrate compliance using fuel analysis, use the methods in line 2 of Table 6 and follow MR&R under AOP term 5.1.22.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.27	40 CFR 63 Subpart DDDDD 63.7490(d) (1/31/13) 63.7495(b) (11/20/15) 63.7500(a), 63.7505(a) and (c), 63.7510(b) and (e), 63.7515(a), (b), (c) and (f), 63.7520, 63.7530(c), Table 2 line 1b, Table 4 line 7 (10/6/22) Table 5 line 4 (11/20/15) Table 6 line 1 (11/14/18)	<p><u>Mercury limit</u></p> <p>Demonstrate compliance with one of the following</p> <ul style="list-style-type: none"> Mercury limit using a stack test: 5.4E-06 lb/MMBtu of heat input. <p>Use fuel analysis if the emission rate of mercury calculated according to 63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to 63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.</p>	<p>If demonstrating compliance through stack testing:</p> <ul style="list-style-type: none"> Follow MR&R under AOP term 5.1.23. Use Methods 1, 2, 2F or 2G, 3A or 3B, 4, 29, 19 and 30A or 30B of 40 CFR Part 60 Appendix A, using specific sampling volumes from Table 2 Line 1. <p>Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx).</p> <p>If you elect to demonstrate compliance using fuel analysis, use the methods in line 1 of Table 6 and follow MR&R under AOP term 5.1.22.</p>
5.1.28	40 CFR 63 Subpart DDDDD 63.7500(a)(2), 63.7525(c), Table 4 line 4a (10/6/22)	<p><u>Opacity</u></p> <p>Maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).</p>	<p>Follow MR&R under AOP term 5.1.30.</p>

Sierra Pacific Industries, Air Operating Permit 019R3

DRAFT April 10, 2026

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.29	40 CFR 63 Subpart DDDDD 63.7525(a), (d) (10/6/22) 63.7535 (11/20/15) NWCAA 367 (7/10/25 State Only)	<u>CO CEMS</u> Install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in 63.7525(a)(1)-(7) and (d).	Operate and maintain the CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, 40 CFR 60 appendix F, 63.7540(a)(8), and NWCAA 367 and NWCAA Appendix A. You must operate the monitoring system and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods, and required monitoring system quality assurance or control activities.
5.1.30	40 CFR 63 Subpart DDDDD 63.7525(c) (10/6/22) 63.7535 (11/20/15) NWCAA 367 (7/10/25 State Only)	<u>Opacity COMS</u> Install, certify, operate and maintain a continuous emission monitoring system for opacity according to the procedures in 63.7525(c)(1)-(7).	Operate and maintain the COMS according to the applicable procedures under Performance Specification 1, 40 CFR part 60, appendix B, 40 CFR 60 appendix F, 63.7540(a)(8), and NWCAA 367 and NWCAA Appendix A. You must operate the monitoring system and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods, and required monitoring system quality assurance or control activities.
5.1.31	40 CFR 63 Subpart DDDDD 63.7540(a), (b), and (d) (10/6/22) 63.7550 Tables 2, 3, 4, 8 (10/6/22) Table 9 (11/20/15)	<u>Continuous compliance</u> You must demonstrate continuous compliance with each emission limit in Table 2 to subpart DDDDD, the work practice standards in Table 3 to subpart DDDDD, and the operating limits in Table 4 to subpart DDDDD that applies to you according to the methods specified in Table 8 to subpart DDDDD.	Keep records of the type and amount of all fuels burned in the boiler. Report each deviation according to the requirements in 63.7550. Submit the compliance reports required in Table 9 to subpart DDDDD according to the schedule in 63.7550(b) containing the information in 63.7550(c) as applicable. Keep copies of each notification and report submitted to comply with subpart DDDDD.
5.1.32	40 CFR 63 Subpart DDDDD 63.7500(a)(3) (10/6/22)	<u>Work practice standards</u> At all times, you must operate and maintain the boiler and 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 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

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.33	40 CFR 63 Subpart DDDDD Table 4 line 7, Table 8 line 10 (10/6/22)	<u>Work practice standards</u> Maintain the operating load of the boiler such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test.	Collect operating load data or steam generation data every 15 minutes.

Table 5-2 Specifically Applicable Requirements – EU-2, Cooling Towers

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.1	OAC 938c Condition 22 (5/8/13)	The owner or operator shall install, operate, and maintain drift eliminators with at least a 0.0005 percent design drift loss on the cooling tower.	The design drift loss shall be demonstrated by manufacturer specifications.
5.2.2	OAC 938c Condition 23 (5/8/13)	Only water treatment chemicals that do not contain chromium or chromium-compounds shall be used in the cooling tower.	Keep on-site Material Safety Data Sheets (MSDS) for all water treatment chemicals.

Table 5-3 Specifically Applicable Requirements – EU-3, Planer Mill

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.3.1	<p>PSD 05-04 A3 Conditions B.7 and B.13.2 (4/23/24)</p> <p>CAM: 40 CFR 64.3(b), 64.6(c), 64.7(c)-(e), 64.9(a)-(b) (10/22/97)</p> <p>WAC 173-401-615(4) (10/17/02)</p> <p>WAC 173-401-630(1) (3/5/16)</p>	<p><u>Planer baghouse stack PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀</u> emissions shall not exceed:</p> <ul style="list-style-type: none"> • 0.005 gr PM₁₀/dscf one-hour average , and • 9.4 tons PM₁₀ in any consecutive 12-month period 	<p>Monitor continuous compliance by 40 CFR Part 60 Appendix A Methods 5 and 202 by an independent testing vendor at least once every 12 months. Compliance will be demonstrated from the arithmetic mean of not less than three two-hour test samples. Equivalent concentration test methods may be used if approved in advance by Ecology and NWCAA.</p> <p>If three consecutive tests (each test being the average of three two-hour samples) have PM₁₀ concentrations less than 0.0025 gr/dscf, testing interval goes to at least once every 36 months. Any test with an average PM₁₀ concentration of 0.0025 gr/dscf or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Determine an emission factor, in units of lb/Mbf, based on the most recent PM₁₀ test results and the planer mill production rate maintained during the corresponding tests.</p> <p><i>Directly Enforceable:</i> Record quantity of lumber processed by the planer mill each month in units of Mbf. Within 30-days of the end of each month use the most recently determined emission factor to calculate PM₁₀ emissions in from the planer mill in lb/month. Add this value to PM₁₀ emissions for the most recent 11 months to and then divide by 2,000 to get tons PM₁₀ for the most recent consecutive 12-month period. Report PM₁₀ emissions according to term 5.3.2.</p> <p><i>Compliance Assurance Monitoring:</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p>Once per operating day, check the pressure taps for plugging, and check and record the differential pressure of the baghouse. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.3.2	PSD 05-04 A3 Conditions B.18.2.2.1, and B.18.2.2.3 (4/23/24)	<u>Planer baghouse reports:</u> Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).	The report shall include: <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O&M Manual. • PM₁₀ stack concentration from most recent compliance test in gr/dscf • PM₁₀ emissions in lb/MMBtu, consecutive 12-month total, for each month of the reporting period.

Table 5-4 Specifically Applicable Requirements – EU-4, Dry Kilns

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.1	OAC 938c, Conditions 15 and 16 (5/8/13)	<u>Lumber kilns HAP emissions</u> SPI is allowed to process Western Hemlock and/or Douglas-Fir in the kilns.	No wood species other than Western hemlock or Douglas fir shall be processed in the kilns without prior written approval from the NWCAA. Each calendar month, SPI shall record the quantity of Douglas fir and the quantity of hemlock dried in each kiln for that month and for the previous 12-month period
5.4.2	OAC 938c, Condition 17 (5/8/13)	<u>Lumber kilns HAP emissions</u> At no time shall any kiln dry-bulb temperature setpoint or the actual dry-bulb temperature in any dry kiln exceed 200°F.	SPI shall continuously monitor and record the dry-bulb temperature in each dry kiln using a device accurate to within ± 0.50 °F.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.3	PSD 05-04 A3 Conditions B.8.1, B.14, and B.18.2.2.4.1 (4/23/24)	<p><u>Lumber kilns PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀</u></p> <p>Emissions shall not exceed 5.86 tons PM₁₀ in any consecutive 12-month period.</p>	<p>Monitor continuous compliance: for each wood species processed, separately determine drying kiln loading in board feet each day.</p> <p>Each month's drying kiln PM₁₀ emissions shall be determined based on each species' emission factor:</p> <ul style="list-style-type: none"> • Douglas fir: 0.02 lb PM₁₀/Mbf • Western hemlock: 0.02 lb PM₁₀/Mbf • Other wood species <ul style="list-style-type: none"> ○ If ≤ 10 percent monthly production, use 0.04 lb/Mbf or value approved in writing by Ecology and NWCAA ○ If > 10 percent monthly production, use value approved in writing by Ecology and NWCAA <p>Quarterly, submit PM₁₀ emissions (12-month total data) and daily kiln loading per species in continuing performance monitoring reports in accordance with 5.4.6.</p>
5.4.4	PSD 05-04 A3 Conditions B.8.2, B.16.2, and B.18.2.2.4.2 (4/23/24) WAC 173-401-630(1) (3/5/16)	<p><u>Lumber drying kilns VOC limit</u></p> <p>VOC emissions, calculated as pinene (10 carbons per molecule, MW = 136) shall not exceed 120 tons VOC in any consecutive 12-month period.</p>	<p>Operate the computerized steam management system for the dry kilns to minimize steam demand in accordance with the manufacturer's specifications.</p> <p>Record, on a monthly basis, dry kiln production each species of wood in board feet.</p> <p>Monitor continuous compliance monthly calculating VOC for each month's production for each species, based on the following VOC emission factors:</p> <ul style="list-style-type: none"> • Douglas Fir: 0.6 lb/Mbf • Western Hemlock: 0.33 lb/Mbf • Other wood species: <ul style="list-style-type: none"> ○ If ≤ 10 percent monthly production, use 0.6 lb/Mbf or value approved in writing by Ecology and NWCAA ○ If > 10 percent monthly production, use value approved in writing by Ecology and NWCAA <p>Quarterly, submit VOC emissions (12-month total data) and daily kiln loading per species in continuing performance monitoring reports in accordance with 5.4.6.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.5	OAC 938c, Condition 18 (5/8/13)	<u>Opacity</u> The opacity of emissions from the dry kilns shall not exceed 10 percent for a period or periods aggregating more than three minutes in any one hour, as determined by DOE Method 9A.	Monthly, conduct an opacity observation of the dry kilns month during operation. Inspections are to be performed during daylight hours while the kilns are in operation. If, during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, SPI shall, as soon as possible, but no later than within 24 hours of the initial observation, take corrective action until there are no visible emissions or, alternatively, record the opacity using DOE Method 9A or shut down the kiln until it can be repaired.
5.4.6	PSD 05-04 A3 Condition B.16.2, B.14, B.18.2.1, and B.18.2.2.4 (4/23/24)	<u>Lumber kiln reports:</u> Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).	The report shall include: Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O&M Manual. <ul style="list-style-type: none"> • MBf per day totals for each day of the reporting period – by wood species • PM₁₀ emissions in tons/yr, consecutive 12-month total, for each month of the reporting period. • VOC emissions in tons/yr, consecutive 12-month total, for each month of the reporting period.

Table 5-5 Specifically Applicable Requirements – EU-5, Anti-mold Spray Chamber

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.5.1	PSD 05-04 A3 Condition B.3 (4/23/24) WAC 173-401- 615(1)(b) & (c), (10/17/02)	<u>Fugitive Emissions</u> SPI-Burlington shall use only wood preservatives that have been approved by the USEPA under the Federal Insecticide, Fungicide, and Rodenticide Act.	<i>Directly enforceable:</i> Maintain records, such as manufacturer specification sheet or MSDS, showing EPA approval.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.5.2	OAC 938c, Conditions 19 and 20 (5/8/13)	<p><u>Fugitive Emissions</u> SPI shall collect emissions from the spray chamber and shall vent all such emissions to a mist eliminator (demister). The demister shall be operated whenever anti-stain/brightener is applied.</p>	<p>SPI shall conduct monthly visual inspections during any month that the spray chamber is used, of the following:</p> <ul style="list-style-type: none"> a) Ductwork, to ensure structural integrity (no corrosion, holes, etc.), b) Fan, to ensure proper fan operation, and <p>Exhaust stack(s) and surrounding roof or structure, to ensure no anti-stain/brightener deposition which would indicate breakthrough or malfunction of the demister. If structural or mechanical problems are noted during such inspections, SPI shall correct problems identified by these inspections within 24 hours of initial discovery or discontinue anti-stain application. If anti-stain/brightener chemical deposition is discovered at the exhaust stack(s) or on surrounding roofs or structure, SPI shall perform a more detailed examination of the process to determine reasons for breakthrough, and SPI shall revise its Operation and Maintenance Plan to address any problems related to the breakthrough and any related problems with the demister within one week of initial discovery. Excess anti-stain/brightener deposition shall be removed from exhaust stack(s) and surrounding roofs or structure within 10 days of initial discovery.</p>
5.5.3	OAC 938c, Condition 21 (5/8/13)	All anti-mold coating operations shall take place inside the spray chamber. Anti-mold coatings shall not be applied by hand or with hand held equipment.	No specific MR&R for this term
5.5.4	PSD 05-04 A3 Conditions B.9, B.16.3, and B.18.2.2.5 (4/23/24) WAC 173-401- 615(1)(b) & (c), (10/17/02)	<p><u>Anti-mold spray chamber VOC emissions limit.</u></p> <p>VOC emissions shall not exceed nine tons in any consecutive 12-month period.</p> <p>Maintain the anti-mold spray chamber as a "drip-free" design.</p> <p>Operate and maintain the spray chamber mist eliminator and condensate recycle system in accordance with the manufacturer's specifications.</p>	<p>Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter) that shall include:</p> <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O& M Manual. • Quantity of wood treatment materials consumed in the anti-mold spray system per month. • VOC emissions per consecutive 12-month total, for each month of the reporting period.

Table 5-6 Specifically Applicable Requirements – EU-6, Natural Gas Package Boiler

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.1	OAC 1089b Condition 2 (8/31/21) WAC 173-401- 615(1)(b) & (c), (10/17/02)	Fuel combusted in the boiler shall be limited to natural gas only.	<i>Directly Enforceable:</i> Keep records of the amount of fuel combusted in the boiler for a period of not less than five years. Make the records available to the NWCAA upon request.
5.6.2	40 CFR 60 Subpart Dc 60.48c(g)(2), (i) (1/28/09)	Each month record amount of natural gas burned in the boiler.	Maintain records for two years following the date of such records.
5.6.3	OAC 1089b Condition 1 (8/31/21)	Visible emissions shall not exceed five percent opacity for more than three minutes (aggregate) within any 60-minute period.	Use Washington State Department of Ecology Method 9A.
5.6.4	OAC 1089b Condition 6 (8/31/21)	Develop a written operating and maintenance manual for the boiler. Include in the manual practices for maintaining good air pollution control.	Keep the operating and maintenance manual up-to-date and on site. Follow operating and maintenance practices at all times.
5.6.5	OAC 1089b Condition 3, 5 (8/31/21) NWCAA Section 367 (7/10/25 State Only)	Emissions of NO _x from the boiler stack shall not exceed 1.7 lb/hr, one-hour average.	Demonstrate compliance using the average of three 60-minute test runs. During the test, operate the boiler at 90 percent or greater average firing rate capacity. Conduct source testing in accordance with NWCAA Section 367 and Appendix A and using 40 CFR Part 60 Appendix A Methods 7E and 19. During the performance tests, record fuel usage continuously and include usage in the performance test report as raw data and in summary form. The heat content of natural gas shall be 1,042 Btu/scf or obtained from the natural gas supplier during the test. The Fd factor for natural gas shall be 8,710 dscf (exhaust)/MMBtu. Conduct the first test within 250 days of the date of issuance of this order (August 31, 2021). Perform subsequent tests not more than 12 months from the date of the previous test.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.6	<p>OAC 1089b Condition 4, 5 (8/31/21)</p> <p>NWCAA Section 367 (7/10/25 State Only)</p>	<p>Emissions of CO from the boiler stack shall not exceed 50 ppmvd corrected to three percent oxygen, one-hour average.</p>	<p>Demonstrate compliance using the average of three 60-minute test runs. During the test, operate the boiler at 90 percent or greater average firing rate capacity. Conduct source testing in accordance with NWCAA Section 367 and Appendix A and using 40 CFR Part 60 Appendix A Method 10.</p> <p>During the performance tests, record fuel usage continuously and include usage in the performance test report as raw data and in summary form. The heat content of natural gas shall be 1,042 Btu/scf or obtained from the natural gas supplier during the test. The Fd factor for natural gas shall be 8,710 dscf (exhaust)/MMBtu.</p> <p>Conduct the first test within 250 days of the date of issuance of this order (August 31, 2021). Perform subsequent tests not more than 12 months from the date of the previous test.</p>
5.6.7	<p>40 CFR 63 Subpart DDDDD 63.7500(a)(1), (3), (e), 63.7505(a), 63.7510(g), 63.7515(d), 63.7540(a)(10)(i)-(vi), (b), 63.7545(a), (e)(8)(i) (10/6/22)</p> <p>63.7550(a), (b)(1)-(4), (c)(1), (c)(5)(i)-(iii), (xiv), (xvii) (11/20/15)</p> <p>Table 3 Line 3 (10/6/22)</p> <p>Table 9 (11/20/15)</p>	<p><u>Boiler Tune-up</u></p> <p>For units designed to burn Gas 1 fuels, conduct a tune-up of the boiler annually.</p> <p>The inspection shall include: inspect the burner, clean and replace components as necessary; inspect the flame pattern and adjust as necessary; inspect the air-to-fuel ration system control to ensure it is correctly calibrated and functioning properly; optimize total emissions of CO and measure CO concentrations in ppmv before and after adjustments are made; maintain on-site an annual report summarizing inspection.</p>	<p>Each annual tune-up must be no more than 13 months after the previous tune-up.</p> <p>Submit a signed certification in the NCS in accordance with AOP Term 3.2.19 that indicates a tune-up was completed. Submit a compliance report every year in accordance with AOP Term 4.1.</p> <p>The compliance report shall be submitted electronically via CEDRI (www.epa.gov/cdx), if available. The compliance report shall include the date of the most recent tune-up and burner inspection; if applicable, a statement that no deviations occurred; and must be certified by the Responsible Official or Duly Authorized Representative.</p>

SECTION 6 INAPPLICABLE REQUIREMENTS

Table 6-1 lists requirements that are deemed inapplicable to the facility. The basis for each determination of inapplicability is included.

Table 6-1 Inapplicable Requirements

Requirement	Emission Unit	Brief Discussion of Requirement	Basis
40 CFR Part 60 Subpart E	EU-1	New Source Performance Standards for incinerators	Only biomass and natural gas are fired in the boiler.
40 CFR Part 60 Subpart KKKK	EU-1	New Source Performance Standards for stationary combustion turbines	SPI operates a steam turbine.
40 CFR Part 60 Subpart Kb	Facility	New Source Performance Standards for Volatile Organic Liquid Storage Vessels	No storage vessels have been constructed at the facility.
40 CFR Part 63 Subpart Q	EU-2	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	SPI does not use chromium based water treatment chemicals in their cooling towers.
WAC 173-400-050(2), (4), and (5)	Facility	Emission Standards for Combustion and Incineration Units	The facility burns only clean hog fuel and biomass residuals, and is therefore not an incinerator or waste combustion unit.
WAC 173-400-070(1), (3) – (8)	Facility	Emission Standards for Certain Source Categories	SPI does not operate a wigwam burner, orchard heater, grain elevator, catalytic cracking unit, sulfuric acid plant, or sewage sludge incinerator.
WAC 173-433	EU-1	Solid Fuel Burning Devices	As defined in WAC 173-433-030(9), EU-1 is not a solid fuel burning device (greater than one MMBtu/hr).
WAC 173-434	EU-1	Solid Waste Incinerator Facilities	As defined in WAC 173-434-030, the facility is not defined as a solid waste incinerator.



Serving Island, San Juan, Skagit and Whatcom Counties

Statement of Basis – Draft 019R3

Sierra Pacific Industries Burlington Division

Mount Vernon, WA
April 10, 2026



PERMIT INFORMATION
SIERRA PACIFIC INDUSTRIES
14353 McFarland Road, Mount Vernon, WA 98273

Responsible Corporate Official

David S. North
Division Manager
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1403

Corporate Inspection Contact

Tyler Moriarty
Division Manager
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1434

Northwest Clean Air Agency

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

Prepared by

Robyn Nabstedt, EIT
Environmental Engineer
(360) 419-6844

Expires: XX/XX/2031

Renewal Application Due: XX/XX/2030

TABLE OF CONTENTS

1 INTRODUCTION.....	6
1.1 Permit Changes in the Third Renewal	6
2 FACILITY DESCRIPTION AND EMISSION UNITS	8
2.1 Location	8
2.2 Operating Schedule	9
2.3 Process Description	9
3 FACILITY EMISSIONS AND ENFORCEMENT HISTORY	19
3.1 Actual Emissions	19
3.2 Enforcement History	20
3.3 Stack Tests	23
4 FEDERAL REQUIREMENTS	24
4.1 New Source Performance Standards	24
4.2 National Emissions Standards for Hazardous Air Pollutants (NESHAP).....	25
4.3 PSD and Major New Source Review	26
4.4 Title IV Acid Rain Provisions	26
4.5 Compliance Assurance Monitoring	27
4.6 Other Federal New Source Review Programs	31
5 PSD AND OAC PERMITS.....	32
5.1 Obsolete Orders.....	32
5.2 Effective Orders and Permits	35
6 COMPLETED REQUIREMENTS	36
6.1 40 CFR 60 Subpart Db, §60.40b (6/13/07, unless otherwise noted)	36
6.2 40 CFR 63 Subpart DDDD, §63.2252 (2/16/06).....	36
6.3 40 CFR 63 Subpart DDDDD §63.7545(b)	36
6.4 40 CFR 63 Subpart DDDDD Table 3 Line 4.....	36
6.5 40 CFR 63 Subpart DDDDD §63.7510.....	36
6.6 PSD 05-04 Amendment 3	36
6.7 OAC 938c.....	37
7 GENERAL PERMIT ADMINISTRATION AND ASSUMPTIONS	38
7.1 Permit Content	38
7.2 Federal Enforceability	38
7.3 Future Requirements.....	38
7.4 Compliance Options	38
7.5 Gap Filling and Sufficiency Monitoring.....	38
7.6 Inapplicable Requirements	41
8 PERMIT ELEMENTS AND BASIS FOR TERMS AND CONDITIONS ...	42
8.1 Permit Organization.....	42
8.2 Section 1 – Permit Information, Attest, and Emissions Unit Description Sections.....	42
8.3 Section 2 – Standard Terms and Conditions	42
8.4 Section 3 – Standard Terms and Conditions for NSPS and NESHAP.....	43
8.5 Section 4 – Generally Applicable Requirements	43

8.6 Section 5 – Specific Requirements for Emissions Units	45
9 CAM PLANS - ESP	46
10 CAM PLANS – BAGHOUSE	51
11 INSIGNIFICANT EMISSIONS UNITS.....	55
12 DEFINITIONS AND ACRONYMS	56
13 PUBLIC DOCKET	58

Figures

Figure 2-1 SPI Location.....	9
Figure 2-2 SPI Facility Layout.....	9
Figure 2-3 General Process Flow Diagram	10
Figure 2-4 Log Storage and Crane.....	10
Figure 2-5 Sawline equipment.....	11
Figure 2-6 Lumber Sorting Line	12
Figure 2-7 Enclosed Planer Operation	13
Figure 2-8 Sawdust baghouse and conveyors	14
Figure 2-9 Dry Kiln at Cycle End	14
Figure 2-10 Dry Kilns Ready to be Loaded.....	14
Figure 2-11 Kiln Internal Equipment	15
Figure 2-12 Fuel House	16
Figure 2-13 Cogeneration Plant Flow Diagram	17
Figure 2-14 Boiler House and ESP.....	17

Tables

Table 3-1 Potential to Emit - Criteria Pollutants.....	19
Table 3-2 Actual Criteria Air Pollutant Emissions	19
Table 3-3 Actual Hazardous Air Pollutant Emissions	20
Table 3-4 NOV history, January 2020 - December 2025	21
Table 3-5 Stack Test History	23
Table 7-1 AOP Terms with Directly Enforceable Gapfill Provisions.....	40
Table 7-2 AOP Terms with Directly Enforceable Sufficiency Provisions.....	41

**Table 11-1 Insignificant Activities and Emissions Units
(Categorically Exempt) 55**

1 INTRODUCTION

Sierra Pacific Industries (SPI) owns and operates a dimensional lumber manufacturing facility in Skagit County, Washington. This facility is referred to as "SPI" or "the facility," in this document.

The SPI facility is a designated major source subject to the Air Operating Permit (AOP) program because of its potential to emit (PTE) both criteria pollutants and Hazardous Air Pollutants (HAP). It has the potential to emit more than 100 tons per year (tpy) of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC), more than 10 tons per year of hydrogen chloride (HCl) and acetaldehyde, and more than 25 tons per year of total HAP. These air pollutants are defined as regulated air pollutants in Chapter 173-401 of the Washington Administrative Code (WAC).

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

1.1 Permit Changes in the Third Renewal

The Northwest Clean Air Agency (NWCAA) received an application for the third renewal of the SPI AOP on April 1, 2025. Changes specific to each permit section are listed below.

1.1.1 AOP Section 1 Emission Unit Descriptions

Emission unit descriptions in Table 1-1 were updated with applicable orders, monitoring equipment, and equipment capacities.

1.1.2 AOP Section 2 Standard Terms and Conditions

Section 2 was updated with current citation dates and NWCAA standard language, which includes modified applicable regulations.

1.1.3 AOP Section 3 Standard Terms and Conditions for NSPS and NESHAP

Section 3 was updated with current NWCAA standard language consistent with the National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS) that apply to the SPI operations. New and modified applicable regulations and updated citation dates are included.

1.1.4 AOP Section 4 and 5 Generally and Specifically Applicable Requirements

The Generally Applicable Requirements of Section 4 were reviewed and updated. Section 4 primarily lists NWCAA and WAC regulations, which often lack specific methods for compliance determination and require that additional monitoring, recordkeeping and recording provisions be added to the AOP for the purpose of compliance determination. This aspect of AOP monitoring, also known as gap-filling and sufficiency monitoring, is discussed further in Section 7.5 of this document.

Section 5 has been modified by updating the federal regulations that apply to SPI, most notably 40 CFR 63 Subpart DDDDD emissions standards for filterable particulate matter (PM), total selected metals (TSM), hydrogen chloride (HCl), and mercury for Emission Unit (EU)-1, the Cogeneration Unit.

Conditions for EU-6, the Natural Gas Package Boiler, were updated to include requirements from Order of Approval to Construct (OAC) 1089b, issued in 2021. This includes the reintroduction of periodic testing for NO_x and CO and the removal of the annual capacity factor limit. This boiler is no longer considered a limited-use boiler under NESHAP DDDDD

and is now subject to more frequent (annual) tune-ups. The AOP conditions have been updated to reflect the change in operation of this boiler.

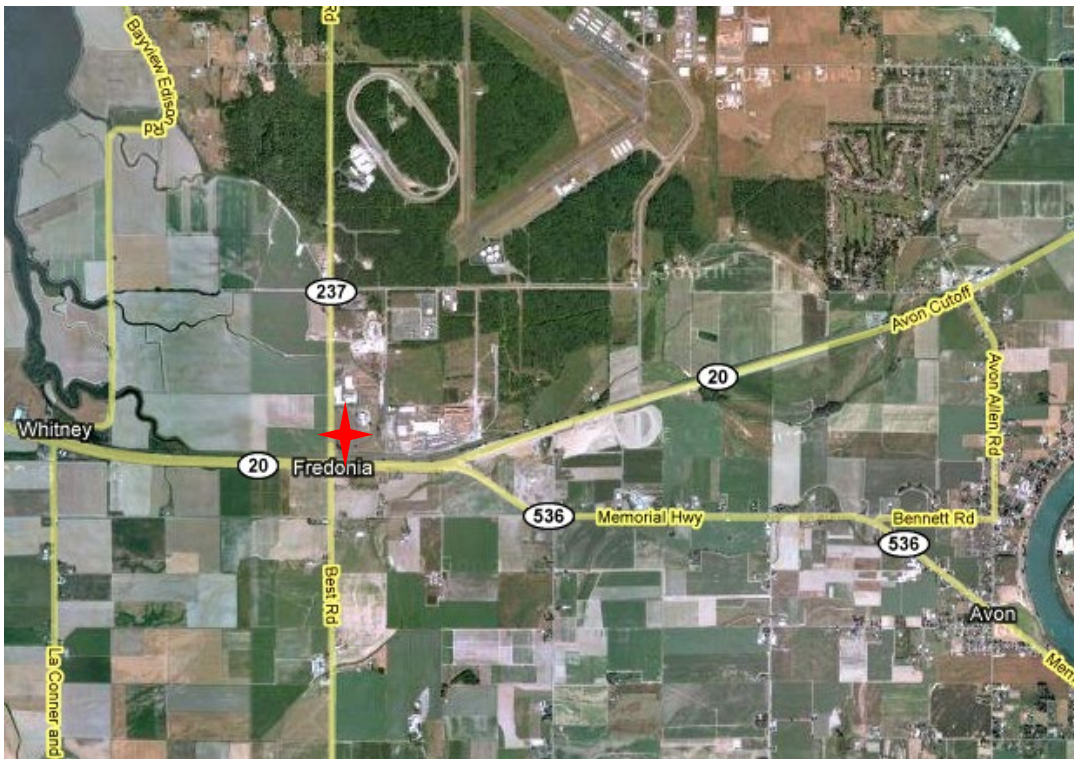
2 FACILITY DESCRIPTION AND EMISSION UNITS

The SPI facility can produce approximately 400 million board feet (MMbf)¹ of kiln-dried dimensional lumber per year. A wood-fired boiler/cogeneration unit produces steam for heating on-site lumber drying kilns and for powering a steam turbine capable of generating up to 28 Megawatts (MW) of electricity. Electricity generated is used on-site to power the saw mill and excess electricity is sold to the Puget Sound Energy distribution system. The facility was constructed beginning in late 2005 with initial startup in December 2006.

Section 1 of the AOP includes a summary of emission units, including their monitoring systems, control devices, and applicable orders and other permit actions. Generally, plant-wide emission requirements from NWCAA and Washington Department of Ecology (Ecology) regulations are included in Sections 2 and 4 of the AOP while requirements for units that have specific permitting or regulatory requirements are contained in Section 5 of the AOP. Section 3 lists portions of federal regulations applicable site-wide.

2.1 Location

The SPI lumber mill and cogeneration plant is located in Skagit County, at 14353 McFarland Road near Mount Vernon, Washington 98273. Figure 2-1 shows the location of the facility. Figure 2-2 is a drawing of the general layout of the process area of the facility.



¹ A **board-foot** is a specialized unit of volume for measuring lumber; it is the volume of a one foot length of a board one foot wide and one inch thick. One board-foot equals 1 ft × 1 ft × 1 in or 0.002360 m³.

Board-feet are used for rough lumber (before drying and planing) with no adjustments. For planed lumber, board-feet refer to the nominal thickness and width of lumber, calculated in principle on its size before drying and planing. Actual length is used.

Figure 2-1 SPI Location

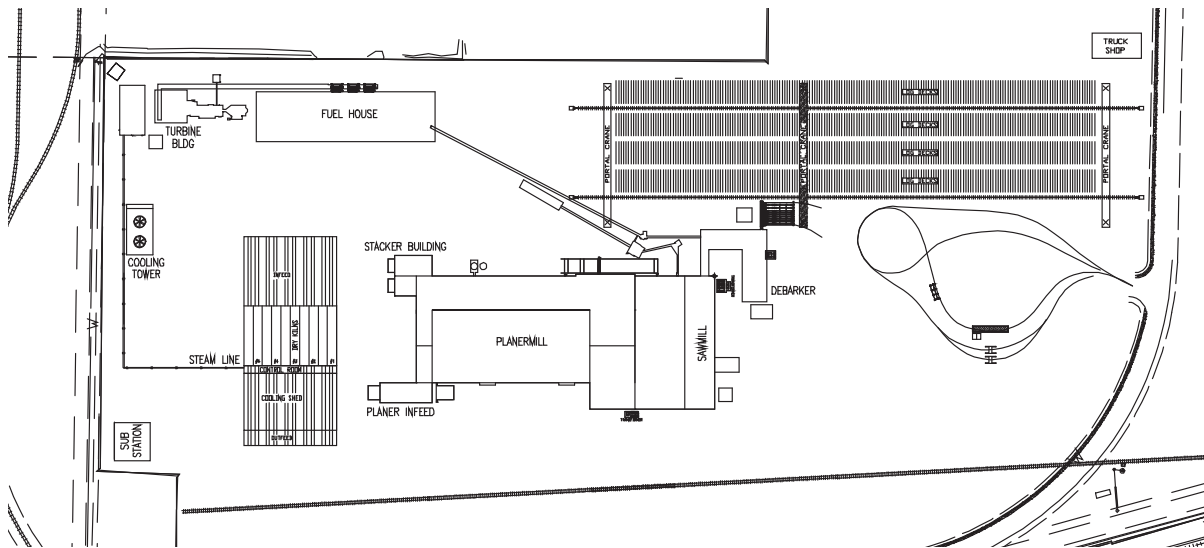


Figure 2-2 SPI Facility Layout

2.2 Operating Schedule

At the time of the permit renewal, SPI operates two 12-hour shifts (Monday 0500 through Saturday 0400) at the saw mill and planer. Maintenance on the milling equipment is done as needed between shifts and on weekends. The kilns are operated 24 hours per day, seven days per week.

The cogeneration plant operates 24 hours per day, seven days per week, with a scheduled minor maintenance shutdown approximately every 6 to 12 months. The facility underwent the first major overhaul on the cogeneration plant in May 2009 after approximately two years and six months of operation. These major overhauls are scheduled every seven to nine years of operation. The last major overhaul shutdown took place in 2020. The last maintenance shutdown took place in September 2025.

2.3 Process Description

Figure 2-3 presents the general process flow diagram of operations at the facility.

Logs are delivered to the site by truck arriving through the northern facility gate. The facility processes Western hemlock and Douglas fir. Other species of logs received at the facility are generally set aside to be sold or sent to a different facility. A majority of the log trucks are offloaded by an electric-powered portal crane that stacks the logs in organized log decks as shown in Figure 2-4. The balance are offloaded by log loaders (Caterpillar 988 or similar), which put the logs within reach of the portal crane.

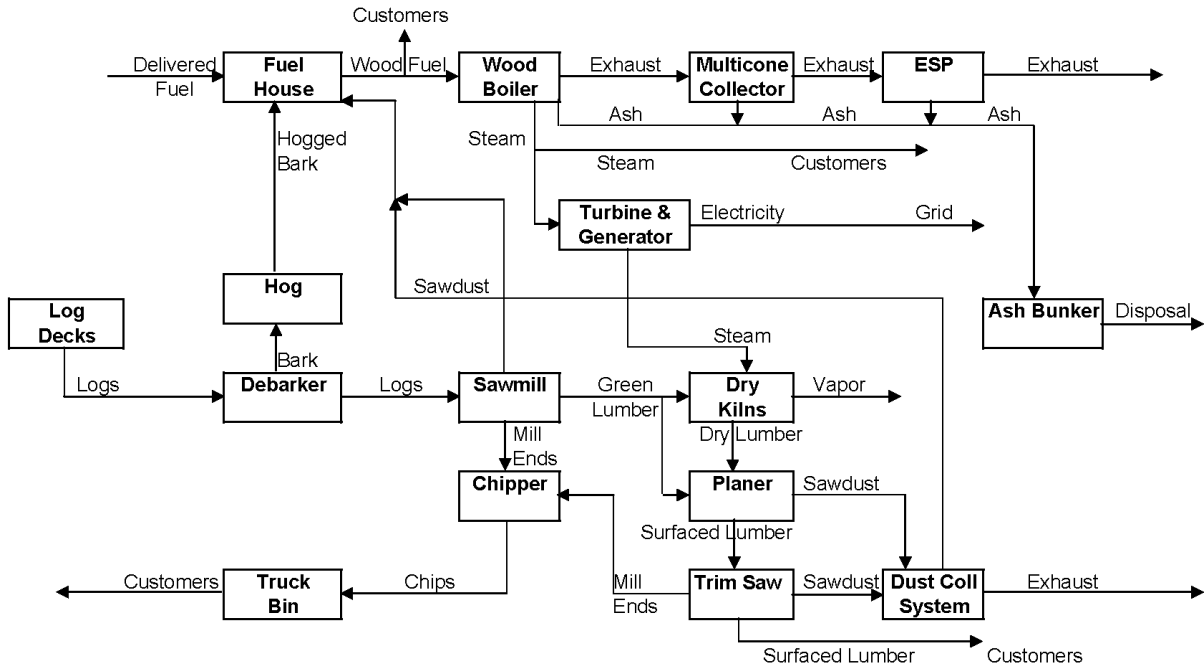


Figure 2-3 General Process Flow Diagram



Figure 2-4 Log Storage and Crane

The portal crane selects logs for feed to the saw mill through the debarker machine. The debarker removes the bark from the log. The log is then sent to the saw mill, while the bark is conveyed to a large wood chipper known as a “hog.” The hog reduces and homogenizes the size of the individual pieces of bark and normally sends it to the cogeneration facility fuel house. SPI segregates bark from logs that have been transported over salt water to be shipped off site for landscaping, keeping it out of the fuel for the boiler.

2.3.1 Saw Mill and Planer Operation

Debarked logs are cut to appropriate lengths and sawed into lumber in the saw mill as illustrated in Figure 2-5.



Figure 2-5 Sawline equipment

Log pieces that are too small to be sawed into lumber are sent to a chipper and the resulting chips are carried by covered conveyor to a chip bin. Trucks periodically remove chips and carry them to off-site customers.

Saw dust from the mill is collected under the saw deck and transferred to the fuel house by covered conveyor.

Un-dried, or "green," lumber from the saw mill may be graded, stacked, and moved by forklift to a train or truck to be removed from the facility as green product. Green lumber may also be stacked with spacers and sent to the kilns to be dried. Lumber sorting is shown in Figure 2-6.

Lumber dried in the kilns is allowed to cool in a covered area adjacent to the kilns called the cooling shed. The cool dry lumber is moved by forklift from the cooling shed to the planer mill, where the lumber is planed, graded, stacked, wrapped for shipment offsite. Product is shipped offsite primarily by rail car, but trucks may also be used.



Figure 2-6 Lumber Sorting Line

The planer, shown in Figure 2-7, processes kiln-dried lumber which generates fine, light dust. SPI uses a high efficiency cyclone to collect dust directly from the interior of the planer mill by vacuum which then places the dust onto the fuel house conveyors. Dust pick-up points are located at the planer and the trimmer saw. A baghouse is installed on the cyclone exhaust to control particulate matter emissions. The planer mill baghouse is identified as EU-3.

Most of the 48,440 acfm² operating capacity of this system is devoted to the planer, but approximately 10,000 acfm is dedicated to the trimmer saw. The baghouse exhaust has a permit limit of 0.005 grain per standard cubic foot (gr/scf)³ of air exhausted. At the design capacity of the baghouse (50,440 acfm at 70 °F, equivalent to 50,250 scfm at 68 °F) and 0.005 gr/scf, the dust collection system has the potential to emit 9.4 TPY of PM₁₀. The potential annual emission rate for the dust collection system is based on continuous operation (24 hours per day, 8,760 hours per year). However, since startup, SPI has operated the mill in shifts on a non-continuous basis that results in fewer hours of operation and lower annual emissions.

² acfm = actual cubic feet per minute (ambient conditions)

³ Standard conditions are 20 °C (68 °F) and 1.00 atmosphere (29.92 inches of mercury).

Note that the baghouse exhaust stack was initially constructed, and is currently configured to discharge vertically downward as shown in Figure 2-8.



Figure 2-7 Enclosed Planer Operation



Figure 2-8 Sawdust baghouse and conveyors

2.3.2 Dry Kilns

SPI operates six double-track dry kilns to treat lumber produced by the saw mill (up to 400 MMbf/yr)⁴. The kilns are identified as EU-4. One of the kilns is shown in Figure 2-9 with a closer view in Figure 2-10. The kilns may run on a continuous basis throughout the year, if necessary, to meet production needs. The amount, dimension, and type of wood that is kiln-dried changes throughout the year based on market demand.

Wood is stacked with spacers to allow air and heat to penetrate the stack more uniformly. Steam is circulated in the kiln wall piping while fans and plenums in the roof structure circulate air in the chamber. The steam demand, fan, and plenum systems are controlled by a computer system with kiln temperature readings as feedback.



Figure 2-9 Dry Kiln at Cycle End



Figure 2-10 Dry Kilns Ready to be Loaded

Figure 2-11 shows two views of the kilns. On the left, stacked lumber inside the kiln is

⁴ MMbf = million board feet

shown, with a view up to the steam tubes surrounding the kiln. On the right is a view the upper portion of a kiln, where fans are used to circulate air inside the kilns when it is in operation.



Figure 2-11 Kiln Internal Equipment

Wood passing through the kilns is either western hemlock or Douglas fir. During the drying process, wood releases VOC which pass to the atmosphere through the kiln vents. Some of these compounds (semivolatile chemicals) can condense to form particulate matter, and others have been listed by the EPA as HAP. Western hemlock and Douglas fir release methanol, acetaldehyde, and formaldehyde as the largest portion of drying emissions.

Emissions from the kilns are controlled by species throughput limitations and maintaining kiln temperatures below 200°F. No control equipment is installed on the kiln vents.

Emission factors for calculating emissions from the kilns have been included in Prevention of Significant Deterioration (PSD) permit 05-04, Amendment 3. See Section 6 of this document for more discussion. The dry kilns are also regulated by NWCAA OAC 938c, issued in 2013.

2.3.3 Anti-mold Spray System

Lumber may be treated with anti-stain/anti-mold and brightener chemicals. The spray chamber is a continuous spray box that lumber (dried as well as green) is fed through. The lumber is treated with two water-borne coatings, one that protects against sapstain, mold, mildew, decay, and bacteria during storage and transit, and another that brightens the lumber to improve its appearance. The spray chamber is located near the planer mill.

The spray chamber exhausts to the atmosphere at a maximum flow rate of 1,000 acfm. The exhaust passes through a mist eliminator, and the condensed fluid from the mist eliminator is recycled back into the spray system. No additional control equipment is installed on the spray chamber exhaust. The spray chamber is identified as EU-5.

The potential VOC emissions from the spray chamber are estimated to be approximately nine tons per year assuming all VOC in the chemicals is emitted. The spray chamber emissions are addressed by NWCAA OAC 938c, issued in 2013.

2.3.4 Cogeneration Plant

Steam for the kilns is generated by the boiler in the cogeneration facility. The cogeneration plant consists of a wood-fired, water-wall boiler, a steam turbine, and a generator. The boiler burns wood residuals (bark, sawdust, and chipped material) generated in the saw mill and planer to produce high-pressure steam for the steam turbine. In the event of saw mill shutdown, the facility also accepts wood residuals from offsite to fuel the boiler. The material is delivered by truck, dumped in the area in front of the fuel house, and mixed into the sawdust in the fuel house by front loader. A NWCAA permit requires inspection and rejection of fuel containing anything other than biomass.

Fuel is received in a three-sided fuel house, as shown in Figure 2-12, either from overhead conveyors from the saw mill or from trucks unloaded in front of the fuel house. Fuel is stacked for storage in the fuel house and pushed into the chain feeder area by front loader. Fuel is fed to boiler by a drag chain onto enclosed conveyors; as a result, fugitive dust emissions are calculated up to the drag chain. The boiler burns approximately 380,000 tons of wood residuals annually, all of which are received through the fuel house.



Figure 2-12 Fuel House

The McBurney vibrating grate spreader-stoker type boiler has a design heat input of 430 million British thermal units per hour (MMBtu/hr) and a design steam generation rate of 250,000 pounds per hour (lb/hr). The boiler is equipped with two natural gas burners, each rated at 62.5 MMBtu/hr, for start up and flame stabilization. The boiler incorporates a selective non-catalytic reduction (SNCR) system to reduce NO_x emissions using urea injection. Boiler exhaust is treated through a multiclone followed by an electrostatic precipitator (ESP) to control particulate matter emissions. Ash collected from the multiclone and ESP is shipped offsite to be used as a soil amendment. The ash loading system is enclosed to prevent fugitive emissions. The process flow in the cogeneration plant is shown in Figure 2-13.

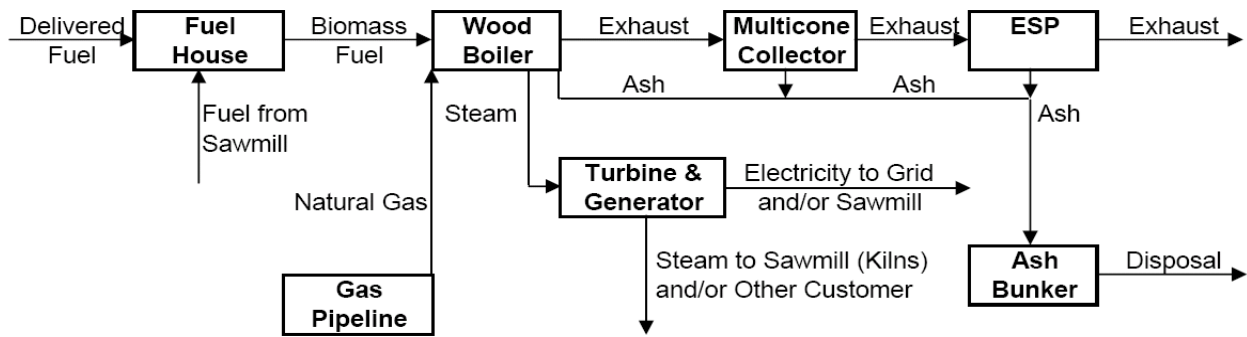


Figure 2-13 Cogeneration Plant Flow Diagram

The boiler emits NO_x , CO, $\text{PM}_{2.5}$, PM_{10} , and PM, SO_2 , and VOC, as well as several HAP. The boiler exhaust is identified as EU-1. Figure 2-14 shows the boiler house and ESP.



Figure 2-14 Boiler House and ESP

The steam turbine generator can generate up to 28 MW of electricity. A portion of the produced power is used on-site; the remaining power is sold to a public utility. Low-pressure steam is collected from the steam turbine through a controlled extraction and used to heat the dry kilns.

The steam turbine and generator do not emit air pollutants. The boiler criteria pollutant emissions are based on the permit limits established in the most recent PSD permit (PSD 05-04 Amendment 3) applicable to the facility. Potential HAP emissions were derived from factors for the biomass-fired boiler. Factors were derived from AP-42 Section 1.6, where the EPA combined all source test data to calculate the AP-42 emission factors regardless of boiler type or control technology. Where more specific information was available, emission factors that were based on a subset of the source tests (biomass-fired boilers controlled by ESPs). The HCl emission factor was based on SPI's proposed HCl emission limit of 0.02 lb/MMBtu. HCl is emitted from burning "salty hog", wood that was previously soaked in salt water. The ammonia emission rate was based on an anticipated maximum exhaust

ammonia concentration of 50 parts per million (ppm), a consequence of operating an SNCR system to reduce boiler NO_x emissions.

2.3.5 Cooling Tower

The facility's cooling tower condenses steam from the turbine before it is returned to the boiler feedwater supply. The cooling tower is equipped with drift eliminators to reduce water loss associated with aerosol drift. The drift eliminators achieve a drift of 0.0005 percent or less, according to design specifications. Assuming this drift rate, a maximum water flow rate of 25,000 gallons per minute (gpm), and a conservative total dissolved solids (TDS) value of 725 milligrams per liter (mg/l), the PM₁₀ emission rate from the cooling towers was calculated to be approximately one ton per year. The cooling tower is identified as EU-2. The cooling tower emissions are addressed in NWCAA OAC 938c, issued in 2013.

2.3.6 Natural gas-fired package boiler

An Apache 2,200 brake horsepower (bhp) Scotch Marine boiler rated at 95 MMBtu/hr and equipped with low-NOX burners and flue gas recirculation was initially permitted on June 21, 2011. The main boiler/cogeneration plant generally undergoes maintenance for about 5-15 days per year. The purpose of the Apache boiler is to maintain kiln operation, providing steam, during the main boiler down-time.

The Apache boiler is permitted by NWCAA OAC 1089b, issued on August 31, 2021 to burn only natural gas. The most recent permit modification removed a condition limiting annual capacity to 10 percent or less, meaning the boiler no longer qualifies as a limited-use boiler⁵ under 40 CFR 63 Subpart DDDDD. Because the boiler burns only natural gas, it is not subject to any emission standards under Subpart DDDDD, but it does require an annual tune-up.

2.3.7 Facility Roadways and Storage Areas

Particulate matter is generated facility-wide from storage areas and roadways. The majority of the plant manufacturing area is paved. The facility sprays water on roadways by water truck and operates a sweep truck regularly to maintain the paved surfaces free of wood dust and dirt.

⁵ Limited-use boiler any boiler that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable average annual capacity factor of no more than 10 percent. Annual capacity factor means the ratio between the actual heat input to a boiler from the fuels burned during a calendar year and the potential heat input to the boiler had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

3 FACILITY EMISSIONS AND ENFORCEMENT HISTORY

The SPI facility is subject to the Title V program because its potential annual NO_x, CO, VOC, the single HAPs (HCl) and acetaldehyde, and total HAP emissions exceed the applicability thresholds.

Table 3-1 contains the potential to emit (PTE) from point sources at the SPI Mount Vernon facility as reported by SPI in its initial AOP application received by NWCAA on December 31, 2007, and amended to include the potential emissions of the package boiler that was first permitted on June 21, 2011. The boiler emissions are post-control. In the table below, "--" denotes a PTE of 0 for the given pollutant and EU.

Table 3-1 Potential to Emit - Criteria Pollutants

Pollutant	Boiler tpy	Cooling Tower tpy	Planer Mill tpy	Dry Kilns tpy	Anti-mold Spray tpy	Fugitive Emissions tpy	Package Boiler tpy	Plant-wide tpy
NO _x	245	==	==	==	==	==	166	411
CO	659	==	==	==	==	==	30.8	690
SO ₂	47	==	==	==	==	==	3.0	50
PM/PM ₁₀	37.7	0.9	9.4	5.9	==	2.2	3.1	59
PM _{2.5}	37.7	0.9	9.4	5.9	==	==	3.1	57
VOC	35.8	==	==	120	9.00	==	2.2	167
H ₂ SO ₄	3.8	==	==	==	==	==	==	3.8

SPI is also major for HAP. It has the potential to emit about 16 tons of acetaldehyde, 3.3 tons of formaldehyde, 8.4 tons of methanol, and 37.7 tons of hydrochloric acid.

3.1 Actual Emissions

SPI is required to submit emissions annually by April 15 for the preceding calendar year. Table 3-2 contains the emissions of criteria and other major pollutants reported by SPI from 2020 to 2024, which is the latest year emissions have been reported as of the time of writing this document. Table 3-3 contains the emissions of HAPs from the same reporting period. The actual mass of emissions reported includes emissions from normal operation as well as upsets.

Table 3-2 Actual Criteria Air Pollutant Emissions

Criteria Air Pollutant	2020 tpy	2021 tpy	2022 tpy	2023 tpy	2024 tpy
PM	63	70	69	64	71
PM ₁₀	25	33	35	28	33
PM _{2.5}	13	21	23	17	21
SO ₂	0.8	1	2	2	0.04
NO _x	119	160	115	171	152
VOC	59	61	54	58	67
CO	194	225	198	232	259

Criteria Air Pollutant	2020 tpy	2021 tpy	2022 tpy	2023 tpy	2024 tpy
NH ₃	3	4	6	19	19

Table 3-3 Actual Hazardous Air Pollutant Emissions

Toxic Air Pollutant	2020 lb/yr	2021 lb/yr	2022 lb/yr	2023 lb/yr	2024 lb/yr
Acetaldehyde	18,777	19,739	19,261	19,865	20,004
Acrolein	309	348	320	358	351
Formaldehyde	4,201	5,571	4,137	6,007	5,839
Methanol	11,636	12,193	12,671	12,671	11,886
Phenol	741	771	666	719	841

3.2 Enforcement History

SPI received three Notices of Violation (NOV) from the NWCAA between January 2020 and December 2025. A summary of these NOVs is presented below.

Table 3-4 NOV history, January 2020 - December 2025

Sierra Pacific Industries, Statement of Basis for AOP #019R3
Draft, April 10, 2026

Date Issued	Date Occurred	NOV	Description	Penalty
3/23/2021	9/30/2020-2/21/2021	4461	<p>Sierra Pacific Industries reported 11 upset and excess emissions events on the following dates: September 30, October 28, November 1, 4, and 16, December 22 and 30, 2020, January 7, 9, and 15, and February 21, 2021. Moreover on November 14, 2020 SPI reported a shutdown due to a mechanical failure.</p> <p>Four of the incidents were caused by burning fuel with a high moisture content, and eight of the incidents resulted from preventable operational or mechanical failures.</p> <p>The frequency of boiler upsets with excess emissions resulting from reasonably preventable conditions is indicative of insufficient operation and maintenance practices and resources consistent with good air pollution control practices.</p> <p>Citations: NWCAA 322.3, NWCAA 342.1</p>	\$6,250
10/4/2022	2022	4619	<p>Failure to submit the following required reports timely:</p> <ol style="list-style-type: none"> 1. The first half 2022 First half Semiannual Boiler MACT report, due on 7/30/2022, has not been submitted as of 9/28/2022 either via CEDRI or hardcopy to NWCAA. NWCAA notified SPI via email on 8/31/2022. (TV term) 2. The first half 2022 semiannual compliance certification report, due on 7/30/2022 has not been submitted as of 9/28/2022. NWCAA notified SPI email on 9/26/2022. (TV term) 3. The second quarter of 2022 air emission report, due on 7/30/2022, was delivered on 8/04/2022. (TV term) <p>SPI has asserted that company was the victim of a data hijack, and that the company did not pay ransom, so they lost data, causing them to be late on reports.</p> <p>Citations: WAC 173-401-615(3), 40 CFR 63.9(k), 40 CFR 63.7550</p>	\$3,000

2/21/2023	6/19/2022	4637	<p>Operation of the wood-fired boiler resulting in 30.7 tons excess carbon monoxide (CO) emissions released during the period 6/19/2022 through 7/11/2022 (based on emissions in excess of the 0.35 lb CO/MMBtu limit). The facility also exceeded the rolling 30-day CO limit from 7/4/2022 through 7/31/2022.</p> <p>The wood fired boiler started up on 06/19/2022 when the steam turbine malfunctioned. The facility continued running the wood fired boiler to produce steam for the kilns (but without producing electricity). On 07/11/2022, the facility found the CEMS was registering the boiler in startup mode, with no alarms, in excess of emission limits. The facility then shut down the boiler on 7/12/2022. The facility reported the root cause as the data acquisition handling software (DAHS) was incorrectly programmed.</p> <p>Citations: NWCAA 322.2, 40 CFR 63.7500(a)(1)</p>	\$63,000
-----------	-----------	------	--	----------

3.3 Stack Tests

SPI performed the following stack tests from January 2020 to December 2025.

Table 3-5 Stack Test History

Test Date	Pollutant	Emission Unit	Result
10/27/2020	CO, HCl, Hg, NH ₃ , NO _x , PM, PM ₁₀ , SO ₂ , VOC	McBurney Wood Fired Boiler	Pass
8/19/2021	PM ₁₀	McBurney Wood Fired Boiler	Pass
10/21/2021	NH ₃ , PM ₁₀ , SO ₂ , VE, VOC	McBurney Wood Fired Boiler	Pass
10/21/2021	PM ₁₀	Planer	Pass
5/6/2022	CO, NO _x	Apache Boiler	Pass
10/27/22	NH ₃ , PM ₁₀ , VE	McBurney Wood Fired Boiler	Pass
10/6/2023	HCl, Hg, NH ₃ , PM, PM ₁₀ , SO ₂ , VOC	McBurney Wood Fired Boiler	Pass
10/6/2023	CO, NO _x	Apache Boiler	Pass
10/5/2024	NH ₃ , PM ₁₀ , VE	McBurney Wood Fired Boiler	Pass
10/30/2024	PM ₁₀	Planer	Pass
10/31/2024	CO, NO _x	Apache Boiler	Pass
10/15/2025	NH ₃ , SO ₂ , VE, VOC	McBurney Wood Fired Boiler	Under Review
10/16/2025	PM ₁₀	Planer	Under Review
10/21/2025	CO, NO _x	Apache Boiler	Under Review

As shown above, the facility passed all stack tests from January 2020 to October 2025, and preliminary review indicates passing stack tests performed from October 2025 to December 2025. As discussed in detail in Section 7.5, NWCAA used this and other information to determine whether existing monitoring was sufficient.

4 FEDERAL REQUIREMENTS

The facility owns and operates equipment regulated under federal regulations.

4.1 New Source Performance Standards

EPA has established NSPS for new, modified, or reconstructed facilities and source categories in 40 CFR Part 60.

4.1.1 Subpart A – General Provisions

If a NSPS in 40 CFR Part 60 applies to a facility, Subpart A also applies. If a requirement is applicable when triggered by some action, it was not included in the permit. Similarly, if a part of Subpart A did not have concrete requirements for the facility (i.e., if it solely addressed applicability or definitions), it was not included. If the requirement was something in the past, or addressed something that a regulatory agency must do, it was not included. The fact that these parts were not included in the permit does not exempt the facility from the requirements if they are triggered by any future actions.

The Subpart A requirements appear in Section 3 of the AOP.

4.1.2 Subpart Db - Standards Of Performance for Industrial-Commercial-Institutional Steam Generating Units (Greater than 100 MMBtu/hr)

40 CFR 60 Subpart Db addresses emissions from boilers constructed after June 19, 1984 having a heat input of greater than 100 million British thermal units per hour (MMBtu/hr). Subpart Db applies to the cogeneration boiler because the rated heat input of that unit is 430 MMBtu/hr and the unit commenced constructed in 2005.

Subpart Db limits PM emissions to 0.085 lb/MMBtu. At the proposed maximum firing rate, this limit translates into an emission rate of 36.6 lb PM/hr. Subpart Db also requires exhaust opacity to be 20 percent or less (six-minute average), except for one six-minute period per hour, which cannot exceed 27 percent opacity. SPI is required by Subpart Db to monitor opacity with a continuous opacity monitoring system (COMS). These limits do not apply during startup, shutdown, or during a malfunction. The Ecology PSD permit (PSD 05-04 Amendment 3) has a more stringent cogeneration boiler exhaust PM emission limit and NWCAA permit (OAC 938c) has a more stringent cogeneration boiler exhaust opacity limit than corresponding NSPS requirements.

The cogeneration unit burns natural gas during startup and to maintain flame stabilization. Subpart Db imposes SO₂ and NO_x limits on boilers that fire fossil fuels under certain conditions. The SO₂ limits do not apply to boilers that combust natural gas. The NO_x limits in Subpart Db do not apply to boilers that have a federally enforceable requirement that limits annual fossil fuel capacity factor to less than ten percent. SPI maintains on-site records of the quantities and times that natural gas is fired in the cogeneration boiler to ensure that gas provides less than ten percent of the annual fuel input. The AOP imposes a 0.10 annual fuel factor for natural gas exempting the facility from the NO_x limits in the regulation for the cogeneration boiler.

4.1.3 Subpart Dc – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (10-100 MMBtu/hr)

40 CFR 60 Subpart Dc addresses emissions from boilers constructed after June 9, 1989 having a heat input rate greater than 10 MMBtu/hr but less than 100 MMBtu/hr. Subpart Dc applies to the natural gas-fired Apache package boiler because the unit has a heat input rate of 95 MMBtu/hr and was constructed in 2011.

The main boiler/cogeneration plant is scheduled to undergo maintenance for about 5-15

days per year. The Apache boiler is permitted by NWCAA OAC 1089b to burn only natural gas..

4.2 National Emissions Standards for Hazardous Air Pollutants (NESHAP)

EPA has established NESHAP under 40 CFR 63 to regulate HAP emissions from major sources of HAP. This regulatory program defines a "major source" as any facility that has a PTE of more than 10 tons per year of a single HAP or more than 25 tons per year of all HAP combined. The highest single HAP potential to emit at the facility is HCl at 37.7 tons per year. Overall, the facility has a combined PTE of 58.6 tons per year for all HAP. As a result of the annual facility-wide HCl emissions exceeding 10 tons per year, and total HAP emission rate exceeding 25 tons per year, the facility is a major source with respect to the NESHAP program.

4.2.1 Subpart A – General Requirements

If a Standard in 40 CFR Part 63 applies to a facility, portions of Subpart A also apply. If a requirement is applicable when triggered by some action, it was not included in the permit. Similarly, if a part of Subpart A did not have concrete requirements for the facility (i.e., if it solely addressed applicability or definitions), it was not included. If the requirement was something in the past, or addressed something that a regulatory agency must do, it was not included. The fact that these parts were not included in the permit does not exempt the facility from the requirements if they are triggered by any future actions.

Subpart A requirements for notifications are included in Section 3 of the AOP. These sections are triggered by the applicability of other Subparts to the facility.

4.2.2 Subpart DDDD – Plywood and Composite Wood Products

As a major source of HAPs, the facility is subject to applicable promulgated Maximum Achievable Control Technology (MACT) standards. 40 CFR Part 63 Subpart DDDD applies to the dry kilns. Construction of the dry kilns commenced in December 2005. Therefore, these units are considered new sources under 40 CFR 63 Subpart DDDD. The only applicable requirement (40 CFR §63.2252) to the kilns is the initial notification requirement in 40 CFR §63.9(b). Pursuant to 40 CFR §63.9(b)(iii), the initial combined NOC and PSD permit application served as the initial notification for the lumber dry kilns. Therefore, the facility has met this requirement and there are no additional compliance provisions applicable to the facility under this regulation included in the AOP.

4.2.3 Subpart DDDDD – Industrial, Commercial and Institutional Boilers and Process Heaters

40 CFR Part 63 Subpart DDDDD, often referred to as the "Boiler MACT," is intended to regulate industrial, commercial, or institutional boilers or process heaters that are located at a major source of hazardous air pollutants. SPI owns and operates two boilers that are subject to the boiler MACT.

The Apache 95 MMBtu/hr boiler, EU-6, is fired on natural gas and qualifies as an existing unit designed to burn Gas 1 fuels. EU-6 must comply with the work practice standards in 40 CFR 63 Subpart DDDDD Table 3, Line 3, which requires an annual tune-up.

The biomass-fired boiler qualifies as an "existing" "large solid fuel unit" with oxygen trim under the boiler MACT. According to §63.7499, the biomass-fired boiler at SPI qualifies under paragraph (i): Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid. The rule, which includes a variety of emission standards, work practice standards, monitoring, testing, and recordkeeping requirements for such units, has been included in the AOP. The rule allows a facility to comply with some of the standards using

either performance testing or by performing fuel analysis. SPI has requested that both methods be included in the AOP to allow for operational flexibility.

The biomass-fired boiler was required to install a COMS under NWCAA OAC 938c. Table 4 of the boiler MACT specifies operating limits for boilers. Line 4 of this table applies to the biomass-fired boiler at SPI. This line is further split into two options, 4a and 4b. A source must meet one of the two options. SPI will meet option 4a that stipulates a limit of 10% opacity, daily block average. Since SPI is equipped with a COMS, the COMS will be used for showing compliance with the 10% opacity daily block average limit.

4.3 PSD and Major New Source Review

EPA established the Prevention of Significant Deterioration program to ensure that new or expanded sources do not cause a significant deterioration in the air quality of areas that currently meet applicable air quality standards. SPI submitted a PSD permit application for the facility in 2005 because the facility's potential CO emissions exceeded the 250 ton per year PSD applicability threshold for non-designated sources. The facility's initial PSD permit was issued on December 12, 2005 (PSD 05-04). PSD 05-04 Amendment 1 was issued on August 6, 2009. PSD 05-04 Amendment 2 was issued on October 28, 2013. PSD 05-04 Amendment 3 was issued on April 23, 2024. These amendments are discussed further in Section 6 of this document.

4.4 Title IV Acid Rain Provisions

Title IV of the federal Clean Air Act regulates SO₂ and NO_x emissions from fossil fuel-fired electrical generation facilities. 40 CFR §72.6 identifies criteria used to determine whether a facility is subject to the Acid Rain Program. §72.6(b)(4)(ii) states that a biomass-fired cogeneration unit is not subject to the program if it sells no more than one third of its potential annual electrical output capacity or if it sells less than 219,000 megawatt (electric)-hours (MWe-hrs) of electricity annually. A cogeneration unit meeting either of these criteria is not subject to the Acid Rain Program.

The biomass-fired boiler at the facility meets the definition of a "cogeneration unit" in 40 CFR §72.2 because at least a portion of the steam generated by the boiler is delivered first to the steam turbine and then to the adjacent lumber manufacturing facility as steam for heating. Thus, the steam is "used twice." Additionally, SPI is capable of selling up to 219,000 MWe-hrs of power annually, which is more than one-third of the boiler's annual potential electrical output capacity (219,000 MWe-hrs calculated as described in Appendix D to Part 72). However, the boiler is not an affected source because SPI does not sell more than 219,000 MWe-hrs of electricity annually. The facility maintains records of the amount of electricity generated and sold. The electricity sale records are used to confirm the facility sells less than 219,000 MWe-hrs of power annually. Due to the boiler's cogeneration status and electrical sales, this boiler is not considered an affected source.

4.5 Compliance Assurance Monitoring

EPA established the Compliance Assurance Monitoring (CAM) program to regulate emission sources that employ a control device to maintain compliance with an enforceable emission limit or standard. 40 CFR §64.2 establishes applicability criteria for the CAM program:

- The unit is located at a major source,
- The unit is subject to an emission limit, other than an emission limit from a NSPS or NESHAP that was proposed after November 15, 1990,
- The unit uses a control device to achieve compliance with that limit,
- The unit has potential pre-control emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, and,
- The unit is not otherwise exempt.

For units to which all applicability criteria above apply, one further criterion is evaluated to determine whether a CAM Plan is needed: if a unit is equipped with a continuous emissions monitor (i.e., CEM or COM) and monitoring for compliance with a limit is done using the continuous emissions monitor, then a CAM plan is not required for that unit for that specific limit or standard.

With the exception of the biomass-fired boiler and the planer mill dust collection system, none of the facility's emission sources employ pollution control equipment. The cooling tower is equipped with a mist eliminator; however, the primary purpose of the mist eliminator is not to control emissions. All cooling towers employ mist eliminators as process equipment to minimize water loss during operation.

CAM summary for Emission Units at SPI:

Emission Unit	Add-on Control Device Present?	Is unit subject to emission limit or standard for which the unit has a control device?	If control is present, what pollutant does it control?	Are pre-control emissions greater than 100% of major source?	Is unit equipped with a continuous monitor for the pollutant for which it exceeds 100% of major source?	Is a CAM Plan Required?
Cogeneration Facility (biomass-fired boiler)	Yes – ESP, multiclone, & SCR	Yes: PM & Opacity Yes: NOx	ESP - PM & Opacity SCR - NOx	Yes for PM, Opacity, and NOx	Yes, CEMS for NOx Yes, COMS used for some, but not all, opacity limits	NOx: NO – CEM used to show compliance for all applicable limits PM & Opacity: YES for some limits not monitored continuously (see Section 9)
Planer Mill	Yes – Baghouse	Yes: PM & Opacity	PM & Opacity	Yes for PM	No	PM & Opacity: YES (See Section 10)
Cooling Towers	No controls	No controls	No controls	No controls	No	No
Dry Kilns	No controls	No controls	No controls	No controls	No	No
Anti-mold spray chamber	No controls	No controls	No controls	No controls	No	No
Natural Gas package boiler	No controls	No controls	No controls	No controls	No	No

4.5.1 Wood-fired (Biomass) Boiler

The boiler is equipped with a multiclone and ESP for particulate control and an SNCR system for NO_x control. For PM, opacity, and NO_x, the biomass-fired boiler is subject to emission limits stemming from a PSD, 40 CFR 60 Subpart Db, 40 CFR 63 Subpart DDDDD, NWCAA OAC permits, the WAC, and the NWCAA Regulation. As discussed above, the boiler uses control devices to achieve compliance with its opacity, PM₁₀ and NO_x limits.

The pre-control emissions of PM₁₀ and NO_x are evaluated as follows:

- The technical support document for PSD 05-04, which SPI received for the biomass boiler, states that post-control potential emissions of NO_x are 188 tpy. Pre-control emissions of NO_x can only be larger and were not evaluated since post control emissions were above 100 tpy.
- The technical support document for PSD 05-04 states that the post-control potential emissions of PM₁₀ are 54 tpy. Assuming that the ESP and multiclones have a 90 percent control efficiency for PM₁₀, the pre-control potential PM₁₀ emissions are greater than 540 tons per year.

4.5.1.1 NO_x Emissions Limits Monitored Using CEMS

Although the boiler has pre-control emissions of NO_x that are more than 100 tpy, a CAM plan is not required if continuous monitoring using a CEM is required to show compliance with those standards. The facility's PSD permit 05-04 requires that SPI install a NO_x CEMS on the boiler and requires the use of that CEMS to demonstrate compliance with the NO_x limits stemming from the PSD. Therefore, as established in 40 CFR §64.3(d)(1), the NO_x CEMS satisfies the requirements of Part 64 and therefore a CAM plan for NO_x is not required.

4.5.1.2 NO_x Emission Limits Not Monitored Using CEMS

The biomass boiler is not subject to any NO_x emission limits other than those in SPI's PSD 05-04 permit.

4.5.1.3 Opacity Emissions Limits Using COMS

Because the boiler's pre-control PM₁₀ emissions are greater than 100 tpy, the boiler is also subject to CAM review for opacity. The boiler is equipped with a continuous opacity monitoring system (COMS), which was required by NWCAA OAC 938c. The COM is the compliance method for the following OAC 938c and federal NSPS requirements:

1. OAC 938c Condition 3a: 20 percent opacity for a period or periods aggregating more than three minutes in one hour
2. OAC 938c Condition 3b: 5 percent opacity, one hour average and 10 percent opacity, during soot blowing
3. 40 CFR 60 Subpart Db: 20 percent opacity (6 minute average) except for one six-minute average per hour of not more than 27 percent opacity

A CAM Plan is not required for these requirements because the COMS satisfies the requirements for continuous monitoring.

4.5.1.4 Other Opacity Emissions Limits

Because the boiler's pre-control PM₁₀ emissions are greater than 100 tpy, the boiler is subject to CAM review for opacity. The following additional opacity limits apply. These limits are evaluated separately from the limits identified in Section 5.5.1.3 because, unlike the limits in Section 5.5.1.3, the COM is not sufficient to demonstrate compliance as compliance must be demonstrated outside of the boiler stack:

1. NWCAA 451.1: less than 20 percent opacity for any period aggregating more than three minutes in any 60 minute period
2. WAC 173-400-040(1): less than 20 percent opacity for any period aggregating more than three minutes in any 60 minute period
3. OAC 938c Condition 3c: less than 10 percent opacity for any period aggregating more than three minutes in any 60 minute period

NWCAA determined that a CAM Plan was needed for the above requirements. SPI submitted a PM CAM plan for the biomass boiler with their first Title V renewal application as stated in 40 CFR §64.5(b). This CAM plan is applicable to both PM and opacity. SPI proposed a CAM plan based on both COM readings and ESP voltage measurements. The provisions of the CAM plan have been included in AOP terms reference the above mentioned opacity limits. The plan is shown in Section 10 of this document.

Note that in addition to complying with the CAM plan, the monthly visible emission checks required by AOP term 4.12 serve to further demonstrate compliance with the visible emission limits and validate the CAM plan monitoring parameters.

4.5.1.5 PM Emissions Limits

The biomass boiler is not equipped with a particulate matter continuous monitor. The following particulate matter emission limits and standards apply:

1. PSD 05-04: 0.02 lb PM₁₀/MMBtu 24-hour average, based on the heat input value of the fuel
2. PSD 05-04: 37.7 tons PM₁₀ in any consecutive 12-month period
3. NWCAA Regulation and WAC: 0.10 grain/dscf (0.23 g/dry m³) (corrected to seven percent oxygen)
4. NWCAA Regulation and WAC: 0.05 grain/dscf (0.11 g/dry m³) (corrected to seven percent oxygen) when burning gaseous fuel

SPI has submitted a PM CAM plan for the biomass boiler with their first Title V renewal application as stated in 40 CFR §64.5(b). SPI has proposed a CAM plan based on opacity and voltage measurements. The provisions of the CAM plan have been included in AOP terms which reference the above mentioned PM limits. The plan is shown in Section 10 of this document.

Note that in addition to complying with the CAM plan, the monthly visible emission checks required by AOP term 4.12 and the annual PM testing requirements in AOP term 5.1.14 serve to further demonstrate compliance with the PM emission limits and validate the CAM plan monitoring parameters.

4.5.1.6 Large Pollutant Specific Emission Units

According to 40 CFR §64.5(a), a large pollutant-specific emissions unit (PSEU) is one with the potential to emit (taking into account control devices) the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Based on this definition, the biomass boiler is not a large PSEU for PM: the post-control emissions are under 100 tons per year, since the ESP is limited to 0.02 lb/MMBtu, with an annual potential emission of 39.4 tpy of PM.

As discussed above, because the biomass boiler has a post-control limit of more than 100 tpy of NO_x, it would be a large PSEU for that pollutant under CAM. However, since all NO_x

limits for the biomass boiler are required to demonstrate compliance using a CEMS, no CAM plan is required.

4.5.2 Planer Mill

The planer mill dust collection system employs a baghouse for particulate control. The planer mill dust collection system is subject to a PM₁₀ emission limit (0.005 gr/dscf, and not more than 9.4 tons of PM₁₀ per year, from PSD 05-04 Amendment 3) and a baghouse control device achieves compliance with its PM₁₀ limit. The baghouse is also subject to opacity limits (generally applicable opacity limits in Section 4 of the AOP). According to Chapter 1 of EPA's CAM Technical Guidance Document⁶, pre-control device emissions can be estimated using post-control potential to emit and the estimated control device efficiency. The baghouse controlling the planer mill is subject to an annual PM₁₀ limit of 9.4 tons per year. Assuming conservatively that the baghouse has greater than 99 percent control efficiency for PM₁₀, the pre-control potential PM₁₀ emissions are greater than 930 tons per year. As a result, the baghouse controlling emissions from the planer mill is subject to CAM.

Visible emissions from baghouse are directly related to sawdust particulate matter emissions; when a baghouse is functioning properly, no visible emissions will be observed. Since the baghouse controls PM emissions to below the major source threshold, 40 CFR §64.3(b)(4)(iii) requires data collection at least once per 24-hour period. The SPI AOP was modified during the previous renewal to include the CAM Plan, which consists of daily observation of emissions from the baghouses and daily readings of the pressure drop across the baghouses. This monitoring, annual testing already required, plus monitoring records were found to be appropriate based on guidance provided by EPA in a Frequently Asked Questions Concerning the CAM Rule (October 2004) guidance document⁷. In this document, EPA stated that daily observation for any visible emissions from a baghouse stack satisfies the monitoring requirement of CAM for PM emissions.

As mentioned above, the maximum PM emission rate of the planer mill baghouse is 9.4 tpy. The potential controlled PM₁₀ emissions from the planer mill baghouse are less than 100 tpy, and therefore the unit is not classified as a large PSEU.

SPI has proposed a CAM plan based on pressure drop monitoring across the bags of the baghouse. The CAM provisions are included in AOP Terms 4.13 and 5.3.1. The CAM plan is shown in Section 11 of this document.

4.6 Other Federal New Source Review Programs

The entire jurisdiction of NWCAA is designated as in attainment for all criteria pollutants. No other federal new source review programs for new or modified sources of air pollution in a nonattainment area are applicable.

⁶ http://www.epa.gov/ttnchie1/mkb/documents/TSD_1.pdf, accessed on 1/12/2021

⁷ www.epa.gov/ttn/emc/cam/camfaq1r1004.pdf, accessed on 1/12/2021

5 PSD AND OAC PERMITS

SPI has been issued a series of permits by Ecology and NWCAA. Section 5.1 discusses historical orders, while Section 5.2 discusses currently applicable orders.

5.1 Obsolete Orders

This section describes OACs and permits that are expired or superseded in order to provide the facility history of changes impacting emissions.

5.1.1 OAC 938 and PSD 05-04

SPI submitted a combined Notice of Construction (NOC) application and a PSD permit application for the facility to NWCAA and Ecology on August 22, 2005. OAC 938 and the permit PSD 05-04 were issued in parallel on December 12, 2005. Construction of the SPI facility began December 2005 and the facility commenced operations on December 30, 2006 under these permit actions.

OAC 938 limited throughput of the kilns to 150 million board feet of lumber over any consecutive 12-month period. The purpose of the requirement was to limit formaldehyde emissions to less than 195 lb/year, which is the point at which modeling indicated that the “acceptable source impact level (ASIL)” for the pollutant formaldehyde was reached. The 195 lb/year amount and the resulting 150 MMbf/year limit were based on the worst case of the two allowed wood species – Hemlock. Under this scenario, SPI could dry up to 100 percent hemlock and remain under the formaldehyde ASIL. PSD permit 05-04 limited VOC and PM₁₀ emissions from the kilns as requested by SPI, in order to facilitate issuance of the PSD permit. These emission caps kept the facility below the thresholds requiring significant modeling work.

5.1.2 PSD 05-04 Amendment 1

PSD 05-04 was superseded by Amendment 1 issued and effective August 6, 2009.

Throughout 2007 and 2008, SPI found that more of the total production required drying because the market for green (not dried) lumber was declining (as stated in the OAC 938a modification application). Therefore, the facility needed to dry most, if not all, of the mill production in order to remain competitive. Additionally, according to SPI, production improvements implemented by the facility resulted in an actual mill capacity of 400 MMbf/yr. The actual capacity of the kilns is also now known to be up to 400 MMbf/yr as-built.

In the PSD modification application and the associated minor permit modification (OAC 938b) application, SPI requested that the kiln throughput limit be lifted to 400 MMbf/yr with resulting criteria, toxic air pollutant (TAP), and hazardous air pollutant (HAP) emission increases. SPI proposed that kiln throughput be limited by emissions not by production rate directly in order to provide flexibility for the species dried in the kilns.

The PSD permit addresses the criteria pollutant emission limits and OAC 938b addresses the toxic air pollutant limits that changed during this permit revision.

Because the proposed project was a PSD circumvention case avoiding full modeling requirements, PSD guidance document, Tyler memo 7/5/85 page 10 requires that the project be treated as a new source for purposes of modeling. SPI utilized Environ consultants to fulfill the modeling requirements and provide a full ambient impact analysis. WA DOE and EPA conducted the reviews for all the modeling results.

The ambient impact results showed that full throughput at the kiln had to be limited in conjunction with extending the facility fence line to the west of the kilns in order to manage

PM_{2.5} increment consumption. The PSD 05-04 Amendment 1 terms includes terms to address the new property boundary and limiting the kiln throughput to meet the modeling results. The PSD 05-04 Amendment 1 permit also includes ambient PM_{2.5} monitoring in the area of proposed impact within the facility boundary.

The application requested that the PSD NO_x limit be lifted from 188 tpy to 245 tpy to offset the formation of secondary visible emissions resulting from the reaction of fuel salts with injected urea. This increase is seen as dropping the long term 0.10 lb NO_x /MMBtu leaving only the short-term 0.13 lb NO_x /MMBtu limit in place.

5.1.3 PSD 05-04 Amendment 2

PSD 05-04 Amendment 2 was issued on , and superseded PSD 05-04 A1.

SPI applied to Ecology to change their PSD permit, asking to revise the averaging period of their CO limit from 0.35 pounds per million British thermal units (lb/MMBtu) emission limit from one hour to a 30-day rolling of the facility's biomass boiler.

SPI argued that since their boiler burns wet biomass, and the fuel does not instantaneously combust as it would in a natural gas boiler, the boiler grate can carry a significant amount of fuel, even up to ½ hour worth of fuel under some conditions. Also, SPI argued, it takes 20 minutes for fuel to travel from the fuel house through the fuel delivery system and into the furnace. Fuel is put on the grate for a current need, but when that need changes, it can take between ½ hour to nearly an hour for the boiler to level the fuel back to the current demand and achieve the result of a full fuel change if we are changing fuel source. This could result in excess CO emissions when the limit is based on a one hour averaging period. Therefore, SPI concluded, a one hour averaging time is inconsistent with the boiler design parameters.

Ecology considered the request and agreed that a one hour averaging period does not provide sufficient time for a biomass boiler to be operated properly. Using historical CEMS data from SPI, as well as other permits written around the same time as the original PSD 05-04 (2005), Ecology proposed a limit of 0.28 lb/MMBtu, 24-hour average.

5.1.4 OAC 938a

OAC 938a was issued on January 17, 2008, superseding and replacing OAC 938.

On December 18, 2007, SPI applied to change the kiln throughput limitations of OAC 938. Throughout 2007 SPI found that the facility was drying less hemlock than anticipated, and needed to dry more Douglas fir lumber to respond to market demands. SPI requested changes in their permit to raise allowable kiln throughput to 180 MMbf on a calendar year basis and the addition of a formaldehyde limit of 195 pounds over any consecutive 12-month period. The modified permit allowed more flexibility, requiring SPI to track throughput of each allowable wood species and to calculate formaldehyde emissions on a monthly basis.

During the time interval between issuance of OAC 938 and 938a, new emission factors had been developed for formaldehyde from dry kilns. It was found that emissions of formaldehyde increased if the kiln operated at temperatures in excess of 200°F. The permit findings identified kiln temperatures controlled below 200°F to be BACT for VOC and TBACT.

5.1.5 OAC 938b

OAC 938b was issued on February 23, 2009, superseding and replacing OAC 938a.

In conjunction with the PSD 05-04 Amendment, SPI requested associated and additional changes to the NWCAA OAC. SPI requested that the COMS-measured opacity limit on the cogeneration unit be increased from five percent to 10 percent to accommodate soot

blowing. In interviews with the facility operators, soot blowing at the boiler was being deferred from the recommended rates to meet the opacity limits in place. OAC 938b provided a term that allows for scheduled soot blowing twice per day, easing the opacity limit during that hour to the requested 10 percent limit. This change does not impact the BACT determination for visible emissions for the boiler – most other wood-fired boilers have provisions for soot blowing included in the permits.

Emissions of acetaldehyde, acrolein, and formaldehyde at full capacity in the kilns resulted in ambient levels exceeding the ASILs, therefore, Tier 2 review was required for those compounds. The tier 2 review was conducted by Ecology and the technical support document is included in the background documentation for OAC 938b.

T-BACT was employed to mitigate the impact of the emissions in this case. “T-BACT” is best available control technology for toxic air pollutants. The kilns in question were using T-BACT at the time of the original application, which is no add-on controls, plus the additional limitation of not exceeding an average operating temperature of 200 °F.

OAC 938b imposed facility-wide limits of acetaldehyde, acrolein, and formaldehyde reflective of the Tier 2 modeling analysis. The WAC 173-460 tier 2 approval by Ecology was included as part of the OAC upon issuance of the permit.

SPI submitted an ammonia emissions monitoring plan to the NWCAA in 2007. The plan noted that testing demonstrated that at the highest input of urea, the facility does not exceed the 50 ppm_{dv}⁸ limit imposed by the permit. Therefore, the facility proposed to demonstrate compliance with the ammonia slip limit annually through source testing. The AOP reflects that there is no additional monitoring for ammonia slip beyond the annual testing and that any modification triggers an update of the plan. OAC 938b includes language that places operation and maintenance (O&M) requirements on the urea injection system.

5.1.6 OAC 1089

OAC 1089 was issued on June 21, 2011, and installation and operation of a 95 MMBtu/hr natural gas-fired package boiler in order to maintain kiln operation during the wood-fired boiler down-time.

The wood-fired boiler scheduled maintenance time is 5-15 days per year and is under contract with Puget Sound Energy for power production for all remaining days of the year. SPI requested an operating limit of 876 hours per year to accommodate both scheduled maintenance and unforeseen boiler downtime.

OAC 1089 was issued on 6/21/2011, and was superseded by OAC 1089a on 11/14/2014.

5.1.7 OAC 1089a

OAC 1089 was superseded by OAC 1089a issued and effective November 14, 2014.

On October 27, 2014, SPI applied to NWCAA to amend the language in Condition 1 of OAC 1089 that keeps the natural gas-fired package boiler as “limited use” boiler as defined in 40 CFR 63 Subpart DDDDD.

OAC 1089 limited the boiler to 876 hours of operation per calendar year. The language was

⁸ “ppm” means parts per million. Sometimes this is written as “ppm_{vd}” meaning ppm on a volumetric, dry, basis, to distinguish ppm on a weight basis. Stack gas is usually sampled through a probe placed somewhere in the middle of the stack cross-section. The moisture is removed from the gas stream as part of the sampling process. The stack gas sample is analyzed for the pollutant in question, with the lab results being calculated as cubic feet (or meters) of pollutant per million cubic feet (or meters) of dry stack gas.

changed to reflect what 40 CFR 63 Subpart DDDDD allows: that limited use boilers are those that do not exceed 10% of the annual capacity factor.

The annual capacity factor is defined as the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

The conditions pertaining to NO_x and CO limits, as well as the testing provisions, also were deleted. The original permit called only for an initial test, which had been done on 05.10.2012. Results were 1.08 lb NO_x/hour (limit of 1.7 lb/hr) and 0.08 ppmv CO (limit of 50 ppmv).

5.2 Effective Orders and Permits

The following Orders of Approval to Construct (OAC) and Regulatory Orders for specific equipment are currently valid at the facility and included in the AOP.

5.2.1 PSD 05-04 Amendment 3

PSD 05-04 Amendment 3 was issued April 23, 2024 superseding and replacing PSD 05-04 Amendment 2.

SPI applied to Ecology to change their PSD permit, asking to revise the averaging period of their CO limit from 0.35 pounds per million British thermal units (lb/MMBtu) emission limit from one hour to a 30-day rolling of the facility's biomass boiler.

Using historical CEMS data from SPI, as well as other permits written around the same time as the original PSD 05-04 (2005), Ecology agreed to change the limit to 0.28 lb/MMBtu, 24-hour average.

5.2.2 OAC 938c

OAC 938b was superseded by OAC 938c issued and effective May 8, 2013.

On February 14, 2013, SPI submitted an application proposing to utilize "urban wood waste" fuel ("alternative fuel") for up to 50% of the wood-fired boiler's fuel demand. Specifically, SPI proposed to remove the words "from wood products industries" from condition 8 of OAC 938b to allow no more than 50% of fuel combusted in the existing biomass-fired cogeneration boiler to be purchased from fuel suppliers other than those in the wood products industry.

5.2.3 OAC 1089b

In June of 2021, SPI requested an amendment to OAC 1089a to remove the annual capacity factor limiting operation of the natural gas-fired Apache package boiler. The boiler became subject to the annual tune-up requirements of 40 CFR 63 Subpart DDDDD, rather than the 'limited use boiler' tune-up frequency of once every five years. This renewal incorporates the removal of the annual capacity factor from OAC 1089b and the subsequent change in operation of the boiler into the AOP.

6 COMPLETED REQUIREMENTS

These requirements are applicable, but they are “one-time” in nature, in that they only have to be complied with once, usually in the startup phase of a project. Once this type of requirement has been fulfilled, it is placed in this Completed Requirements Section.

6.1 40 CFR 60 Subpart Db, §60.40b (6/13/07, unless otherwise noted)

The cogeneration facility is subject to Subparts A and Db of the NSPS. Subpart A contains a number of notification requirements that are considered to be one-time. Once these notification requirements have been fulfilled they can be moved to this section. SPI submitted the notification of commencement of construction in their application for OAC 938 on August 22, 2005. They submitted notification via email that the cogeneration facility had commenced operation, stating that operations had commenced on December 30, 2006. They submitted the notification and test protocol for the initial source testing and relative accuracy test audit (RATA) of the continuous emission monitoring system (CEMS) on December 21, 2007.

6.2 40 CFR 63 Subpart DDDD, §63.2252 (2/16/06)

For process units not subject to the compliance options or work practice requirements specified in §63.2240 (including, but not limited to, lumber kilns), the source is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of Subpart DDDD, or any other requirements in subpart A of 40 CFR 63, except for the initial notification requirements in §63.9(b). SPI submitted the initial notification in their application for OAC 938 on August 22, 2005. They submitted notification via email that the dry kilns had commenced operation, stating that operations had commenced on December 30, 2006.

6.3 40 CFR 63 Subpart DDDDD §63.7545(b)

According to §63.7545(b), SPI must have submitted to an initial notification not later than 120 days after 1/31/2013. SPI has submitted the initial notification to EPA Region X with a letter dated 5/30/2013.

6.4 40 CFR 63 Subpart DDDDD Table 3 Line 4

According to 40 CFR 63 Subpart DDDDD, Table 3, Line 4, an existing boiler located at a major source facility must have a one-time energy assessment performed by a qualified assessor according to the provisions listed in Table 4. The report was finished on July 31, 2015.

6.5 40 CFR 63 Subpart DDDDD §63.7510

According to §63.7510, as part of the initial compliance demonstration, SPI must have performed initial compliance tests for HCl, Hg, and PM according to §63.7520 and Table 5, a CEM performance evaluation for CO according to §63.7525(a) and a COM performance evaluation for opacity according to §63.7525(c), as well as the initial boiler tune-up. These tests and performance evaluations were completed on 6/11/2015.

6.6 PSD 05-04 Amendment 3

Section A, General Conditions: General standard conditions from PSD 05-04 Amendment 2 were moved into Section A, General Conditions in PSD 05-04 Amendment 3. These

conditions are substantially equivalent to conditions found in Section 2 of the AOP (Standard Terms and Conditions) and are not included in the AOP.

Condition 1: Requirements specified in the following approval conditions for SPI to notify or report to or acquire approval or agreement from "Ecology and the Northwest Clean Air Agency" may be satisfied by providing such notification, reporting, or approval request to the NWCAA if the approval conditions of this PSD permit have been incorporated in SPI's Title V permit (40 CFR Part 70). Therefore, there are no ongoing compliance provisions in this term to incorporate into the AOP.

Condition 2: requires that SPI shall obtain and maintain exclusive control over property described as "That portion of New Lot 2 of that certain Boundary Line Adjustment as shown on Record of Survey recorded under Auditor's file number 200905290102, records of Skagit County, Washington.

The requirement to obtain control over the property is implicit and is not included in the term as it appears in the AOP. And for simplicity, the requirement to maintain this area describes the boundary in general terms as including the area east of the rail spur and the northwest corner of the Fredonia Grange lot. In the event of a dispute in this description, the underlying requirement holds precedence and the survey information will be compared.

Control of the property was confirmed by SPI in correspondence, approved by NWCAA and Ecology on November 18, 2009.

6.7 OAC 938c

Condition 11 required SPI to submit a notification of the date they received first alternative fuel, and the date they first burned that fuel in their boiler. According to an email from Curt Adcock of SPI to Erica Shuhler of NWCAA received on 6/18/2013, alternative fuel was first received by SPI on June 12, 2013 and it was burned in the boiler on June 19, 2013.

7 GENERAL PERMIT ADMINISTRATION AND ASSUMPTIONS

7.1 Permit Content

Applicable requirements that were satisfied by a single past action on the part of the source are not included in the AOP. An example of this would be performance testing to demonstrate compliance with applicable emission limitations as a requirement of initial startup (see Section 6). Also, regulations that require action by a regulatory agency, but not of the regulated source are not included as applicable permit conditions.

7.2 Federal Enforceability

Federally enforceable requirements are terms and conditions required under the Federal Clean Air Act (FCAA) or under any of its applicable requirements. Local and state regulations may become federally enforceable by formal approval and incorporation into the State Implementation Plan (SIP). 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 they are identified in the permit as enforceable only by the state. Two different versions (identified by the date) of the same regulatory citation may apply to the source if the date NWCAA adopted the regulation lags behind changes made to the Washington Administrative Code (WAC) or federal regulations. The citation for each applicable requirement in the permit includes a date, which is the effective date in the case of a WAC, or the approval date for NWCAA Regulation sections, or the Federal Register publication date for federal regulations.

7.3 Future Requirements

Applicable requirements promulgated with future effective compliance dates may be included as applicable requirements in the permit. 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 permit.

There are presently no pending applications to construct or modify SPI in such a way as to trigger New Source Review. SPI has certified in the permit renewal application that the facility will meet any future applicable requirements on a timely basis.

7.4 Compliance Options

SPI 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.

7.5 Gap Filling and Sufficiency Monitoring

Title V of the Federal Clean Air Act is the basis for the EPA's 40 CFR 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 AOP for that source. Title V also requires that each applicable regulation be accompanied by a federally enforceable means of "reasonably assuring continuous compliance." Title V, 40 CFR 70, and WAC 173-401-615 all contain a "gap-filling" provision that enables NWCAA to

add monitoring where no monitoring is present⁹. 40 CFR Part 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 AOP.

The majority of cases where monitoring needed to be added were older regulations and permits that contain no monitoring. For example, NWCAA used its gap-filling authority to add monitoring for the 20 percent visible emission standard, NWCAA 451.1. In any term where gap-filling has taken place, the regulatory citation for that term will contain will contain the words "directly enforceable" and the introductory paragraphs for the AOP table include the reference to the citation of the gap-filling requirement.

There were also some limited cases where monitoring did exist but was found to be insufficient. NWCAA used its sufficiency monitoring authority (WAC 173-401-630(1)) to add monitoring in those cases. "Directly Enforceable – Sufficiency" is included in the AOP term when NWCAA used its authority supplement insufficient monitoring and the introductory paragraphs for the AOP table include reference to the citation for the sufficiency monitoring requirement.

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 requirements 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 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, an upset that causes an exceedance at the biomass-fired cogeneration boiler could have a greater environmental impact than failing to use ultra-low sulfur diesel at an emergency

⁹ WAC 173-401-615(1) Monitoring. Each permit shall contain the following requirements with respect to monitoring:

(a) All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated pursuant to sections 504(b) or 114(a)(3) of the FCAA;

(b) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to subsection (3) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph; and

(c) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.

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.

The following tables lists where NWCAA used its gap-filling or sufficiency monitoring authority.

Table 7-1 AOP Terms with Directly Enforceable Gapfill Provisions

AOP Term	Description	Monitoring
4.1	Required monitoring reports	Reporting periods identified
4.2	Operation and maintenance	Monitor, keep records and report
4.3-4.6, 4.22	Nuisance	Procedure followed when complaints are received
4.7-4.11	Fugitive PM	Procedure followed when complaints are received
4.12-4.16, 4.22	Visible emissions	Visible emissions monitoring
4.17-4.21	Sulfur dioxide	Burn biomass or natural gas only
5.1.6	Boiler startup	Recordkeeping to demonstrate startup has occurred
5.1.7	Boiler shutdown	Recordkeeping to demonstrate shutdown has occurred
5.1.18- 5.1.19	Cogeneration unit regulatory status	Maintain records of electricity generation
5.5.1, 5.5.4	Anti-mold spray chamber	Recordkeeping and calculation of rolling 12 month VOC totals

Table 7-2 AOP Terms with Directly Enforceable Sufficiency Provisions

AOP Term	Description	Monitoring
5.1.2	Recordkeeping for rejected fuel loads	Ensuring the facility keeps records of rejected fuel loads onsite
5.3.1	Recordkeeping for planer baghouse	Keep records of lumber processed per month and calculate rolling 12 month total of PM10 emissions
5.4.4	Lumber drying kilns VOC limit	Clarifying VOC records include rolling 12 month totals

7.6 Inapplicable Requirements

WAC 173-401-640 requires the permitting authority to issue a determination regarding the applicability of requirements with which the source must comply. Table 6-1 of the AOP lists requirements that are deemed inapplicable to the facility. These inapplicable requirements must be listed in the AOP in order for the permit shield to apply. The basis for each determination of inapplicability is included in the table.

8 PERMIT ELEMENTS AND BASIS FOR TERMS AND CONDITIONS

8.1 Permit Organization

The permit is organized in the following sequence:

1. Permit Information
2. Attest
3. Table of Contents
4. Emission Unit Identification
5. Standard Terms and Conditions
6. Generally Applicable Requirements
7. Specific Requirements for Emissions Units
8. Inapplicable Requirements

8.2 Section 1 – Permit Information, Attest, and Emissions Unit Description Sections

The General Information section identifies the source, the responsible corporate official, and the NWCAA personnel responsible for permit preparation, review, and issuance. The Attest section provides authorization by NWCAA for the source to operate under the terms and conditions contained in the AOP. The Emissions Unit Identification section lists the significant emissions units, associated control equipment, fuel type, applicable orders and other permits, and installation dates. This section is a general overview of the facility. Detailed information about the plant can be found in the permit application and supporting files.

8.3 Section 2 – Standard Terms and Conditions

The Standard Terms and Conditions section of the permit specifies administrative requirements or prohibitions with no ongoing compliance monitoring requirements. The legal authority for the Standard Terms and Conditions are provided in the citations in Section 2 of the permit. The description of the regulation in each of these conditions (with the exception of those labeled “Directly enforceable”) is sometimes a paraphrase of the actual regulatory requirement. Where there is a difference between the actual requirement and the paraphrased description, the cited regulatory requirement takes precedence. In an effort to make the section more readable, the terms and conditions have been grouped by function. In some cases, similar requirements at the state and local authority level have been grouped together.

Several permit conditions in Section 2 are labeled “Directly enforceable”. These conditions are a clarification of the regulatory requirements, as the NWCAA interprets those requirements. They are legal requirements with which the permittee must comply and are directly enforceable through the permit.

A number of requirements that would not be applicable until triggered have also been included in this section. An example of one such requirement is the requirement for a source to submit an application for new source review.

8.4 Section 3 – Standard Terms and Conditions for NSPS and NESHAP

8.4.1 NSPS

The applicable requirements of Subpart A of 40 CFR 60 are in this Section. Subpart A contains requirements that apply whenever a specific New Source Performance Standard applies. NSPS Subpart Db applies to the cogeneration unit, so Subpart A applies to that unit as well.

8.4.2 NESHAP

The applicable requirements of Subpart A of 40 CFR 63 are in this Section. Subpart A contains requirements that apply whenever a specific NESHAP Standard applies. 40 CFR 63 Subpart DDDDD applies to the cogeneration unit and the package boiler, so Subpart A applies to those units as well.

8.5 Section 4 – Generally Applicable Requirements

The Section 4 - Generally Applicable Requirements section of the AOP identifies requirements that apply broadly to the facility. These requirements are generally not called out in NOC approvals. Instead, they are found as general air pollution rules such as the NWCAA Regulation or the WAC.

For example, regulations addressing general air pollution sources in Washington are contained in WAC 173-400. NWCAA has also established regulations that apply locally. Several general provisions already included in the existing PSD permit continue to apply to the Facility and are included in this Section:

WAC 173-400-040 General Standards for Maximum Emissions (adopted by the NWCAA under Section 401.1).

NWCAA Regulation Section 451 Emission of Air Contaminant – Visual Standard

WAC 173-400-050 and NWCAA Regulation Section 455 identify emission standards for combustion and incineration units, and limit particulate matter emissions. The requirements in 455.12 for “existing” sources that burn wood to produce steam don’t apply to McBurney wood fired boiler, EU-1, at SPI as the boiler is not considered existing under the rule.

NWCAA Regulation Section 535 Odor Control Measures

NWCAA Regulation Section 550 Preventing Particulate Matter from Becoming Airborne

The first column of the Generally Applicable Requirements table in Section 4 includes the permit term, numbered 4.1, 4.2, etc. The second column is the legal citation and contains the enforceable requirement. If the requirement is not federally enforceable, it is specifically noted as “*State only*” along with the version date of the requirement. The third column is a paraphrase of the requirement, for descriptive purposes only, and is not intended to be a legal requirement. The last column contains the monitoring, recordkeeping and reporting (MR&R) requirements the source must perform to determine if it is maintaining on-going compliance with the corresponding requirement. Again, it is a paraphrase of the MR&R from the cited underlying requirement unless stated as “directly enforceable”.

Many of the permit requirements do not need to be explained in this Statement of Basis because the legal and factual basis for the requirement is self-evident. Some of the terms, however, contain requirements that are not well defined or have MR&R for which the rationale is not readily apparent. For these, additional discussion is provided below.

8.5.1 Nuisance (odor) and Fugitive Emissions (Permit Terms 4.3 - 4.12, 4.24):

NWCAA Regulation 530 is a state only requirement that prohibits the discharge of air contaminants that are likely to be injurious to health, property or which unreasonably interfere with enjoyment of life and property. WAC 173-400-040(5) prohibits emissions detrimental to health and property. WAC 173-400-040(4) is a similar state requirement that requires "recognized good practice" to reduce odors to a reasonable minimum.

NWCAA Regulation 550 is a federally enforceable requirement that requires reasonably available control technology (RACT) for all fugitive dust emissions. WAC 173-400-040(3) addresses fugitive dust emissions for some activities and WAC 173-400-040(8) requires reasonable precautions or reasonably available control technology (RACT) to control fugitive emissions. Both of the Ecology regulations are federally enforceable. Recording of fugitive dust emissions is not necessarily a violation of the requirement, since the requirement does not prohibit fugitive dust emissions, but prohibits fugitive dust unless RACT is employed. RACT is employed for all sources of dust at this plant. Equipment controlled or vented directly through a stack is incapable of violating this standard while complying with the other requirements in the permit. WAC 173-400-040(2) is a state only regulation that prohibits emissions 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.

The monitoring method specifies monthly facility inspections to monitor for nuisance and fugitive emissions with SPI taking corrective action within 24 hours, if any nuisance or fugitive dust emissions are noted. In addition to the periodic inspections described above, SPI is also required to actively respond to citizen complaints. Records must be kept of periodic inspections, any complaints, problems found, and corrective actions taken.

Term 4.24 comes from Condition 1 of OAC 938c, and requires fugitive emissions to be controlled such that no visible emissions are detected at any point beyond the plant property line as measured by Reference Method 22.

8.5.2 Particulate Matter (Permit Terms 4.13 - 4.17):

The cogeneration facility and the sawmill baghouse exhaust stacks and the kilns are the only likely point sources of particulate matter emissions in the SPI facility. The MR&R requires SPI to periodically inspect the entire facility for visible emissions that would indicate PM emissions. If visible emissions are found, SPI is to take corrective action and to document the incident.

8.5.3 Sulfur Dioxide and Fuel bound Sulfur (Permit Terms 4.18 - 4.23)

8.5.3.1 Sulfur Dioxide, Stack Emissions (Permit Terms 4.18 - 4.21):

NWCAA Regulations 462 and 410 and WAC 173-400-040(6) have been grouped together under Permit Terms 4.16 through 4.18 since they are equivalent requirements (SO₂ emissions not to exceed 1,000 ppmvd) and have the same monitoring requirements.

The second paragraph of WAC 173-400-040(6), which is not in the NWCAA regulations and is not adopted into the SIP, allows for exceptions to this requirement if the source can demonstrate that there is no feasible method of reducing the SO₂ concentrations to 1,000 ppm. This requirement is not federally enforceable and is not an applicable requirement for sources regulated by the NWCAA.

The cogeneration unit burns only wood, which contains virtually no sulfur, burning natural gas only on startup and occasionally as required to maintain stable combustion. The

following calculation shows that it is mathematically impossible for a unit to emit 1,000 ppm sulfur dioxide while burning natural gas.

According to *Perry's Chemical Engineer's Handbook*, each cubic foot of natural gas requires approximately 10 cubic feet of air for combustion, yielding approximately 11 cubic feet of combustion exhaust gases, consisting mostly of nitrogen, water vapor, and carbon dioxide. The sulfur in the natural gas will almost all be converted to sulfur dioxide, with each cubic foot of sulfur producing the same volume of sulfur dioxide. Since each cubic foot of natural gas contains 1.306×10^{-5} cubic foot of sulfur, each cubic foot of stack exhaust will contain approximately:

$$1.306 \times 10^{-5} \frac{ft^3 S}{ft^3 nat. gas} \times \frac{1 ft^3 SO_2}{1 ft^3 S} \times \frac{1 ft^3 nat. gas}{11 ft^3 stack exhaust} = 1.188 \times 10^{-6} \frac{ft^3 SO_2}{ft^3 stack exhaust}$$

This is equivalent to 1.19 ppmvd SO₂. Note that this estimated value is about one-tenth of one percent of the 1,000 ppm SO₂ standard. Therefore, it is reasonable to assume that combustion units that are fired on natural gas cannot exceed the 1,000 ppm SO₂ limits in NWCAA Regulations 462 and 410 and WAC 173-400-040(6).

1. Fuel Sulfur Content (Permit Term 4.22):

Natural gas is used on a limited basis in the cogeneration unit. NWCAA 520 limits sulfur content of gaseous fuels to a maximum of 412 ppm sulfur, which is about 24 grains of sulfur per 100 standard cubic feet. Natural gas is supplied via pipeline by Cascade Natural Gas and typically contains less than 2 grains of sulfur per 100 standard cubic feet:

Note:

$$\frac{2 gr. Sulfur}{100 ft^3} \times \frac{1 lb}{7000 gr} \times \frac{1 lb - mole}{32 lb} \times \frac{385 ft^3}{1 lb - mole} \times 10^6 = 34 ppm$$

A "lb-mole" of a pure gas weighs the molecular weight of that gas in pounds and occupies 385 ft³ at 32° F and 1 atmosphere pressure. A "lb-mole" of sulfur (S) weighs 32 lb and reacts with a lb-mole of oxygen (O₂) which also weighs 32 lb to form a lb-mole of sulfur dioxide, which weighs 64 lb. Therefore, 2 lb of SO₂ are emitted for every lb of sulfur in the fuel. Because one lb-mole of sulfur reacts to form one lb-mole of sulfur dioxide, each cubic foot of sulfur in the fuel results in one cubic foot of sulfur dioxide out the stack.

SPI demonstrates compliance with this requirement by burning natural gas, which is inherently low in sulfur, as required in Term 4.18. No oil is burned in any of the equipment at SPI.

8.6 Section 5 – Specific Requirements for Emissions Units

This section lists requirements that apply to the specific emission units, such as the cogeneration unit, the planer mill, dry kilns, etc. All of the general requirements from Sections 2 and 4 apply as well. Section 3 applies in the case of any emission unit that has an applicable NSPS or NESHAP. The format and organization of this section is the same as the table for the generally applicable requirements in Section 4.

9 CAM PLANS - ESP

COMPLIANCE ASSURANCE MONITORING PLAN
SIERRA PACIFIC INDUSTRIES, BURLINGTON DIVISION
ELECTROSTATIC PRECIPITATOR

I. Background

A. Emissions Unit

Description:	McBurney Biomass Fired, Water wall boiler with natural gas as secondary fuel.
Identification:	McBurney Boiler
NWCAA ID:	EU-1 Cogeneration Facility
Facility:	Sierra Pacific Industries – Burlington Division Mount Vernon, Washington

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	NWCAA AOP 019 OAC 938C
	PSD 05-04 Amendment 2 40 CFR Part 60 Subpart Db 40 CFR Part 63 – NESHAP, Major Sources

Emissions Limits:	
PM ₁₀	0.02 lb/mmbtu (24-hour average) [PSD]
PM ₁₀	37.7 tpy (any consecutive 12-month period) [PSD]
PM*	0.085 lb/mmbtu [40 CFR 60]
PM*	0.037 lb/mmbtu [40 CFR 63]

Current monitoring requirements:	Maintain and operate continuous opacity monitoring system (COMS) and perform annual performance stack testing.
----------------------------------	--

C. Control Technology: Mechanical collector followed by a 4-Zone Electrostatic Precipitator

II. Monitoring Approach

The key elements of the monitoring approach, include the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1 and Table 2.

TABLE 1. OPACITY MONITORING APPROACH

I. Indicator	Opacity is used as an indicator of ESP performance.
Measurement Approach	A continuous opacity monitor (COM) provides continuous information to boiler operators to confirm proper operation of the ESP.
II. Indicator Range	<p>Any of the following shall be considered an excursion of the ESP:</p> <ul style="list-style-type: none"> • Exceeding 20% opacity for a period or periods aggregating more than 3 minutes in any 1 hour as measured by a COMS; • Exceeding 5% opacity (1-hour average) as measured by a continuous opacity monitoring system (COMS), except for periods of soot-blowing; • Exceeding 10% opacity (aggregated 3 minutes in any 1 hour) as measured by WA DOE Method 9A. • Exceeding 20% opacity for a period or periods aggregating more than 6 minutes in any 1 hour as monitored by Method 9. <p>Note: Soot-blowing shall occur as a regularly scheduled event and shall not exceed 1 hour per 8-hour shift. Soot-blowing shall not cause the boiler stack to exceed 10% opacity (1-hour average) as measured by COMS. Deviations from the regular soot-blowing schedule that result in excess emissions shall trigger agency notification.</p>
III. Performance Criteria	More than 20 years of operating experience with a COM have demonstrated that opacity is an excellent indicator of ESP performance.
A. Data Representativeness	
B. Verification of Operational Status	Hourly recording of T/R voltages and displays in boiler control room confirm operational status.
C. QA/QC Practices and Criteria	Confirm the meters read zero when the unit is not operating. The COM is checked quarterly and calibrated as appropriate.
D. Monitoring Frequency	Continuous monitoring by COM. Frequent visual observations of stack opacity by non-certified plant personnel.
Data Collection Procedures	COM observations are continuously recorded.
Averaging period	Varies based on permit requirements indicated above (3 min and 6 min).

TABLE 2. ESP MONITORING APPROACH

I. Indicator	Secondary voltage (to transformer/rectifier [T/R]) is measured for each field to ensure that proper conditions exist in each field for particulate matter collection.
Measurement Approach	The secondary voltage to each T/R is monitored hourly and recorded to confirm proper operation of the ESP. High and low voltage alarms for the operators are present in the control room.
II. Indicator Range	An excursion is defined as when the Kilovolts to two or more of the transformer rectifier (T/R) sets are above 55kv or less than 10kv. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria	The voltages are measured using the instrumentation the manufacturer provided with the ESP. The maximum and minimum allowable T/R voltages are based on manufacturer recommended values. Shut-off alarm to the unit is set at 5kv to avoid unnecessary shut-down of the unit between 5 and the lower range of excursion.
A. Data Representativeness	
B. Verification of Operational Status	Continuous recording of T/R voltages and displays in boiler control room confirm operational status.
C. QA/QC Practices and Criteria	Confirm the meters read zero when the unit is not operating. Follow O&M manual for ESP.
D. Monitoring Frequency	Continuous monitoring by alarm and hourly recording of T/R voltages.
Data Collection Procedures	Continuous monitoring by alarm and hourly recording of T/R voltages.

MONITORING APPROACH JUSTIFICATION

I. Background

The pollutant-specific emission unit is a 4-field ESP controlling a biomass-fired, water wall boiler. The boiler is rated at 250,000 pounds of steam per hour. The boiler is subject to New Source Performance Standard (NSPS) Subpart Db. The boiler normally is operated at full capacity, and most emission tests have been performed at or near full load. The boiler is not a “large” CAM source (the post-control PM emissions are less than 100 tons per year) so continuous monitoring is not required. However, a Continuous Opacity Monitor (COM) was required as a condition of its operating permit and for compliance purposes with the NSPS Subpart Db.

A two-stage control system ensures compliance with permit limits for particulate matter (PM) mass emissions limits. Large particles are removed in a mechanical collector (a “multiclone” cyclone separator). This initial stage of particle control removes about 70 percent of the particulate matter mass emissions. These larger particles and char are typically re-injected into the boiler to improve fuel efficiency and to reduce ash generation. An induced draft fan pulls flue gas through the multiclone and into four-field ESP designed by PPC Industries. The maximum power consumption of the ESP is 204 kW. The combined PM control (multiclone and ESP) is estimated at 97.5% efficiency.

After passing through the ESP, boiler exhaust gases are emitted from an 82 foot tall, 8’-3” diameter stack. Stack sampling test ports and an opacity monitor are located about three quarters of the way up the stack.

The facility’s Air Operating Permit identifies a variety of monitoring and record-keeping requirements. It also requires the development and use of an Operations and Maintenance Plan for both the multi-clone and the ESP.

II. Rationale for Selection of Performance Indicators

Although the performance of an ESP can be assured by providing sufficient power to each field, SPI has never conducted tests that reveal the minimum power requirements needed to ensure compliance with the mass emission limit. As noted below, recent source tests have demonstrated that the facility meets its PM emission limit and its opacity limit, but neither test evaluated mass emissions as a function of power input to the ESP. Indicators in the control room identify problems with the ESP electrical systems and with opacity excursions, but there is no absolute means of quantifying PM mass emissions in real time.

In an ESP, electric fields are established by applying a direct-current voltage across a pair of electrodes, a discharge electrode and a collection electrode. Particulate matter suspended in the gas stream is electrically charged by passing through the electric field around each discharge electrode (the negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the gas stream by retention on the collection electrode. Particulate is removed from the collection plates by shaking or rapping the plates.

As a general rule, ESP performance improves as total power input increases. This relationship is true when particulate matter and gas stream properties (such as PM concentration, size distribution, resistivity, and gas flow rate) remain stable and all equipment components (such as rappers, plates,

wires, hoppers, and transformer-rectifiers) operate satisfactorily. The secondary voltage decreases when a malfunction, such as grounded electrodes, occurs in the ESP. When the secondary voltage drops, less particulate is charged and collected. Monitoring the secondary voltage helps ensure that proper conditions exist in each field for particulate collection.

SPI believes that opacity is a better indicator of ESP performance and mass emissions than measuring ESP parameters. Problems that would be detected by anomalies in power input will also be manifested in the opacity observations. Monitoring the voltages to the T/R sets will help track ESP performance, while the control room alarms will help identify potential operational problems with the ESP fields.

III. Rationale for Selection of Indicator Ranges

An ESP excursion is defined as two or more of the ESP T/R sets have voltages that are outside the acceptable voltage range (above minimum acceptable voltage and below maximum acceptable voltage) as shown in Table 2. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported.

If the COM is not functioning, plant personnel will evaluate opacity visually once per shift. If there is a visible plume not attributable to water, plant personnel will consider that an excursion. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All opacity excursions will be documented and reported.

The opacity criterion was selected based upon the current permit limit for opacity.

10 CAM PLANS – BAGHOUSE

COMPLIANCE ASSURANCE MONITORING PLAN: BAGHOUSE FOR PM CONTROL

I. Background

A. Emissions Unit

Description: Planer Baghouse
Identification: EU-3, Superior Systems Baghouse
Facility: Sierra Pacific Industries – Burlington Division
Mount Vernon, WA

B. Applicable Regulation, Emission Limit, and Pre-CAM Monitoring Requirements

Regulation: NWCAA AOP 019R1
OAC 938c
PSD 05-04 Amendment 2,
40 CFR 60, App A

Emission limits: PM₁₀ 0.005 gr/dscf (1-hr average)
PM₁₀ 9.4 tons (any consecutive 12-month period)
Opacity Cannot exceed 10% (EPA Method 9)

Operating Limits: Differential Pressure Minimum 1.0 inches of water
Differential Pressure Maximum 4.0 inches of water

C. Control Technology, Capture System

Controls: Pressurized fabric filter baghouse.
Capture System: Closed-duct system
Bypass: Fan shuts off if abort gate is tripped and baghouse is bypassed. Operation of the fan indicates that the baghouse is not being bypassed.

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table.
Normal process operations will not produce conditions that adversely affect the baghouse without affecting pressure drop; therefore, no process operational parameters will be monitored.

III. Response to Excursion

Excursion from the Operating Limits will trigger immediate Planer and baghouse shutdown.

MONITORING APPROACH

	Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No. 4
I. Indicator	Pressure drop	Pressure drop	Reference Method Testing	Reference Method Testing
Measurement Approach	Pressure drop through the baghouse is measured continuously using a differential pressure gauge.	Pressure drop through the baghouse is measured continuously using a differential pressure gauge.	Emissions testing using Methods 1-4 and 5.	Emissions testing using Methods 1-4 and 5.
II. Indicator Range	Differential Pressure Less than 1.0 inches H ₂ O <i>Immediately shut down planer and baghouse.</i> Differential Pressure Greater than 4.0 inches H ₂ O. <i>Immediately shut down planer and baghouse.</i> Do not resume operation until the problem is identified and corrected.	Differential Pressure Less than 1.2 inches H ₂ O Differential Pressure Greater than 3.5 inches H ₂ O. Investigate the cause of the low or high pressure drop and correct the cause within 4-hours.	Particulate matter ≥ 0.005 gr/dscf	Particulate matter ≤ 0.005 gr/dscf
III. Performance Criteria				
A. Data Representativeness	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ± 0.5 in. H ₂ O.	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ± 0.5 in. H ₂ O.	Test sampling done at the exhaust of the baghouse.	Test sampling done at the exhaust of the baghouse.
B. Verification of Operational Status	NA	NA	NA	NA
C. QA/QC Practices and Criteria	Pressure taps checked daily for plugging.	Pressure taps checked daily for plugging.	Qualified personnel perform inspection.	Use reference method protocols.
D. Monitoring Frequency	Pressure drop is measured continuously.	Pressure drop is measured continuously.	If source test emissions are greater than 0.0025, source test must be done every 12-months	If source test emissions are less than 0.0025, source test may be done every 36-months
Data Collection Procedures	Pressure drop is recorded daily.	Pressure drop is recorded daily.	As required by Methods 1-4 and 5.	As required by Methods 1-4 and 5.
Averaging period	None	None	Average of three 2-hour testing periods	Average of three 2-hour testing periods

JUSTIFICATION

I. Background

SPI operates a lumber facility at Mount Vernon, Washington. As part of that facility, trimming and planing of dried and green lumber results in generation of particulate matter that is collected by a high efficiency cyclone and baghouse.

The baghouse, produced by Superior Systems is fitted with polyester bags cleaned by reverse air. Air flow is induced by a fan with a 300 hp electric motor.

The facility is subject to a federal Title V permit due to potential to emit (uncontrolled) emissions more than 100 tons/year for PM₁₀.

II. Rationale for Selection of Performance Indicators

The pressure drop through the baghouse is monitored as shown on the attached O&M procedures for the unit. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, or the bags are becoming blinded. Decreases in pressure drop may indicate significant holes and tears in the bags or missing bags.

Implementation of a baghouse inspection and maintenance program provides assurance that the baghouse is in good repair and operating properly. A summary of the facility current Baghouse Operation & Maintenance Procedures is attached.

III. Rationale for Selection of Indicator Ranges

Performance Indicator 1 requires an immediate equipment shutdown as required in AOP 019R1 condition 5.3.1.

Performance Indicator 2 was selected to initiate a response to correct operating conditions with the baghouse or planer operation to help ensure that the differential pressure at the baghouse will not reach the limits in Performance Indicator 1, to avoid a shutdown.

Performance Indicator 3 and Performance Indicator 4 are necessary to demonstrate compliance with the permit PM₁₀ emission limits.

Operations & Maintenance Procedures

Superior Systems Baghouse – SPI Burlington Division

The Superior Systems Baghouse will be operated and maintained according to the Owner's manual supplied by the manufacturer.

<u>FREQUENCY</u>	<u>DESCRIPTION</u>
------------------	--------------------

Daily (when in operation)

- Check and record magnehelic gauge reading. Magnehelic should be between 1.2 and 3.5.
- If magnehelic is less than 1.0, the Planer and baghouse must be shut down.
- If magnehelic is greater than 4.0, the Planer and baghouse must be shut down.
- Check for discharge out of the bottom of the baghouse.
- Visually check for exhaust emission.

Information will be recorded on a spreadsheet (Bag House Daily Check) and printed and filed onsite. Any issues needing attention will be brought to the Maintenance Superintendents attention to be corrected. Correction will be noted on the spreadsheet.

Weekly

- Check bearings for excessive vibration or heat.
- Record magnehelic and purge pressure. Compare readings with previous weeks. Purge pressure should be between 7 and 11 psi.
- Check lubricator and filter on airline to purge control panel.
- Visually check purge arm for alignment during purge cycle.

Information will be recorded on the "Bag House Weekly Inspection" form. Items needing attention will be documented on the form, along with completion dates. Completed forms will be given to the Safety/Environmental Coordinator to be filed.

Monthly

- Visually inspect pneumatic actuator and ratchet assembly for wear.
- Grease bearings.
- Change purge pump oil (Every 1500 hours of operation).

Bi-Annually (June and December)

- Grease ratchet assembly
- Visually inspect bags

11 INSIGNIFICANT EMISSIONS UNITS

Some categorically exempt insignificant emission units as defined in the WAC 173-401-532 are present at SPI and are listed in this Statement of Basis rather than in the AOP. Emission units at SPI that have been determined to be insignificant on the basis of size or production rate as defined in WAC 173-401-530 and WAC 173-401-533 are listed in Table 11-1 below:

Table 11-1 Insignificant Activities and Emissions Units (Categorically Exempt)

Insignificant Emission Unit	Basis
Lubricating Oil Tank	WAC 173-401-532(3)
Hydraulic Oil Tank	WAC 173-401-532(4)
Pressurized Storage of Gases	WAC 173-401-532(5)
Vehicle Exhaust from Maintenance Shops	WAC 173-401-532(7)
CEMS	WAC 173-401-532(8)
Vents	WAC 173-401-532(9)
Vehicle Internal Combustion Engines	WAC 173-401-532(10)
Welding Operations	WAC 173-401-532(12)
Plant Upkeep Activities	WAC 173-401-532(33)
Street/Pavement Cleaning and Sweeping	WAC 173-401-532(35)
Food Preparation	WAC 173-401-532(41)
Portable Drums and Totes	WAC 173-401-532(42)
Lawn and Landscaping Activities	WAC 173-401-532(43)
General Vehicle Maintenance	WAC 173-401-532(45)
Comfort Air Conditioning	WAC 173-401-532(46)
Office Activities	WAC 173-401-532(49)
Sampling Connections	WAC 173-401-532(51)
Parking Lot Exhaust	WAC 173-401-532(54)
Indoor Activities	WAC 173-401-532(55)
Repair and Maintenance	WAC 173-401-532(74)
Totally Enclosed Conveyors	WAC 173-401-532(86)
Air Compressors	WAC 173-401-532(88)
Steam Leaks	WAC 173-401-532(89)
Vacuum System Exhausts	WAC 173-401-532(108)
Water Cooling Towers	WAC 173-401-532(121)

12 DEFINITIONS AND ACRONYMS

Definitions are assumed to be those found in the underlying regulation. A short list of definitions has been included to cover those not previously defined.

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.

"Ecology" means the Washington State Department of Ecology.

An "emission unit" is any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant.

"SPI" means Sierra Pacific Industries

"Oil" means low sulfur No. 2 diesel fuel, containing no more than 0.05 percent sulfur by weight.

A "permit" means for the purposes of the air operating permit program an air operating permit issued pursuant to Title 5 of the 1990 Federal Clean Air Act Amendments.

"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:

acfm	actual cubic feet per minute
AOP	air operating permit
ASIL	acceptable source impact level
bf	board-feet of lumber
CEM	continuous emissions monitor
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	carbon monoxide
EPA	The United States Environmental Protection Agency
ESP	electrostatic precipitator
EU	emission unit
FCAA	Federal Clean Air Act
gpm	gallons per minute
gr	grain (measurement of mass)
HAP	hazardous air pollutant
HCl	hydrochloric acid
lb/hr	pound per hour
lb/MMBtu	pound per million British thermal unit
Mbf	thousand board feet of lumber
mg/L	milligram per liter

MMbf million board feet of lumber
MMBtu million British thermal units
MR&R Monitoring, Recordkeeping and Reporting
MW megawatt
NESHAP National Emission Standards for Hazardous Air Pollutants
NOC Notice of Construction
NO_x oxides of nitrogen
NSPS New Source Performance Standard
NSR New Source Review
NWCAA Northwest Clean Air Agency
O₂ Oxygen
OAC Order of Approval to Construct
ODEQ Oregon Department of Environmental Quality
OSU Oregon State University
PM particulate matter
PM₁₀ particulate matter less than 10 microns in diameter
PM_{2.5} particulate matter less than 2.5 microns in diameter
ppm parts per million
ppmvd (same as ppmvd) parts of pollutant per million parts of dry stack gas on a volumetric basis
PSD Prevention of Significant Deterioration (federally required program for pre-construction review of sources)
QA/QC quality assurance/quality control
RCW Revised Code of Washington
scf standard cubic foot (cubic foot of gas at Standard Conditions)
SIP State Implementation Plan
SNCR selective non-catalytic reduction
SO₂ sulfur dioxide
TDS total dissolved solids
TPY tons per year
VOC volatile organic compounds
WAC Washington Administration Code

13 PUBLIC DOCKET

Copies of SPI's air operating permit and permit application and any technical support documents are available at the following at www.nwcleanairwa.gov and the following location:

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



SIERRA PACIFIC INDUSTRIES

14353 McFarland Road
Burlington, Washington 98273

March 28, 2025

Northwest Clean Air Agency
1600 South 2nd St.
Mount Vernon, WA 98273

Attn: Robyn Jones, E.I.T

Re: Title V Operating Permit Renewal Application
Sierra Pacific Industries, Burlington Division

Dear Ms. Jones:

Enclosed is an application to renew Title V Air Operating Permit No. 019R2M1 issued to Sierra Pacific Industries (SPI) for the Burlington Division Facility located in Mount Vernon, Washington, which will expire on April 15, 2026. This renewal application is being submitted by the renewal deadline of April 15, 2025, as stipulated in AOP No. 019R2M1.

The renewal application attachments provide information consistent with the recently issued AOP No. 019R2M1 dated July 2, 2024. The only change the facility is proposing in this application is that the renewed permit incorporate requirements from Order of Approval to Construct (OAC) 1089b, issued August 31, 2021.

SPI is preparing an administrative amendment request for submittal to Ecology that will request the boiler startup and shutdown definitions in PSD permit 05-04 be removed so that cogeneration facility boiler startup and shutdown will be defined solely by the definitions in 40 CFR Part 63 Subpart DDDDD (i.e., Boiler MACT). Preparation of the administrative amendment request is underway and ongoing, and, when submitted, would affect Permit Term 5.1.6 (Boiler Startup Defined) and Permit Term 5.1.7 (Boiler Shutdown Defined). The updates are not incorporated into the Title V Renewal Form, but SPI will provide NWCAA with an update once the administrative amendment is issued for incorporation into the AOP.

In addition to the certification that the statements and information in this renewal application are true, accurate, and complete, I further certify that the SPI Burlington Division Facility is in compliance with all applicable air quality regulations and permit requirements.

Sincerely,

David S. North
Division Manager

Cc: Justin Eastman, SPI
Annie Klinke, Landau Associates, Inc.
Eric Albright, Landau Associates, Inc.

Attachments: Title V Permit Renewal Form
Regulatory Applicability Analysis
Emissions Inventory
Process Flow Diagram
Site Plan
Insignificant Emissions Units
AOP No. 019R2M1

ATTACHMENT 1

TITLE V PERMIT RENEWAL FORM



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]

Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273

- 2) Current Air Operating Permit number and expiration date

AOP 019R2M1 (Expires April 15, 2026)

- 3) Owner's name and agent

Red Emmerson
Sierra Pacific Industries
PO Box 496028
Redding, CA 96049

- 4) Responsible Official name and address

David S. North
Division Manager
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273

- 5) Telephone number and name of plant site manager/contact

David S. North
(360) 424-7619 ext. 1403

- 6) Were there any changes to the facility impacting air emissions since receiving the current Air Operating Permit? [if yes, please describe changes]

There have been no physical changes to the facility that impact air emissions since the start of the current Air Operating Permit.

However, the facility is requesting that the renewed permit incorporate requirements from Order of Approval to Construct (OAC) 1089b. Specifically, the facility requests that Permit Condition 5.6.1 be updated to remove the 10 percent capacity factor from the regulatory description and add in the periodic source test requirement to demonstrate compliance with the nitrogen oxides (NO_x) and carbon monoxide (CO) emission limits in OAC 1089b.

Part 2: Process and Emissions Information

- 7) Will there be any changes to the operating scenario(s) identified in the current AOP?

There will be no changes to the operating scenario(s) identified in the current AOP.

- 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 Code: 2421 – Sawmills and Planing Mills
 NAICS Code:
 321113 – Sawmills
 321999 – All other Miscellaneous Wood Product Mftg.
 221119 – Other Electrical Power Generation

- 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.

The SPI facility is a designated major source subject to the air operating permit program because of its potential to emit more than 100 tons per year of NO_x, carbon CO, and volatile organic compounds (VOC), more than 10 tons per year of hydrogen chloride (HCl) and acetaldehyde, and more than 25 tons per year of total hazardous air pollutants (HAPs). These air pollutants are defined as regulated air pollutants in Chapter 173-401 of the Washington Administrative Code (WAC).

- 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.

EU-1	Cogeneration Facility
EU-2	Cooling Tower
EU-3	Planer Mill
EU-4	Dry Kilns
EU-5	Anti-mold Spray Chamber
EU-6	Natural Gas Package Boiler

The emissions points at the facility remain unchanged from the current AOP, and are identified above.

- 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 NWAPA to the most recent annual emissions inventory.

The 2023 Annual Report is attached to this renewal, and includes all emissions regulated by the permit.

- 12) List the fuels used and their respective usage rates at design capacity for the emission points identified in item 10 above.

There were six emission units listed in Item 10 above. Of these, only the Cogeneration Facility and Natural Gas Package Boiler utilized fuels and are shown below:

Emission Unit	Fuel Type	Design Capacity (mmbtu/hr)	Fuel usage	Unit of measurement
Cogeneration Facility	Wood	430	43	Bdt/hr*
	Nat. Gas	125	130,250	Scf/hr**
Natural Gas Package Boiler	Nat. Gas	95	92,400	Scf/hr**

* Bone dry tons equate to roughly 380,000 tons per year

** Scf/hr based on heat input natural gas of 1,041 btu/scf for Cogen Boiler, scf/hr for Package Boiler from Manufacturer

- 13) List the raw materials used and their respective usage rates at design capacity for the emission points identified in item 10 above.

See response to item 12 above. The Natural gas package boiler only uses Natural gas at a design capacity as shown.

For the Cogeneration Boiler, the natural gas component is unchanged. Wood and similar biogenic fuels sources are best described as shown on OAC 938c.

- At least 50 percent of fuel burned in the boiler, shall be clean hog fuel consisting of bark, sawdust, chips, and other wood waste from wood products industries.
- Up to 50 percent of fuel burned in the boiler, shall be clean cellulosic biomass, resonated wood debris, and/or biomass-derived non-hazardous secondary materials (NHSM) as defined, processed, and managed according to 40 CFR Part 241.

- 14) List the production rate at design capacity for the emission points identified in item 10 above.

Cogeneration Facility	250,000 lb/hr steam 28 MW/h electrical Generation
Cooling Tower	N/A
Planer Mill	400 MMbf/year of dimensional lumber
Dry Kilns	400 MMbf/year
Anti-mold Spray Chamber	N/A
Natural Gas Package Boiler	75,900 lb/hr steam

- 15) Identify the facility operating schedule (anticipated operating hours per day, days per week, weeks per year)

The facility operates 24 hours per day, 365 days per year. This is consistent with the existing AOP.

- 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.

Cogeneration Facility	Multiclone / ESP
Cooling Tower	None
Planer Mill	Baghouse
Dry Kilns	None
Anti-mold Spray Chamber	Mist Eliminator Pad
Natural Gas Package Boiler	Low NOx Burners / FGR

Air pollution control equipment information is correctly identified and defined in the current AOP.

- 17) Please identify and describe all compliance monitoring devices or activities at the facility.

- The facility utilizes a Data Acquisition and Handling System (DAHS) collecting Continuous Parametric Monitoring System (CPMS) data (steam flow), Continuous Emissions Monitoring System (CEMS) data (stack flow, NO_x concentration, CO concentration, O₂ Concentration, CO₂ Concentration), and Continuous Opacity Monitoring System (COMS) data (Opacity). This system is operated in compliance with a Quality Assurance Plan specified by 40 CFR Part 60.
- The facility operates under a Continuous Assurance Monitoring Plan (CAM) specified in 40 CFR Part 64 and monitors hourly voltage values from each transformer/rectifier set.
- The facility conducts a source test on the cogeneration boiler to determine an emission rate for PM, VOC, and SO₂ at the frequency specified in the permit. On a monthly basis, compliance with the limits for these constituents is demonstrated by multiplying the emission factor determined during the source test by the monthly average firing rate.
- The facility conducts a source test once every 36 months on the cogeneration boiler to determine an emission rate for PM, Hg, and HCl to determine compliance with the Boiler MACT limit (40 CFR Part 63 DDDDD). The steam production rate is measured concurrently during the source test and a steam generation rate Operating Limit is set as 110 percent of the maximum generation rate during the highest emissions that passed.
- The facility conducts a source test on the natural gas package boiler to demonstrate compliance with the emission limits in OAC 1089b at the frequency specified in the permit.
- Annually, CEMS RATA certification is conducted.

- 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.

Operating Limits

- Continuous compliance with Boiler MACT PM, Hg, and HCl is achieved by maintaining steam generation rate below the steam generation rate Operating Limit.
- Maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).
- Keep records of the type and amount of all fuels burned in the boiler.

Work Practice Standards

- Comply with the startup work practice standards in the Boiler MACT by conducting startup on natural gas.
- A boiler tune-up is conducted once every 5 years to minimize CO and optimize O₂ in the furnace.

- Keep records of the type and amount of all fuels burned in the boiler.
- Collect operating load data or steam generation data every 15 minutes

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.

Refer to Table 4-1 Generally Applicable Requirements and Table 5-1 Specifically Applicable Requirements from current Air Operating Permit. The following updates to Table 5-6 are requested to conform with updates to the natural gas package boiler (EU-6), as documented in OAC 1089b.

SPI is preparing an administrative amendment request for submittal to Ecology that will request the boiler startup and shutdown definitions in PSD permit 05-04 be removed so that cogeneration facility boiler startup and shutdown will be defined solely by the definitions in 40 CFR Part 63 Subpart DDDDD (i.e., Boiler MACT). Preparation of the administrative amendment request is underway and ongoing, and, when submitted, would affect Permit Term 5.1.6 (Boiler Startup Defined) and Permit Term 5.1.7 (Boiler Shutdown Defined).

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.1	OAC 1089b Condition 2 (8/31/21)	Fuel combusted in the package boiler shall be limited to natural gas only.	Keep records of amount of fuel combusted for a period of not less than 5 years. Make record available to the NWCAA upon request.
5.6.2	40 CFR 60 Subpart Dc §60.48c(g)(2),(1) (1/28/09) NWCAA 104.2 (12/14/23)	Each month, record amount of natural gas burned in the boiler.	Maintain records for two years following the date of such records.
5.6.3	OAC 1089b Condition 1 (8/31/21)	Visible emissions from the boiler stack shall not exceed 5 percent opacity for more that 3 minutes (aggregate) within any 60-minute period.	Use Washington State Department of Ecology Method 9A.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.4	OAC 1089b Condition 3, 4, and 5 (8/31/21)	<p>Emissions of NO_x from the boiler stack shall not exceed 1.7 pounds per hour (1-hour average)</p> <p>Emission of CO from the boiler stack shall not exceed 50 ppmvd corrected to 3 percent oxygen (1-hour average).</p>	<p>Compliance with 5.6.4 shall be demonstrated by the average of three 60-minute test runs. During the test, the boiler shall operate at 90 percent or greater average firing rate capacity. Alternative test methods and/or reduced operation rate may only be used with advanced written approval from NWCAA.</p> <p>Source performance testing shall be conducted in accordance with NWCAA Regulations Section 367 and NWCAA Appendix A, using the following test methods</p> <ul style="list-style-type: none"> (1) NO_x – 40 CFR Part 60 Appendix A Methods 7E and 19 (2) CO – 40 CFR Part 60 Appendix A Method 10 <p>During the performance tests, fuel use shall be continuously recorded and included in the source performance test report as raw data and in summary form. The heat content of natural gas shall be 1,042 btu/scf or obtained from the natural gas supplier during the test. The Fd factor for natural gas shall be 8,710 dscf (exhaust)/MMBtu heat input.</p> <p>The first test shall be conducted within 250 days of the date of issuance of this order. Subsequent tests shall be performed not more than 12 months from the date of the previous test</p>
5.6.5	OAC 1089b Condition 6 (August 31, 2021)	A written operating and maintenance (O/M) manual shall be kept on site and up-to-date for the boiler. The O/M manual shall include practice for maintaining good air pollution control. Follow O/M practice at all time.	Keep the operating and maintenance manual up-to-date and on site.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.6	40 CFR 63 Subpart DDDDD §63.7500(e), §63.7505(a), §63.7510(g), §63.7515(d), §63.7540(a)(10)(i)-(vi), §63.7545(a), (e)(8)(i), §63.7550(a), (b)(1)-(4) Table 3 Line 3 (11/20/15) NWCAA 104.2 (12/14/23)	<u>Boiler Tune-Up</u> For unit designed to burn gas 1 fuels, the package boiler will require a boiler tune-up every year. 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 summarizing inspection.	Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous-tune up. Submit a signed certification in the Notification of Compliance Status (NCS) in accordance with AOP Term 3.2.18 that indicates a tune-up was completed. Include a statement in the NCS, as applicable, "This facility complies with the initial tune-up according to the procedures in §63.7540(a)(10)(i) through (iv)". Submit a compliance report every year. Reports are due, in accordance with AOP Term 4.1, 30 day safter 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, 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.
5.6.7	40 CFR 63 Subpart DDDDD Table 3 Line 4 (11/20/15) NWCAA 104.2 (12/14/23)	For units located at a major source facility, not including limited-use units, the package boiler must have a one-time energy assessment performed by a qualified energy assessor.	An energy assessment completed on or after January 1, 2008 satisfies the energy assessment requirement. Sonnichsen Engineering completed an energy assessment on the package boiler in November 2020.

- 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.

See attached version of current Air Operating Permit and updated Table 5-6 above.

- 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, in the cogeneration boiler, the CAM rule applies to Particulate Matter (PM) only. NO_x and CO are exempt from the CAM requirement due to the presence and use of CEMS for both NO_x and CO. A copy of the current CAM plan is attached to this renewal. The CAM rule also applies to PM from the planer baghouse.

23) Does the accidental release prevention regulation (40 CFR part 68) apply to the facility?

No. Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the accidental release prevention regulations in Part 68, then the owner or operator will submit a risk management plan (RMP) on the date specified in section 68.10 and will certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70.

This facility uses urea, and not ammonia, and does not use any other subject chemical, therefore, 40 CFR part 68 does not apply.

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]

No.

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.

Table 6-1 Inapplicable Requirements (in existing Title V Permit)

Requirement	Emission Unit	Brief Discussion of Requirement	Basis
40 CFR Part 60 Subpart E	EU-1	New Source Performance Standards for incinerators	Only biomass and natural gas are fired in the boiler.
40 CFR Part 60 Subpart KKKK	EU-1	New Source Performance Standards for stationary combustion turbines	SPI operates a steam turbine.
40 CFR Part 60 Subpart Kb	Facility	New Source Performance Standards for Volatile Organic Liquid Storage Vessels	No storage vessels have been constructed at the facility.
40 CFR Part 63 Subpart Q	EU-2	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	SPI does not use chromium based water treatment chemicals in their cooling towers.
WAC 173-400-050(2), (4), and (5)	Facility	Emission Standards for Combustion and Incineration Units	The facility burns only clean hog fuel and biomass residuals, and is therefore not an incinerator or waste combustion unit.
WAC 173-400-070(1), (3) – (8)	Facility	Emission Standards for Certain Source Categories	SPI does not operate a wigwam burner, orchard heater, grain elevator, catalytic cracking unit, sulfuric acid plant, or sewage sludge incinerator.
WAC 173-433	EU-1	Solid Fuel Burning Devices	As defined in WAC 173-433-030(9), EU-1 is not a solid fuel burning device (greater than 1 MMBtu/hr).
WAC 173-434	EU-1	Solid Waste Incinerator Facilities	As defined in WAC 173-434-030, the facility is not defined as a solid waste incinerator.

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.

The 2023 Annual Report included the compliance status and compliance certification.

- 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 following statement is included as part of this renewal application:

For applicable requirements with which the source is in compliance, the facility shall continue to comply with such permit requirements indicated in the Title V Permit and most recent PSD (Amendment #3) and OAC (938c).

- 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;

The following statement is included as part of this renewal application:

For applicable requirements that become effective during the Title V permit term, the facility shall 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 at the time of this application renewal.

- 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 at the time of this application renewal.

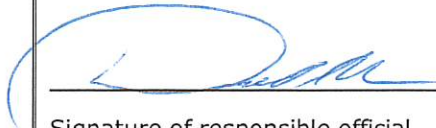
Statement of Certification: *Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete.*

David S. North

Division Manager

Name of responsible official

Title of responsible



Signature of responsible official

4-1-25

Date

ATTACHMENT 2

REGULATORY APPLICABILITY ANALYSIS

Section 4 Federal Requirements from Sierra Pacific Industries (SPI), Statement of Basis for Air Operation Permit (AOP) #019R2M1 (Final, July 2, 2024)

4 FEDERAL REQUIREMENTS

The facility owns and operates equipment regulated under federal regulations.

4.1 New Source Performance Standards

U.S. Environmental Protection Agency (EPA) has established New Source Performance Standards (NSPS) for new, modified, or reconstructed facilities and source categories in 40 CFR Part 60.

4.1.1 Subpart A – General Provisions

If a New Source Performance Standard in 40 CFR Part 60 applies to a facility, Subpart A also applies. Some of the requirements from Subpart A have been included in the permit, and some have not. If a requirement is applicable when triggered by some action, it was not included in the permit. Similarly, if a part of Subpart A did not have concrete requirements for the facility (i.e., if it solely addressed applicability or definitions), it was not included. If the requirement was something in the past, or addressed something that a regulatory agency must do, it was not included. The fact that these parts were not included in the permit does not exempt the facility from the requirements if they are triggered by any future actions.

The Subpart A requirements appear in Section 3 of the AOP.

4.1.2 Subpart Db - Standards Of Performance for Industrial-Commercial-Institutional Steam Generating Units (Greater than 100 MMBtu/hr)

40 CFR 60 Subpart Db addresses emissions from boilers constructed after June 19, 1984 having a heat input of greater than 100 million British thermal units per hour (MMBtu/hr). Subpart Db applies to the cogeneration boiler because the rated heat input of that unit is 430 MMBtu/hr and the unit commenced constructed in 2005.

Subpart Db limits PM emissions to 0.085 pounds per MMBtu (lb/MMBtu). At the proposed maximum firing rate, this limit translates into an emission rate of 36.6 lb particulate matter per hour (PM/hr). Subpart Db also requires exhaust opacity to be 20 percent or less (6-minute average), except for one 6-minute period per hour, which cannot exceed 27 percent opacity. SPI is required by Subpart Db to monitor opacity with a continuous opacity monitoring system (COMS). These limits do not apply during startup, shutdown, or during a malfunction. The Ecology Prevention of Significant Deterioration (PSD) permit (PSD 05-04 Amendment 3) has a more stringent boiler exhaust PM emission limit, and Northwest Clean Air Agency (NWCAA) permit (Order of Approval to Construct [OAC] 938c) has a more stringent boiler exhaust opacity limit, than corresponding NSPS requirements.

The cogeneration unit burns natural gas during startup and to maintain flame stabilization. Subpart Db imposes sulfur dioxide (SO₂) and nitrogen oxides (NO_x) limits on boilers that fire fossil fuels under certain conditions. The SO₂ limits do not apply to boilers that combust natural gas. The NO_x limits in Subpart Db do not apply to boilers that have a federally enforceable requirement that limits annual fossil fuel capacity factor to less than ten percent. SPI maintains on-site records of the quantities and times that natural gas is fired in the boiler to ensure that gas provides less than ten percent of the annual fuel input. The AOP imposes a 0.10 annual fuel factor for natural gas exempting the facility from the NO_x limits in the regulation.

4.1.3 Subpart Dc – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (10-100 MMBtu/hr)

40 CFR 60 Subpart Dc addresses emissions from boilers constructed after June 9, 1989 having a heat input rate greater than 10 MMBtu/hr but less than 100 MMBtu/hr. Subpart Dc applies to the Apache package boiler because the unit has a heat input rate of 95 MMBtu/hr and was constructed in 2011.

The main boiler/cogeneration plant is scheduled to undergo maintenance for about 14 days per year. The purpose of the Apache boiler is to maintain kiln operation, providing steam during the main boiler down-time. The Apache boiler is permitted by NWCAA OAC 1089b to burn only natural gas.

4.2 National Emissions Standards for Hazardous Air Pollutants (NESHAP)

EPA has established National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR 63 to regulate Hazardous Air Pollutant (HAP) emissions from major sources of HAPs. This regulatory program defines a “major source” as any facility that has the potential to emit more than 10 tons per year (tpy) of a single HAP or more than 25 tpy of all HAPs combined. The highest single HAP potential to emit at the facility is hydrogen chloride (HCl) at 37.7 tpy. Overall, the facility has a combined potential to emit of 58.6 tpy for all HAPs. As a result of the annual facility-wide HCl emissions exceeding 10 tpy, and total HAPs emission rate exceeding 25 tpy, the facility is a major source with respect to the NESHAP program.

4.2.1 Subpart A – General Requirements

If a Standard in 40 CFR Part 63 applies to a facility, portions of Subpart A also apply. Some of the requirements from Subpart A have been included in the permit, and some have not. If a requirement is applicable when triggered by some action, it was not included in the permit. Similarly, if a part of Subpart A did not have concrete requirements for the facility (i.e., if it solely addressed applicability or definitions), it was not included. If the requirement was something in the past, or addressed something that a regulatory agency must do, it was not included. The fact that these parts were not included in the permit does not exempt the facility from the requirements if they are triggered by any future actions.

Subpart A requirements for notifications are included in Section 3 of the AOP. These sections are triggered by the applicability of other Subparts to the facility.

4.2.2 Subpart DDDD – Plywood and Composite Wood Products

As a major source of HAPs, the facility is subject to applicable promulgated Maximum Achievable Control Technology (MACT) standards. 40 CFR Part 63 Subpart DDDD applies to the dry kilns. Construction of the dry kilns commenced in December 2005. Therefore, these units are considered new sources under 40 CFR 63 Subpart DDDD. The only applicable requirement (40 CFR §63.2252) to the kilns is the initial notification requirement in 40 CFR §63.9(b). Pursuant to 40 CFR §63.9(b)(iii), the initial combined Notice of Construction (NOC) and PSD permit application served as the initial notification for the lumber dry kilns. Therefore, the facility has met this requirement and there are no additional compliance provisions applicable to the facility under this regulation included in the AOP.

4.2.3 Subpart DDDDD – Industrial, Commercial and Institutional Boilers and Process Heaters

40 CFR Part 63 Subpart DDDDD, often referred to as the “boiler MACT,” is intended to regulate industrial, commercial, or institutional boilers or process heaters that are located at a major source of hazardous air pollutants. SPI owns and operates two boilers that are subject to the boiler MACT.

The Apache 95 MMBtu/hour boiler is no longer considered a “limited-use boiler” under 40 CFR §63.7575, after the federally enforceable annual capacity factor was removed from the permit issued by NWCAA (OAC 1089b). The boiler is now classified as a “unit designed to burn gas 1 fuels” under 40 CFR §63.7575. As a “gas 1 boiler”, the package boiler is not subject to any emission or operating limits under Subpart DDDDD, but is required to conduct a boiler tune-up every year, as well as a one-time energy assessment, which was completed by Sonnichsen Engineering in November 2020.

The biomass-fired boiler qualifies as an “existing” “large solid fuel unit” with oxygen trim under the boiler MACT. According to 40 CFR NO_x emissions from fossil fuel-fired electrical generation facilities. 40 CFR §72.6 identifies criteria used to determine whether a facility is subject to the Acid Rain Program. §72.6(b)(4)(ii) states that a biomass-fired cogeneration unit is not subject to the program if it sells no more than one third of its potential annual electrical output capacity or if it sells less than 219,000 megawatt (electric)-hours (MWe-hrs) of electricity annually. A cogeneration unit meeting either of these criteria is not subject to the Acid Rain Program.

The biomass-fired boiler at the facility meets the definition of a “cogeneration unit” in 40 CFR §72.2 because at least a portion of the steam generated by the boiler is delivered first to the steam turbine and then to the adjacent lumber manufacturing facility as steam for heating. Thus, the steam is “used twice.” Additionally, SPI is capable of selling up to 219,000 MWe-hrs of power annually, which is more than one-third of the boiler’s annual potential electrical output capacity (219,000 MWe-hrs calculated as described in Appendix D to Part 72). However, the boiler is not an affected source because SPI does not sell more than 219,000 MWe-hrs of electricity annually. The facility maintains records of the amount of electricity generated and sold. The electricity sale records are used to confirm the facility sells less than 219,000 MWe-hrs of power annually. Due to the boiler’s cogeneration status and electrical sales, this boiler is not considered an affected source.

4.5 Compliance Assurance Monitoring

EPA established the Compliance Assurance Monitoring (CAM) program to regulate emission sources that employ a control device to maintain compliance with an enforceable emission limit or standard. 40 CFR §64.2 establishes the three applicability criteria for the CAM program:

- The unit is subject to an emission limit, other than an emission limit from a NSPS or NESHAP that was proposed after November 15, 1990
- The unit uses a control device to achieve compliance with that limit, and
- The unit has potential pre-control emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

For units that all 3 applicability criteria above apply, one further criterion is evaluated to determine whether a CAM Plan is needed: if a unit is equipped with a continuous emissions monitor (i.e., continuous emissions monitor [CEM] or COM) and monitoring for compliance with a limit is done using the continuous emissions monitor, then a CAM plan is not required for that unit for that specific limit or standard.

With the exception of the biomass-fired boiler and the planer mill dust collection system, none of the facility's emission sources employ pollution control equipment. The cooling tower is equipped with a mist eliminator; however, the primary purpose of the mist eliminator is not to control emissions. All cooling towers employ mist eliminators as process equipment to minimize water loss during operation.

CAM summary for Emission Units at SPI:

Emission Unit	Add-on Control Device Present?	Is unit subject to emission limit or standard for which the unit has a control device?	If control is present, what pollutant does it control?	Are pre-control emissions greater than 100% of major source?	Is unit equipped with a continuous monitor for the pollutant for which it exceeds 100% of major source?	Is a CAM Plan Required?
Cogeneration Facility (biomass-fired boiler)	Yes – Electrostatic precipitator (ESP), multiclone, & selective non-catalytic reduction (SNCR)	Yes: PM & Opacity Yes: NO _x	ESP - PM & Opacity SNCR - NO _x	Yes for PM, Opacity, and NO _x	Yes, CEMS for NO _x Yes, COMS used for some, but not all, opacity limits	NO _x : NO – CEM used to show compliance for all applicable limits PM& Opacity: YES for some limits not monitored continuously (see Section 9)
Planer Mill	Yes – Baghouse	Yes: PM & Opacity	PM & Opacity	Yes for PM	No	PM & Opacity: YES (See Section 10)
Cooling Towers	No controls	No controls	No controls	No controls	No	No
Dry Kilns	No controls	No controls	No controls	No controls	No	No
Anti-mold spray chamber	No controls	No controls	No controls	No controls	No	No
Natural Gas package boiler	No controls	No controls	No controls	No controls	No	No

4.5.1 Wood-fired (biomass) boiler

The boiler is equipped with a multiclone and ESP for particulate control and an SNCR system for NO_x control. For PM, opacity, and NO_x, the biomass-fired boiler is subject to emission limits from PSD 05-04, 40 CFR 60 Subpart Db, 40 CFR 63 Subpart DDDDD, NWCAA OAC permits, the Washington Administrative Code (WAC), and the NWCAA Regulation. As discussed above, the boiler uses control devices to achieve compliance with its opacity, PM₁₀ and NO_x limits.

The pre-control emissions of particulate matter with a diameter of 10 micrometers or less (PM₁₀) and NO_x are evaluated as follows:

- The technical support document for PSD 05-04, which SPI received for the biomass boiler, states that post-control potential emissions of NO_x are 188 tpy. Pre-control emissions of NO_x can only be greater than that value and were not evaluated because post control emissions were above 100 tpy.
- The technical support document for PSD 05-04 states that the post-control potential emissions of PM₁₀ are 54 tpy. Assuming that the ESP and multiclones have a 90 percent control efficiency for PM₁₀, the pre-control potential PM₁₀ emissions are greater than 540 tpy.

4.5.1.1 NO_x emissions limits monitored using CEMS

Although the boiler has pre-control emissions of NO_x that are more than 100 tpy, a CAM plan is not required if continuous monitoring using a CEM is required to show compliance with those standards. The facility's PSD permit 05-04 requires that SPI install a NO_x CEMS on the boiler and requires the use of that CEMS to demonstrate compliance with the NO_x limits stemming from the PSD. Therefore, as established in 40 CFR §64.3(d)(1), the NO_x CEMS satisfies the requirements of Part 64 and therefore a CAM plan for NO_x is not required.

4.5.1.2 NO_x emission limits not monitored using CEMS

The biomass boiler is not subject to any NO_x emission limits other than those in SPI's PSD 05-04 permit.

4.5.1.3 Opacity emissions limits using COMS

Because the boiler's pre-control PM₁₀ emissions are greater than 100 tpy, the boiler is also subject to CAM review for opacity. The boiler is equipped with a COMS, which was required by NWCAA OAC 938c. The COM is the compliance method for the following OAC 938c and federal NSPS requirements:

1. OAC 938c Condition 3a: 20 percent opacity for a period or periods aggregating more than 3 minutes in one hour
2. OAC 938c Condition 3b: 5% opacity, 1-hour average and 10 percent opacity, during soot blowing
3. 40 CFR 60 Subpart Db: 20 percent opacity (6-minute average) except for one 6-minute average per hour of not more than 27 percent opacity

A CAM Plan is not required for these requirements because the COMS satisfies the requirements for continuous monitoring.

4.5.1.4 Other Opacity emissions limits

Because the boiler's pre-control PM₁₀ emissions are greater than 100 tpy, the boiler is subject to CAM review for opacity. The following additional opacity limits apply. These limits are evaluated separately

from the limits identified in Section 4.5.1.3 because, unlike the limits in Section 4.5.1.3, the COM is not sufficient to demonstrate compliance as compliance must be demonstrated outside of the boiler stack:

1. NWCAA 451.1: less than 20percent opacity for any period aggregating more than 3 minutes in any 60-minute period
2. WAC 173-400-040(1): less than 20percent opacity for any period aggregating more than 3 minutes in any 60-minute period
3. OAC 938c Condition 3c: less than 10percent opacity for any period aggregating more than 3 minutes in any 60-minute period

NWCAA determined that a CAM Plan was needed for the above requirements. SPI submitted a PM CAM plan for the biomass boiler with their first Title V renewal application as stated in 40 CFR §64.5(b). This CAM plan is applicable to both PM and opacity. SPI proposed a CAM plan based on both COM readings and ESP voltage measurements. The provisions of the CAM plan have been included in AOP terms and reference the above mentioned opacity limits. The plan is shown in Section 10 of the statement of basis for the AOP.

Note that in addition to complying with the CAM plan, the monthly visible emission checks required by AOP term 4.12 serve to further demonstrate compliance with the visible emission limits and validate the CAM plan monitoring parameters.

4.5.1.5 PM emissions limits

The biomass boiler is not equipped with a particulate matter continuous monitor. The following particulate matter emission limits and standards apply:

1. PSD 05-04: 0.02 lb PM₁₀/MMBtu 24-hour average, based on the heat input value of the fuel
2. PSD 05-04: 37.7 tons PM₁₀ in any consecutive 12-month period
3. NWCAA Regulation and WAC: 0.10 grain per dry cubic feet at standard conditions (grain/dscf) (0.23 grams per dry cubic meter [g/dry m³]) (corrected to 7percent oxygen)
4. NWCAA Regulation and WAC: 0.05 grain/dscf (0.11 g/dry m³) (corrected to 7percent oxygen) when burning gaseous fuel

SPI has submitted a PM CAM plan for the biomass boiler with their first Title V renewal application as stated in 40 CFR §64.5(b). SPI has proposed a CAM plan based on opacity and voltage measurements. The provisions of the CAM plan have been included in AOP terms which reference the above mentioned PM limits. The plan is shown in Section 10 of the statement of basis for the AOP.

Note that in addition to complying with the CAM plan, the monthly visible emission checks required by AOP term 4.12 and the annual PM testing requirements in AOP term 5.1.14 serve to further demonstrate compliance with the PM emission limits and validate the CAM plan monitoring parameters.

4.5.1.6 Large pollutant specific emission units

According to 40 CFR §64.5(a), a large pollutant-specific emissions unit (PSEU) is one with the potential to emit (taking into account control devices) the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Based on this definition, the biomass boiler is not a large PSEU for PM: the post-control emissions are under 100 tpy, since the ESP is limited to 0.02 lb/MMBtu, with an annual potential emission of 39.4 tpy of PM.

As discussed above, because the biomass boiler has a post-control limit of more than 100 tpy of NO_x, it would be a large PSEU for that pollutant under CAM. However, since all NO_x limits for the biomass boiler are required to demonstrate compliance using a CEMS, no CAM plan is required.

4.5.2 Planer Mill

The planer mill dust collection system employs a baghouse for particulate control. The planer mill dust collection system is subject to a PM₁₀ emission limit (0.005 gr/dscf, and not more than 9.4 tons of PM₁₀ per year, from PSD 05-04 Amendment 3) and a baghouse control device achieves compliance with its PM₁₀ limit. The baghouse is also subject to opacity limits (generally applicable opacity limits in Section 4 of the AOP). According to Chapter 1 of EPA's CAM Technical Guidance Document, pre-control device emissions can be estimated using post-control potential to emit and the estimated control device efficiency.

The baghouse controlling the planer mill is subject to an annual PM₁₀ limit of 9.4 tpy. Assuming conservatively that the baghouse has greater than 99 percent control efficiency for PM₁₀, the pre-control potential PM₁₀ emissions are greater than 930 tpy. As a result, the baghouse controlling emissions from the planer mill is subject to CAM.

Visible emissions from baghouse are directly related to sawdust particulate matter emissions; when a baghouse is functioning properly, no visible emissions will be observed. Since the baghouse controls PM emissions to below the major source threshold, 40 CFR §64.3(b)(4)(iii) requires data collection at least once per 24-hour period. The SPI AOP was modified during the 2015 renewal to include the CAM Plan, which consists of daily observation of emissions from the baghouses and daily readings of the pressure drop across the baghouses. This monitoring, annual testing already required, plus monitoring records were found to be appropriate based on guidance provided by EPA in a Frequently Asked Questions Concerning the CAM Rule (October 2004) guidance document. In this document, EPA stated that daily observation for any visible emissions from a baghouse stack satisfies the monitoring requirement of CAM for PM emissions.

As mentioned above, the maximum PM emission rate of the planer mill baghouse is 9.4 tpy. The potential controlled PM₁₀ emissions from the planer mill baghouse are less than 100 tpy, and therefore the unit is not classified as a large PSEU.

SPI has proposed a CAM plan based on pressure drop monitoring across the bags of the baghouse. The CAM provisions are included in AOP Terms 4.13 and 5.3.1. The CAM plan is shown in Section 11 of the statement of basis for the AOP.

4.6 Other Federal New Source Review Programs

The entire jurisdiction of NWCAA is designated as “attainment/unclassifiable” for all criteria pollutants, with the exception of a small area surrounding the Alcoa aluminum smelter in Whatcom County, which was designated as non-attainment for sulfur dioxide. Following the shutdown of the Alcoa Intalco facility, EPA designated the area surrounding the Alcoa facility as “attainment”. SPI is located in Skagit County, outside of the area of concern. For this reason, no other federal new source review programs for new or modified sources of air pollution in a nonattainment area are applicable.

ATTACHMENT 3
EMISSION INVENTORY

Facility Summary

Northwest Clean Air Agency

D-057-00057

SIERRA PACIFIC INDUSTRIES

2023

FACILITY OPERATIONS	
Facility Category:	HAP and CAP Major
NAICS Code:	321113
Facility Comments:	
Operating Status:	Operating

FACILITY LOCATION	
Coordinates:	Latitude: 48.44840 Longitude: -122.43403
Reference Point:	Entrance Point
Comments:	
Facility Address:	14353 Mcfarland Road Mount Vernon, WA 98273-8232 Skagit County
Contact:	Brad Gould, Division Manager 14353 McFarland Road Burlington, WA 98273 (360) 424-7619 bgould@spi-ind.com

Release Point for Unit 01 - WOOD-FIRED BOILER

Release Point Type	Status	
Vertical	Operating	
Stack	Fugitive	Comments
Height: 100 ft Diameter: 8.2 ft Temperature: 444.8°F Flow Rate: 2,959 ACFS Velocity: 54.8 FPS Water Vapor: 21.2500 % Oxygen: 5.6500 %	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 02 - DRY KILNS		
Release Point Type	Status	
Fugitive	Operating	
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	Missing one or more stack parameters (height, diameter, flow or velocity, temperature). Coded as FUGITIVE until all parameters are provided.
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 03 - ANTI-MOLD SPRAY SYSTEM		
Release Point Type	Status	
Fugitive	Operating	
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 04 - LOG DEBARKING

Release Point Type		Status
Fugitive		Operating
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 06 - LOG PLANING/TRIMMING

Release Point Type		Status
Fugitive		Operating
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 07 - COOLING TOWER

Release Point Type		Status
Fugitive		Operating
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

Release Point for Unit 08 - FUGITIVE EMISSIONS - TRUCK BIN LOAD OUT

Release Point Type		Status
Fugitive		Operating
Stack	Fugitive	Comments
Height: not provided Diameter: not provided Temperature: not provided Flow Rate: not provided Velocity: not provided Water Vapor: not provided Oxygen: not provided	Height: not provided Length: not provided Width: not provided Angle: not provided	
Stack and Fugitive		Release Point Coordinates
Fence Line Distance: not provided EPA Release Point ID: not provided		Reference Point: Substance Release Point Latitude: 48.45151 Longitude: -122.42352

SIERRA PACIFIC INDUSTRIES UNITS

Unit ID: 01

BOILERS - WOOD FIRED (1) AND NAT GAS (2)

Unit Type	Status	Capacity
100 - Boiler	Operating	430 Million BTU Per Hour

Unit ID: 02

DRY KILNS

Unit Type	Status	Capacity
490 - Other Evaporative Sources	Operating	capacity not provided

Unit ID: 03

ANTI-MOLD SPRAY SYSTEM

Unit Type	Status	Capacity
490 - Other Evaporative Sources	Operating	capacity not provided

Unit ID: 04

LOG DEBARKING

Unit Type	Status	Capacity
690 - Other Process Equipment	Operating	capacity not provided

Unit ID: 06

LOG PLANING/TRIMMING

Unit Type	Status	Capacity
690 - Other Process Equipment	Operating	capacity not provided

Unit ID: 07

COOLING TOWER

Unit Type	Status	Capacity
680 - Cooling Tower	Operating	capacity not provided

Unit ID: 08

FUGITIVE EMISSIONS - TRUCK BIN LOAD OUT

Unit Type	Status	Capacity
390 - Other fugitive	Operating	capacity not provided

Unit ID: 09

FUGITIVE EMISSIONS - PAVED ROADS

Unit Type	Status	Capacity
300 - Open Air Fugitive Source	Operating	capacity not provided

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 01 Process ID: 01

Process Description: MCBURNEY - WOOD BOILER

SCC CODE: 10100902 - Ext Comb /Electric Gen /Wood/Bark Fired Boiler

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
943 - Wood/Bark	Input
Throughput and Units:	
188768.00 TONS	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	8041.00 BTUs / LB

OPERATING SCHEDULE

Winter %	27 %	Hours/Day	24.0
Spring %	23 %	Days/Week	7.0
Summer %	26 %	Weeks/Year	50
Fall %	24 %	Hours/Year	8,400

Comments: Ash 1.4%, and Sulfur .28%, are listed in WEIRs but are not showing on the Facility Summary Report.

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
01	Release Point for Unit 01 - WOOD-FIRED BOILER	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057

Unit ID: 01 Process ID: 01

NH3 - Ammonia 19.20 TON	
Calculation Method: Stack Test (no Control Efficiency used)	
Emission Factor: 0.20 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM10-PRI - PM10 Primary (Filt + Cond) 7.30 TON	
Calculation Method: Stack Test (no Control Efficiency used)	
Emission Factor: 0.08 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM-PRI - PM Primary (Filt + Cond) 7.30 TON	
Calculation Method: Stack Test (no Control Efficiency used)	
Emission Factor: 0.08 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
SO2 - Sulfur Dioxide 1.90 TON	
Calculation Method: Stack Test (no Control Efficiency used)	
Emission Factor: 0.02 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
CO - Carbon Monoxide 230.90 TON	
Calculation Method: Continuous Emission Monitoring System	
Emission Factor: 2.45 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
NOX - Nitrogen Oxides 170.20 TON	
Calculation Method: Continuous Emission Monitoring System	
Emission Factor: 1.80 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
VOC - Volatile Organic Compounds 2.60 TON	
Calculation Method: Stack Test (no Control Efficiency used)	
Emission Factor: 0.03 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM25-PRI - PM2.5 Primary (Filt + Cond) 6.64 TON	
Calculation Method: USEPA Speciation Profile	
Emission Factor: 0.07 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	

75070 - Acetaldehyde 548.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.00 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
107028 - Acrolein 105.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.00 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
50000 - Formaldehyde 5749.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.03 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 01 Process ID: 02

Process Description: NAT GAS PKG BOILER

SCC CODE: 10100602 - Ext Comb /Electric Gen /Natural Gas /Boilers < 100 Million Btu/hr except Tangential

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
209 - Natural Gas	Input
Throughput and Units:	
35.45 MILLION STANDARD CUBIC FEET	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	1100.00 BTUs / SCF

OPERATING SCHEDULE

Winter %	12 %	Hours/Day	24.0
Spring %	34 %	Days/Week	7.0
Summer %	21 %	Weeks/Year	52
Fall %	33 %	Hours/Year	8,736

Comments: Only 1 Fuel Parameter is showing on the Facility Summary Report (Heat Content). Sulfur % is also reported (.769%) but is not showing on the Summary Report.

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
01	Release Point for Unit 01 - WOOD-FIRED BOILER	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
Unit ID: 01 Process ID: 02

PM10-PRI - PM10 Primary (Filt + Cond) 0.10 TON

Calculation Method: Stack Test (no Control Efficiency used)

Emission Factor: 5.64 Pounds / Million Standard | Emission Factor Desc: none entered

Comments: none entered

SO2 - Sulfur Dioxide 0.01 TON

Calculation Method: Stack Test (no Control Efficiency used)

Emission Factor: 0.56 Pounds / Million Standard | Emission Factor Desc: none entered

Comments: none entered

CO - Carbon Monoxide 1.50 TON

Calculation Method: Continuous Emission Monitoring System

Emission Factor: 84.63 Pounds / Million | Emission Factor Desc: none entered

Comments: none entered

VOC - Volatile Organic Compounds

VOC Expression: Sum of Volatile Organic Compounds 0.10 TON

Calculation Method: Stack Test (no Control Efficiency used)

Emission Factor: 5.64 Pounds / Million Standard | Emission Factor Desc: none entered

Comments: none entered

PM25-PRI - PM2.5 Primary (Filt + Cond) 0.10 TON

Calculation Method: USEPA Speciation Profile

Emission Factor: 5.64 Pounds / Million Standard | Emission Factor Desc: none entered

Comments: none entered

NOX - Nitrogen Oxides 0.90 TON

Calculation Method: Continuous Emission Monitoring System

Emission Factor: 50.78 Pounds / Million | Emission Factor Desc: none entered

Comments: none entered

PM-PRI - PM Primary (Filt + Cond) 0.10 TON

Calculation Method: Stack Test (no Control Efficiency used)

Emission Factor: 5.64 Pounds / Million Standard | Emission Factor Desc: none entered

Comments: none entered

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 02 Process ID: 01

Process Description: DRY KILNS

SCC CODE: 30700841 - Lumber Kiln: Indirect-heated: Softwood: Pine Species

Insignificant Emissions Unit? No

Status: Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
015 - Wood	Input
Throughput and Units:	
233388.00 1000 BOARD FEET	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Winter %	25 %	Hours/Day	24.0	Comments:
Spring %	25 %	Days/Week	7.0	
Summer %	24 %	Weeks/Year	52	
Fall %	26 %	Hours/Year	8,736	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
02	Release Point for Unit 02 - DRY KILNS	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057

Unit ID: 02 Process ID: 01

67561 - Methanol 12671.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.05 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
107028 - Acrolein 253.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.00 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
8006642 - Turpentine 55353.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.24 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
75070 - Acetaldehyde 19317.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.08 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
108952 - Phenol 719.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.00 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
50000 - Formaldehyde 258.00 LB	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.00 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 03 Process ID: 01

Process Description: ANTI-MOLD SPRAY SYSTEM

SCC CODE: 30700801 - Sawmill Operations /Log Debarking

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
001 - Waste Material	Input
Throughput and Units:	
24.43 TONS	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Winter %	24 %	Hours/Day	20.0	Comments:
Spring %	27 %	Days/Week	5.0	
Summer %	27 %	Weeks/Year	50	
Fall %	22 %	Hours/Year	5,000	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
03	Release Point for Unit 03 - ANTI-MOLD SPRAY SYSTEM	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057

Unit ID: 03 Process ID: 01

VOC - Volatile Organic Compounds**VOC Expression: Sum of Volatile Organic Compounds 0.01 TON**

Calculation Method: S/L/T Emission Factor (no Control Efficiency used)

Emission Factor: 0.00 Pounds / Gallons

Emission Factor Desc: none entered

Comments: none entered

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 04 Process ID: 01 Process Description: LOG DEBARKER

SCC CODE: 30700801 - Sawmill Operations /Log Debarking

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
015 - Wood	Input
Throughput and Units:	
845942.00 TONS	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Season	Percentage	Frequency	Value	Comments:
Winter %	26 %	Hours/Day	20.0	
Spring %	26 %	Days/Week	5.0	
Summer %	23 %	Weeks/Year	50	
Fall %	25 %	Hours/Year	5,000	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
04	Release Point for Unit 04 - LOG DEBARKING	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
 Unit ID: 04 Process ID: 01

PM10-PRI - PM10 Primary (Filt + Cond) 5.10 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.01 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM-PRI - PM Primary (Filt + Cond) 10.20 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.02 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM25-PRI - PM2.5 Primary (Filt + Cond) 2.50 TON	
Calculation Method: Engineering Judgment	
Emission Factor: 0.01 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 06 Process ID: 01 Process Description: PLANER

SCC CODE: 30700801 - Sawmill Operations /Log Debarking

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
015 - Wood	Input
Throughput and Units:	
287978.00 1000 BOARD FEET	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Season	Percentage	Frequency	Value	Comments:
Winter %	25 %	Hours/Day	20.0	
Spring %	26 %	Days/Week	5.0	
Summer %	23 %	Weeks/Year	50	
Fall %	26 %	Hours/Year	5,000	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
06	Release Point for Unit 06 - LOG PLANING/TRIMMING	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
 Unit ID: 06 Process ID: 01

PM10-PRI - PM10 Primary (Filt + Cond) 2.27 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.02 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
PM-PRI - PM Primary (Filt + Cond) 2.27 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.02 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	
PM25-PRI - PM2.5 Primary (Filt + Cond) 2.27 TON	
Calculation Method: Engineering Judgment	
Emission Factor: 0.02 Pounds / 1000 Board Feet	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 07 Process ID: 01 Process Description: COOLING TOWER

SCC CODE: 38500101 - Industrial Process Cooling Tower /Mechanical Draft

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
733 - Cooling Water	Input
Throughput and Units:	
20000.00 GALLON PER MINUTE-YEAR	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Winter %	27 %	Hours/Day	24.0	Comments:
Spring %	23 %	Days/Week	7.0	
Summer %	26 %	Weeks/Year	50	
Fall %	24 %	Hours/Year	8,400	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
07	Release Point for Unit 07 - COOLING TOWER	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
 Unit ID: 07 Process ID: 01

PM-PRI - PM Primary (Filt + Cond) 0.75 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.18 Pounds / Hour	Emission Factor Desc: none entered
Comments: none entered	
PM25-PRI - PM2.5 Primary (Filt + Cond) 0.75 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.18 Pounds / Hour	Emission Factor Desc: none entered
Comments: none entered	
PM10-PRI - PM10 Primary (Filt + Cond) 0.75 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.18 Pounds / Hour	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 08 Process ID: 01

Process Description: TRUCK BIN

SCC CODE: 30688801 - Petrol Indus /Fugitive Emissions /Specify in Comments Field

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
104 - Fiber	Output
Throughput and Units:	
9107.00 EACH	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Winter %	35 %	Hours/Day	20.0	Comments: Throughput shown is actual truck loads.
Spring %	25 %	Days/Week	5.0	
Summer %	18 %	Weeks/Year	50	
Fall %	22 %	Hours/Year	5,000	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
08	Release Point for Unit 08 - FUGITIVE EMISSIONS - TRUCK BIN LOAD OUT	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
 Unit ID: 08 Process ID: 01

PM-PRI - PM Primary (Filt + Cond) 7.30 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.05 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM10-PRI - PM10 Primary (Filt + Cond) 3.50 TON	
Calculation Method: S/L/T Emission Factor (no Control Efficiency used)	
Emission Factor: 0.03 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	
PM25-PRI - PM2.5 Primary (Filt + Cond) 0.50 TON	
Calculation Method: USEPA Speciation Profile	
Emission Factor: 0.00 Pounds / Tons	Emission Factor Desc: none entered
Comments: none entered	

SIERRA PACIFIC INDUSTRIES PROCESSES

Unit ID: 09 Process ID: 01

Process Description: PAVED ROADS

SCC CODE: 30688801 - Petrol Indus /Fugitive Emissions /Specify in Comments Field

Insignificant Emissions Unit? No

Status:Operating

ANNUAL THROUGHPUT

Operating Type:	
Routine	
Material:	Material State:
368 - Vehicle	Existing
Throughput and Units:	
88093.00 MILES	

FUEL PARAMETERS

Fuel Parameter Content	
Sulfur:	no entry
Ash:	no entry
Heat:	no entry

OPERATING SCHEDULE

Winter %	25 %	Hours/Day	20.0	Comments:
Spring %	26 %	Days/Week	5.0	
Summer %	24 %	Weeks/Year	50	
Fall %	25 %	Hours/Year	5,000	

*sum of quarters must be 100%***RELEASE POINT APPORTIONMENT**

RP ID	Description	Ave Emissions (%)
09	Release Point for Unit 09 - FUGITIVE EMISSIONS - PAVED ROADS	100%

EMISSIONS

SIERRA PACIFIC INDUSTRIES D-057-00057
Unit ID: 09 Process ID: 01

PM25-PRI - PM2.5 Primary (Filt + Cond) 1.60 TON	
--	--

Calculation Method: USEPA Speciation Profile

Emission Factor: 0.04 Pounds / Miles

Emission Factor Desc: none entered

Comments: none entered

PM10-PRI - PM10 Primary (Filt + Cond) 6.60 TON	
---	--

Calculation Method: S/L/T Emission Factor (no Control Efficiency used)

Emission Factor: 0.15 Pounds / Miles

Emission Factor Desc: none entered

Comments: none entered

PM-PRI - PM Primary (Filt + Cond) 33.80 TON	
--	--

Calculation Method: S/L/T Emission Factor (no Control Efficiency used)

Emission Factor: 0.77 Pounds / Miles

Emission Factor Desc: none entered

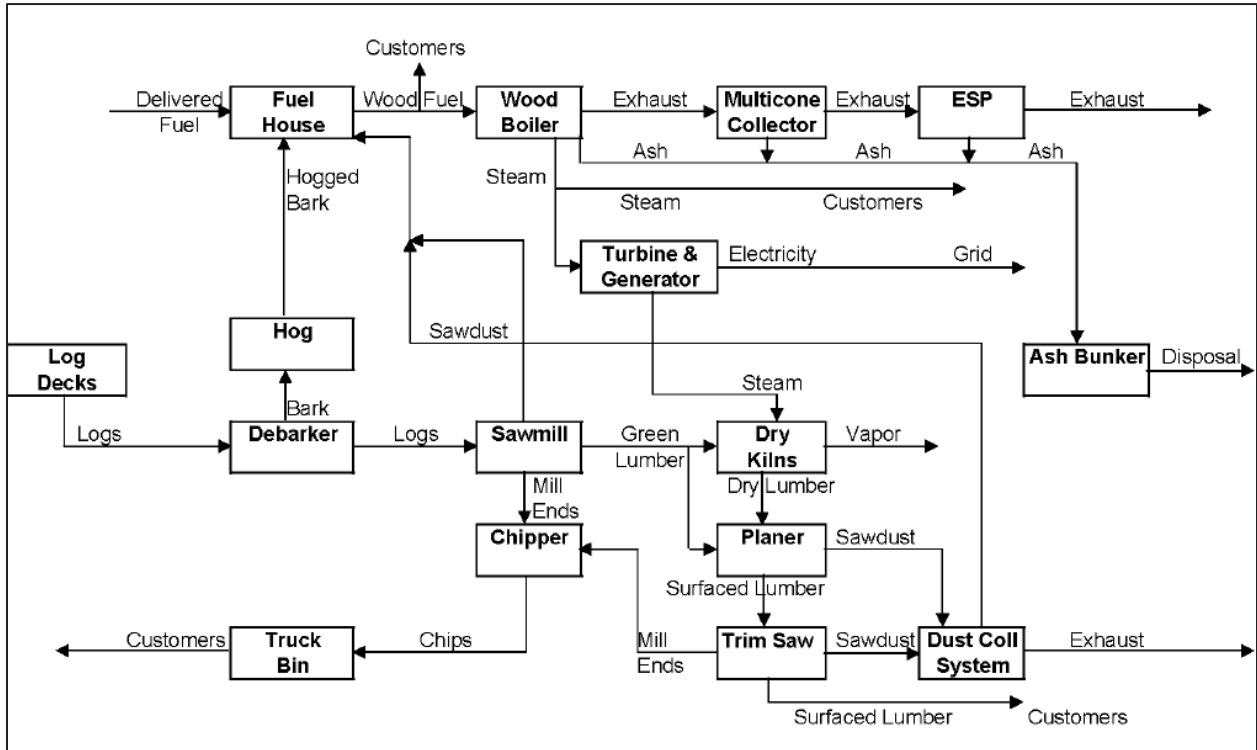
Comments: none entered

END

ATTACHMENT 4

PROCESS FLOW DIAGRAM

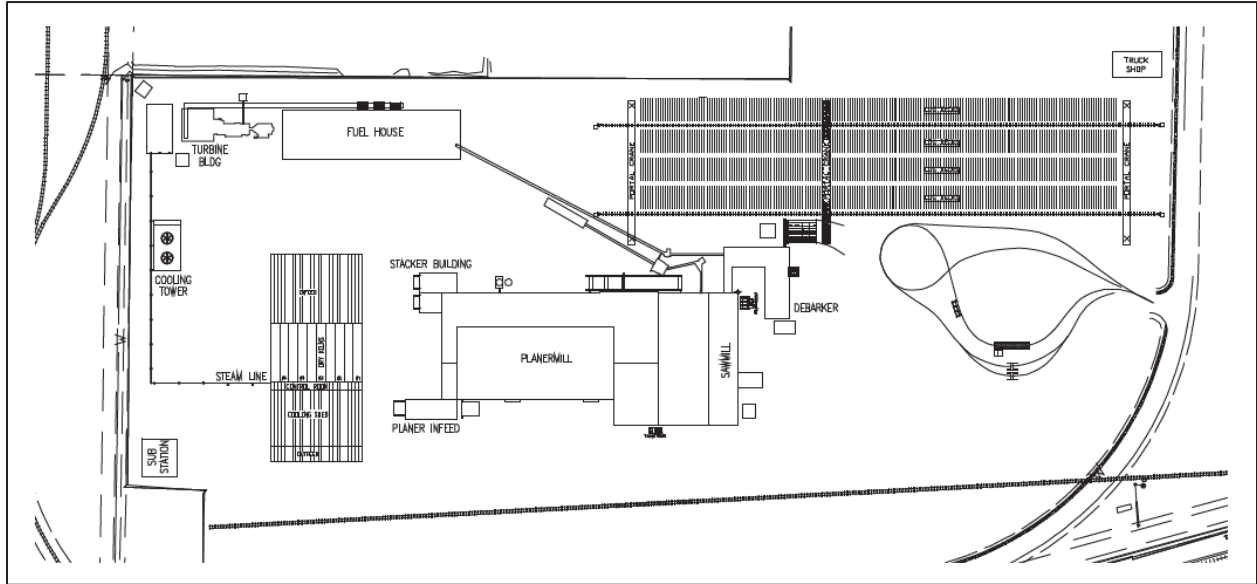
Figure 2-3 General Process Flow Diagram
Sierra Pacific Industries, Statement of Basis for AOP #019R2M1 (Final, July 2, 2024)



ATTACHMENT 5

SITE PLAN

Figure 2-2 SPI Facility Layout
Sierra Pacific Industries, Statement of Basis for AOP #019R2M1 (Final, July 2, 2024)



ATTACHMENT 6

INSIGNIFICANT EMISSIONS UNITS

Table 11-1 Insignificant Activities and Emissions Units (Categorically Exempt)
Sierra Pacific Industries, Statement of Basis for AOP #019R2M1 (Final, July 2, 2024)

Insignificant Emission Unit	Basis
Lubricating Oil Tank	WAC 173-401-532(3)
Hydraulic Oil Tank	WAC 173-401-532(4)
Pressurized Storage of Gases	WAC 173-401-532(5)
Vehicle Exhaust from Maintenance Shops	WAC 173-401-532(7)
CEMS	WAC 173-401-532(8)
Vents	WAC 173-401-532(9)
Vehicle Internal Combustion Engines	WAC 173-401-532(10)
Welding Operations	WAC 173-401-532(12)
Plant Upkeep Activities	WAC 173-401-532(33)
Street/Pavement Cleaning and Sweeping	WAC 173-401-532(35)
Food Preparation	WAC 173-401-532(41)
Portable Drums and Totes	WAC 173-401-532(42)
Lawn and Landscaping Activities	WAC 173-401-532(43)
General Vehicle Maintenance	WAC 173-401-532(45)
Comfort Air Conditioning	WAC 173-401-532(46)
Office Activities	WAC 173-401-532(49)
Sampling Connections	WAC 173-401-532(51)
Parking Lot Exhaust	WAC 173-401-532(54)
Indoor Activities	WAC 173-401-532(55)
Repair and Maintenance	WAC 173-401-532(74)
Totally Enclosed Conveyors	WAC 173-401-532(86)
Air Compressors	WAC 173-401-532(88)
Steam Leaks	WAC 173-401-532(89)
Vacuum System Exhausts	WAC 173-401-532(108)
Water Cooling Towers	WAC 173-401-532(121)

ATTACHMENT 7

AOP Number 019R2M1

Air Operating Permit – Final AOP 019R2M1

Sierra Pacific Industries

Mount Vernon, Washington

July 2, 2024



Serving Island, Skagit & Whatcom Counties

PERMIT INFORMATION
SIERRA PACIFIC INDUSTRIES
14353 McFarland Road, Mount Vernon, WA 98273

Responsible Corporate Official

David S. North
Division Manager
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1403

Corporate Inspection Contact

Tyler Moriarty
Co-Gen Supervisor
Sierra Pacific Industries
Burlington Division
14353 McFarland Road
Mount Vernon, WA 98273
(360) 424-7619 ext. 1434

Northwest Clean Air Agency

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

Prepared by

Christos Christoforou, P.E.
Engineer
(360) 419-6839

Expires: April 15, 2026

Renewal Application Due: April 15, 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.

Pursuant to Section 322 of the Regulation of the Northwest Clean Air Agency and Chapter 173-401 Washington Administrative Code, Sierra Pacific Industries is authorized to operate subject to the terms and conditions of this permit.

Northwest Clean Air Agency Approval:

C.S. Christoforou

Date: 7/2/24

Christos Christoforou, P.E.
Engineer

Agata McIntyre

Date: 7/2/24

Agata McIntyre, P.E.
Engineering Manager



Table of Contents

SECTION 1	Emission Unit Descriptions	5
SECTION 2	STANDARD TERMS AND CONDITIONS	6
2.1	Compliance Requirements	6
2.2	Permit Terms.....	11
2.3	Permit Shield.....	13
2.4	Recordkeeping and Reporting	15
2.5	Excess Emissions	22
2.6	Duty to Supplement or Correct Information	23
2.7	Prohibitions	23
2.8	Notice of Construction and Application for Approval/New Source Review	25
2.9	Greenhouse Gas Regulation.....	28
SECTION 3	Standard Terms and Conditions for NSPS and NESHAP	29
3.1	Part 60 – New Source Performance Standard Requirements	29
3.2	Part 63 – National Emission Standard for Hazardous Air Pollutant Requirements	34
SECTION 4	GENERALLY APPLICABLE REQUIREMENTS	46
SECTION 5	Specifically Applicable Requirements	58
SECTION 6	Inapplicable requirements.....	92

Tables

Table 1-1	Emission Units	5
Table 4-1	Generally Applicable Requirements.....	47
Table 5-1	Specifically Applicable Requirements – EU-1, cogeneration facility.....	59
Table 5-2	Specifically Applicable Requirements – EU-2, Cooling Towers.....	83
Table 5-3	Specifically Applicable Requirements – EU-3, Planer Mill	84
Table 5-4	Specifically Applicable Requirements – EU-4, Dry Kilns	85
Table 5-5	Specifically Applicable Requirements – EU-5, Anti-mold Spray Chamber	88
Table 5-6	Specifically Applicable Requirements – EU-6, Natural Gas Package Boiler	90
Table 6-1	Inapplicable Requirements	92

SECTION 1 EMISSION UNIT DESCRIPTIONS

This table lists emission units and activities included in the AOP that are located at the Sierra Pacific Industries facility located at 14353 McFarland Road, Mount Vernon, Washington, hereinafter referred to as the facility, owner or operator, or the permittee. The information presented here in Section 1 is for informational purposes only.

Table 1-1 Emission Units

Name	Emission Points	Control Device	Process Description
EU-1 Cogeneration Facility	Stack	Multiclone/ESP	Electrical generation using a turbine and high-pressure steam provided by a biomass-fired, 430 MMBtu/hr, 250,000 lb/hr steam, McBurney Corp, water-wall boiler with a vibrating grate, a steam turbine, and a generator. Generates up to 28 MW of electricity. Provides 2,190 MMlb per year of low-pressure steam for heating.
EU-2 Cooling Tower	Vents	None	Condense steam
EU-3 Planer Mill	Stack	Baghouse	The sawmill is currently permitted to process 400 MMbf/yr of dimensional lumber.
EU-4 Dry Kilns	Vents	None	The dry kilns are currently permitted to process 400 MMbf/yr of dimensional lumber.
EU-5 Anti-mold Spray Chamber	Vent	Mist eliminator pad	Treat all cut lumber to protect the wood and improve lumber appearance.
EU-6 Natural Gas Package Boiler	Stack	Low NOx burner / FGR	Natural gas fired package boiler (95 MMBtu/hr) to maintain dry kiln operations when EU-1 is not operating.

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". In accordance with WAC 173-401-625(2), a requirement designated "State Only" is enforceable only by 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 May 14, 2020.

The requirements listed below the "Directly Enforceable" label are legally enforceable requirements added under NWCAA's gap-filling authority in WAC 173-401-615(1)(b) & (c) (10/17/2002). 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.

2.1 Compliance Requirements

2.1.1 Duty to Comply

2.1.1.1 WAC 173-401-620(2)(a) (11/4/1993)

The permittee shall 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 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 (11/17/2011)

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) (3/20/1993), WAC 173-400-240 (3/22/1991), NWCAA Section 131 (3/14/2013), NWCAA Sections 132 & 133 (8/13/2015), 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 WAC 173-400-250 (9/20/1993) and NWCAA 133.2 (8/13/2015)

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) (11/4/1993)

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) (11/4/1993)

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

NWCAA Section 114 (11/8/2007)

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), WAC 173-401-630(2) (3/5/2016), NWCAA Sections 110 & 111 (7/14/2005)
State Only: WAC 173-400-105(3) (11/25/2018)

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

NWCAA Section 110 (7/14/2005)

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, 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) (11/25/2018)

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 2.1.8.1.

2.1.8.3 State Only: NWCAA Section 367 and Appendix A (7/14/2005)

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.

2.1.9 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 (7/14/2005)

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 (7/14/2005)

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), 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) (11/4/1993)

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) (11/4/1993)

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 (4/1/2011), 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) (11/4/1993)

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) (11/4/1993), WAC 173-401-735 (5/3/1997)

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) (11/4/1993)

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 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 (10/17/2002), WAC 173-401-724 (3/5/2016)

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 (11/4/1993), 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) (11/4/1993)

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)

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.

2.2.13 Compliance Schedule

WAC 173-401-630(3) (3/5/2016), 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) (11/4/1993)

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 (11/17/2011)

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 (11/8/2007)

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.

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 (3/22/1991)

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) (9/16/2018)

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 (10/8/2015)

Reasonably Available Control Technology (RACT) is required for all existing sources except as otherwise provided in RCW 70A.15.3000(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 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.

2.3.5 Emergencies

WAC 173-401-645 (11/4/1993)

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) (3/5/2016)

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;
- (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 (11/4/1993)

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**

2.4.2.1 NWCAA Section 112 (7/14/2005)

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).

2.4.3.3 PSD 05-04 Amendment 3 Conditions 18.3.1 and 18.3.2 (05/23/2024)

SPI-Burlington will maintain monitoring, source test, CEM audit tests, and process records at the Skagit County facility for at least five years. SPI-Burlington will provide Ecology and the NWCAA with the monitoring and process records for any period within the five-year archive, within 10 working days of request.

2.4.4 Pollutant Disclosure - Reporting by Air Contaminant Sources

2.4.4.1 NWCAA Section 150 (9/8/1993), 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;
- (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) (11/25/2018)

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.

2.4.4.3 State Only: NWCAA Section 150 (11/8/2007)

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 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) (3/1/2015)

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 (10/16/2016)

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 (3/1/2015)

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 (3/1/2015)

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 Report, 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) (7/1/2016)

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 twelve (12) hours to the NWCAA.

- (ii) 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 (11/8/2007)

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:

- (i) The upset or breakdown shall be reported as promptly as possible and in no event later than twelve (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.

In addition to the reporting requirements of the 10/13/94 version of NWCAA Section 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:

- (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 (7/14/2005)

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 (7/14/2005)

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

2.5.1.1 WAC 173-400-107 (9/20/1993) (State Only - 9/16/2018)

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.

2.5.1.2 PSD 05-04 Amendment 3 Condition 18.2.3 (04/23/2024)

Each occurrence of monitored emissions measured in excess of the limits shall be reported in writing to Ecology and the NWCAA after the respective exceedance in accordance with WAC 173-400-107(3). Such reports shall, as a minimum, include:

- (i) The time of the occurrence.
- (ii) Magnitude of excess from the emission limit.

- (iii) The duration of the excess.
- (iv) The probable cause.
- (v) Corrective actions taken or planned.
- (vi) Any other agency contacted.

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

State Only: NWCAA 340.4 (11/8/2007) and 341.4 (7/14/2005)

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) (10/17/2002)

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) (3/22/1991)*
State Only: WAC 173-400-040(8) (9/16/2018)

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 (1/8/1969)*

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: (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 (4/1/2011), NWCAA Section 502 (9/11/2014)

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 (9/11/2014)

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 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 (12/27/2017)

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

NWCAA Section 124 (7/14/2005)

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) (11/25/2018)

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) (11/25/2018)

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)

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Section 68.10 and 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, 303 (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), and NWCAA 324.2 (9/11/2014)

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 Section 200, and "new source" shall include any "modification" to an existing "stationary source" as those terms are defined in NWCAA Section 200.

2.8.2 Nonroad Engines

State Only: NWCAA Section 304 (4/11/2019)

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

State Only: WAC 173-400-560 (12/29/2012) and NWCAA 121.4 (3/14/2013)

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)

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, -720, -730 (7/1/2016), -740 (9/16/2018), -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 (4/11/2019)

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) (3/5/2016)

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 have been adopted by reference in Section 104.2 of the NWCAA Regulation. NWCAA 104.2 was last amended by the agency on May 14, 2020.

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 8/5/2019 from Krishna Viswanathan, 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
Director, Air and Waste Management Division
1200 Sixth Avenue OAQ-107
Seattle, WA 98101

3.1.2 Notification

40 CFR 60.7(a) (2/12/1999) (as amended by Delegation Letter dated 8/5/2019 from Krishna Viswanathan, 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) (2/12/1999)

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) (as amended by Delegation Letter dated 8/5/2019 from Krishna Viswanathan, 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) (2/12/1999)

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 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:

- (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) (10/17/00)

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) (10/17/2000)

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(q) (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

40 CFR 60.13 (6/30/2016)

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 (10/17/2000)

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 (11/19/2020), 40 CFR 63.10(b)(3) (11/19/2020)

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.

Beginning on January 19, 2021, a major source may become an area source at any time upon reducing its emissions of HAP to below the major source thresholds established in 40 CFR 63.2. The 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 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.

3.2.4 Operation and Maintenance

- 3.2.4.1 O&M for 40 CFR 63 Subpart DDDDD (Boiler MACT)
40 CFR 63.7500(a)(3) (11/20/2015)

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.

3.2.5 Compliance With Nonopacity Emission Standards

3.2.5.1 Nonopacity emission standards for Part 63 NESHAP Sources 40 CFR 63.6(f)(2) and (3) (11/19/2020)

(2) Methods for determining compliance. (i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in §63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

3.2.6 Extension of Compliance for Early Reductions and Other Reductions

40 CFR 63.6(i) (11/19/2020) and 63.9(c) (11/19/2020)

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) (11/14/2018) and 63.9(e) (11/19/2020)

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 Conduct of Performance Tests

Conduct of Performance Tests for Part 63 NESHAP Sources 40 CFR
63.7(e)(2)-(9), 63.7(f), 63.7(g), 63.7(h) (11/14/2018), 63.9(e) (11/19/2020)

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:

- (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, 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.

3.2.9 Operation and Maintenance of Continuous Monitoring Systems

O&M of CMS for Part 63 NESHAP Sources 40 CFR 63.8(c)(1), 63.8(c)(1)(ii), 63.8(c)(2)-(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.

The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

All CMS must 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).

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. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity.

3.2.10 Continuous Monitoring Systems (CMS) Out of Control Periods

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).

3.2.11 Continuous Monitoring Systems (CMS) Quality Control Program

40 CFR 63.8(d) & (e) (11/14/2018), 63.9(g)(1) (11/19/2020)

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—

- (vii) 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,
- (viii) 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) (11/14/2018)

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 Address for Reports, Notifications and Submittals

40 CFR 63.9(a) (11/19/2020), 63.10(a) (11/19/2020), 63.12(c) (11/19/2020), 63.13 (11/19/2020), (as amended by Delegation Letter dated 8/5/2019 from Krishna Viswanathan, 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, or to Compliance and Emissions Data Reporting Interface (CEDRI), if required by the relevant subpart:

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

Regardless of delegation status, all information required to be submitted to CEDRI by a relevant subpart must be submitted to CEDRI. All information required to be submitted to the EPA under this part shall also be submitted to NWCAA.

3.2.14 Notification

3.2.14.1 Notification Requirements for New or Reconstructed Part 63 NESHAP Sources
40 CFR 63.9(b)(4) (11/19/2020)

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 Recordkeeping

Recordkeeping for Part 63 NESHAP Sources 40 CFR 63.10(b)(1) 11/11/2020)

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.

3.2.16 Startup, Shutdown, and Malfunction Recordkeeping and Reports

3.2.16.1 SSM Reports for 40 CFR 63 Subpart DDDDD (Boiler MACT) Affected Sources 40 CFR 63.7555(d)(7) 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 3.3.17.1 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 Recordkeeping Requirements for Sources with Continuous Monitoring Systems

Recordkeeping requirements for sources with CMS for Part 63 NESHAP Sources 40 CFR 63.10(c) (11/19/2020)

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:

- (i) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);
- (ii)–(iv) [Reserved]
- (v) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
- (vi) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);
- (vii) 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;
- (viii) 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;
- (ix) [Reserved]
- (x) The nature and cause of any malfunction (if known);

- (xi) The corrective action taken or preventive measures adopted;
- (xii) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;
- (xiii) The total process operating time during the reporting period; and
- (xiv) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

3.2.18 Notification of Compliance Status (NCS)

3.2.18.1 NCS for 40 CFR 63 Subpart DDDDD (Boiler MACT) Affected Sources **40 CFR 63.7545(a), (e), (e)(1), and (e)(6) (11/20/2015)**

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 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 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 are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended May 14, 2020. All of the federal regulations listed in Section 4 have been adopted by reference in NWCAA 104.2, as amended May 14, 2020.

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-Gapfill*" are legally enforceable requirements added under the NWCAA's "gap-filling" authority (WAC 173-401-615(1)(b) & (c), (10/17/02)). The requirements in the MR&R column labeled as "*Directly Enforceable-Sufficiency*" are legally enforceable requirements added under the NWCAA's "sufficiency monitoring" authority (WAC 173-401-630(1)). 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) (10/22/97). 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) 40 CFR 60 Subpart A 60.19(c) (2/12/1999) 40 CFR 61 Subpart A 61.10(g) (3/16/1994) 40 CFR 63 Subpart A 63.10(a)(5) (11/19/2020) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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 - Gapfill:</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
4.2 General	NWCAA Section 342 (9/8/1993) (7/14/2005 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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 - Gapfill:</i> Monitor, keep records and report in accordance with the terms of this permit. Keep records of maintenance and repair work on process and air pollution control equipment.

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.3 Nuisance	NWCAA Section 530 (3/9/2000 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>General Nuisance</u></p> <p>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.</p> <p>An air contaminant is defined as "dust, fumes, mist, smoke, other particulate matter, vapor gas, odorous substance, or any combination thereof.</p>	<p><i>Directly Enforceable - Gapfill:</i></p> <p>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.</p>
4.4 Nuisance	WAC 173-400-040(5) (3/22/1991) WAC 173-400-040(6) (9/16/2018 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Emission Detrimental to Persons or Property</u></p> <p>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.</p>	<p>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.</p> <p>Receipt of a nuisance complaint in itself shall not necessarily be a violation.</p>
4.5 Odor	NWCAA Section 535 (3/9/2000 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Odor Control Measures</u></p> <p>Appropriate practices and control equipment shall be installed and operated to reduce odor-bearing gases emitted into the atmosphere to a reasonable minimum.</p> <p>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.</p> <p>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.</p>	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.6 Odor	WAC 173-400-040(5) (9/16/2018 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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.	
4.7 PM	NWCAA Section 550 (4/14/1993) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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 - Gapfill:</i> Follow MR&R under AOP Term 4.3.
4.8 PM	NWCAA Section 550 (9/11/2014 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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) (9/16/2018 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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)(a) (9/16/2018 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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) (3/22/1991) WAC 173-400-040(9)(a) (9/16/2018 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<u>Fugitive Dust</u> Reasonable precautions to prevent release of fugitive dust required. Maintain and operate source to minimize emissions.	
4.12 VE	NWCAA 451.1 (10/13/1994); (11/8/2007 State Only) CAM: 40 CFR §64.3(b), §64.6(c), §64.7(c)-(e), §64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c), (10/17/02) NWCAA 104.2 (5/14/20)	<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 - Gapfill:</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.

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.13 VE	WAC 173-400-040(1) (3/22/1991) WAC 173-400-040(2) (9/16/2018 State Only) CAM: 40 CFR §64.3(b), §64.6(c), §64.7(c)-(e), §64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c), (10/17/02) NWCAA 104.2 (5/14/20)	<p><u>Visible Emissions</u></p> <p>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 (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.</p>	<ul style="list-style-type: none"> • 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.

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.14	NWCAA 455.1 (4/14/93); (5/11/95) State Only WAC 173-400-060 (3/22/91); (2/10/05) State Only CAM: 40 CFR §64.3(b), §64.6(c), §64.7(c)-(e), §64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) NWCAA 104.2 (5/14/20)	<p><u>Emission of Particulate Matter</u></p> <p>Emissions shall not exceed 0.10 grain/dscf (0.23 g/dry m³) (combustion emissions shall be corrected to 7% oxygen) except gaseous and distillate fuel burning equipment (not including internal combustion engines) shall not exceed 0.05 grain/dscf (0.11 g/dry m³) corrected to 7% oxygen.</p>	<p>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.</p> <p>Compliance with this MR&R does not excuse an exceedance of the underlying opacity standard.</p> <p><i>Compliance Assurance Monitoring: Planer Mill</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p>Once per operating day, check the pressure taps for plugging, and check and record the differential pressure under which the baghouse is operating. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair. Report according to the provisions of AOP term 2.4.8.</p> <p><i>Compliance Assurance Monitoring: Biomass boiler</i> Demonstrate compliance with the opacity standard following the CAM MR&R of AOP term 5.1.8. Demonstrate compliance with the PM standard following the CAM MR&R of AOP term 5.1.14.</p>

<p>4.15 PM</p>	<p>WAC 173-400-050(1) and (3) (9/16/2018) CAM: 40 CFR §64.3(b), §64.6(c), §64.7(c)-(e), §64.9(a)-(b) (10/22/97) WAC 173-401-615(4) (10/17/02) WAC 173-401-615(1)(b) & (c), (10/17/02) NWCAA 104.2 (5/14/20)</p>	<p><u>Emission Standards for Combustion and Incineration Units</u> Particulate emissions from combustion units greater than 0.2 grains/dscf corrected to 7% oxygen prohibited.</p>	<p><i>Directly Enforceable - Gapfill:</i> Conduct a facility-wide inspection at least once per calendar month during each month of operation for visible emissions, odors, prohibited activities under AOP Section 2.7 and activities that require additional approval under AOP Section 2.8. The inspections shall also examine the general state of compliance with Operation and Maintenance (O&M) Manuals. Keep records of the inspections, including the date, person conducting the inspection and the results of the inspections. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p><i>Compliance Assurance Monitoring: Planer Mill</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken. Once per operating day, check the pressure taps for plugging, and check and record the differential pressure under which the baghouse is operating. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair. Report according to the provisions of AOP term 2.4.8.</p> <p><i>Compliance Assurance Monitoring: Biomass boiler</i> Demonstrate compliance with the opacity standard following the CAM MR&R of AOP term 5.1.8. Demonstrate compliance with the PM standard following the CAM MR&R of AOP term 5.1.14.</p>
--------------------	---	---	--

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.16	WAC 173-400-060 (11/25/2018) WAC 173-401-615(1)(b) & (c), (10/17/02)	<u>Emission Standards for General Process Units</u> Particulate emissions greater than 0.1 grain/dscf prohibited.	<i>Directly Enforceable - Gapfill:</i> Follow MR&R under AOP Term 4.12.
4.17 SO ₂	NWCAA Section 462 (10/13/1994) WAC 173-401-615(1)(b) & (c), (10/17/02)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , 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 - Gapfill:</i> Burn biomass or natural gas only.
4.18 SO ₂	NWCAA Section 462 (3/13/1997 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<u>Emission of Sulfur Compounds</u> Sulfur compounds emissions, calculated as SO ₂ , 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.	
4.19 SO ₂	WAC 173-400-040(6) first paragraph only (3/22/1991) WAC 173-401-615(1)(b) & (c), (10/17/02)	<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.	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.20 SO ₂	NWCAA 520.11, 520.12, 520.13, and 520.15 (4/14/1993) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Sulfur Compounds in Fuel</u></p> <p>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:</p> <ul style="list-style-type: none"> • #1 distillate – 0.3 wt% • #2 distillate – 0.5 wt% • other fuel oils – 2.0 wt% • solid fuels – 2.0 wt% 	<p><i>Directly Enforceable - Gapfill:</i></p> <p>Burn biomass or natural gas only.</p>
4.21 SO ₂	NWCAA 520.11, 520.12, 520.13, 520.15, 520.2 (5/9/1996 State Only) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Sulfur Compounds in Fuel</u></p> <p>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:</p> <ul style="list-style-type: none"> • #1 distillate – 0.3 wt% • #2 distillate – 0.5 wt% • other fuel oils – 2.0 wt% • solid fuels – 2.0 wt% <p>Ocean-going vessels are exempt.</p>	

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.22	OAC 938c Condition 1 (5/8/13) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Fugitive Emissions</u> Fugitive emissions, including but not limited to any of the following, shall be controlled at all times as specified below such that no visible emissions are detected at any point beyond the plant property line as determined using 40 CFR 60 Appendix A Method 22.</p> <ul style="list-style-type: none"> • dust from unpaved roads or any other non-vegetation-covered area; • fugitive sawdust from fuel-handling devices and/or storage areas; • ash which is processed by the ash handling system or is removed from the wood-fired boiler by other means. Such ash shall be stored in closed containers and disposed of in such a manner so as to not create a public nuisance. Ash shall be transported in a wet condition in covered containers at all times. It shall be the responsibility of the plant owner/operator to insure that any and all contract or company carriers adhere to this condition; • accumulation of sawdust or ash on outside surfaces, including but not limited to the main building, boilers, electrostatic precipitator, support pads, road areas. Surfaces shall be cleaned on a regular basis to prevent the build-up of ash and/or fugitive dust. 	<p><i>Directly Enforceable - Gapfill:</i> Comply with the MR&R requirements of terms 4.3 and 4.12 (except CAM requirements).</p>

Sierra Pacific Industries, Air Operating Permit 019R2M1

Final, July 2, 2024

Permit Term	Citation	Description	Monitoring, Recordkeeping, & Reporting
4.23	OAC 938c, Condition 2 (5/8/13)	<p><u>HAP emission limits</u></p> <p>a) Emissions of acetaldehyde from the facility shall not exceed 33,844 lb/yr, 12-month total, calculated on a rolling monthly basis.</p> <p>b) Emissions of acrolein from the facility shall not exceed 588 lb/yr, 12-month total, calculated on a rolling monthly basis.</p> <p>c) Emissions of formaldehyde from the facility shall not exceed 6,917 lb/yr, 12-month total, calculated on a rolling monthly basis.</p>	<p>Each month, Sierra Pacific shall determine compliance with the emission limits using kiln throughput data, boiler operation data, and the emission factors listed below, unless otherwise approved by the NWCAA. Sierra Pacific shall include the monthly compliance determination with the quarterly reports required by PSD Permit # PSD 05-04 Amendment 3 (see AOP term 5.1.17)</p> <p>a) Acetaldehyde emission factors:</p> <ul style="list-style-type: none"> i) 1.64E-04 lb/MMBtu for the wood-fired boiler ii) 113 lb/MMbf for kiln-drying Western hemlock iii) 57 lb/MMbf for kiln-drying Douglas fir <p>b) Acrolein emission factors:</p> <ul style="list-style-type: none"> i) 3.15E-05 lb/MMBtu for the wood-fired boiler ii) 1.6 lb/MMbf for kiln-drying Western hemlock iii) 0.65 lb/MMbf for kiln-drying Douglas fir <p>c) Formaldehyde emission factors:</p> <ul style="list-style-type: none"> i) 1.72E-03 lb/MMBtu for the wood-fired boiler ii) 1.24 lb/MMbf for kiln-drying Western hemlock iii) 1.0 lb/MMbf for kiln-drying Douglas fir
4.24	PSD 05-04 Amendment 3 Condition 19 (04/23/24)	<p><u>O&M Manual</u></p> <p>Prepare an O&M manual that includes operational parameters and practices for the planer mill bag house, drying kilns, anti-mold spray system, and wood-fired cogeneration unit.</p> <p>Keep the O&M manual up to date to reflect any modifications of the equipment or its operating procedures.</p>	<p>Keep the O&M manual readily available at the facility for review by state, federal, and local agencies.</p>

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 are enforceable by NWCAA because they are adopted by reference in NWCAA 104.1, as amended May 14, 2020. All of the federal regulations listed in Section 5 have been adopted by reference in NWCAA 104.2, as amended May 14, 2020.

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-Gapfill*" are legally enforceable requirements added under the NWCAA's "gap-filling" authority of WAC 173-401-615(1)(b) & (c), 10/17/02. The requirements in the MR&R column labeled as "*Directly Enforceable- Sufficiency*" are legally enforceable requirements added under the NWCAA's "sufficiency monitoring" authority (WAC 173-401-630(1)). 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) (10/22/97). 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 and Appendix A were 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.

Table 5-1 Specifically Applicable Requirements – EU-1, cogeneration facility

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.1	OAC 938c Conditions 7, 8, 9, and 10 (5/8/13)	<p><u>Boiler fuel requirements</u></p> <p>At least fifty percent (50%) of fuel burned in the boiler on a calendar year basis shall be clean hog fuel consisting of bark, sawdust, chips, and other wood waste from wood products industries. Clean hog fuel for purposes of this condition shall meet the following criteria:</p> <ul style="list-style-type: none"> • Is derived from wood and is of a suitable size and moisture content to sustain adequate combustion; • Is free of contamination including, but not limited to, non-wood man-made materials, painted wood, wood treated with creosote or other wood preservatives, wood from construction/demolition activities, and wood contaminated with petroleum products. <p>Up to 50% of fuel burned in the boiler on a calendar year basis shall be clean cellulosic biomass, resinated wood debris, and/or biomass-derived non-hazardous secondary materials (NHSM) as defined, processed, and managed according to 40 CFR Part 241 Solid Wastes Used as Fuels or Ingredients in Combustion Units. This fraction of boiler fuel shall be referred to as "alternative fuel".</p>	<p>When utilizing alternative fuels, operate in accordance to the following:</p> <p>Inspect all purchased fuel prior to acceptance.</p> <p>Prior to combusting any alternative fuel, SPI shall develop and implement an alternative fuel quality assurance plan subject to prior approval by the Northwest Clean Air Agency. The plan shall clearly describe how SPI will evaluate potential alternative fuel and alternative fuel suppliers to assure that the boiler will not combust solid or hazardous waste. Changes to the plan shall be approved by the Northwest Clean Air Agency prior to implementation. The following elements shall be included in the plan:</p> <ul style="list-style-type: none"> • Procedure for alternative fuel handling at the SPI facility; • Procedure for SPI inspection of alternative fuel sources/suppliers; <p>Procedure for inspecting individual alternative fuel loads, including how to identify different levels of contamination by visual inspection, how to document the inspection, and how to identify loads with unacceptable levels of contamination. "Contamination" includes plastics, asbestos-containing material, preservative-treated wood, painted wood, rubber, metals, non-wood roofing materials, or any other material that is not a non-waste fuel according to 40 CFR 241.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.2	<p>OAC 938c Conditions 12, 13, and 14 (5/8/13)</p> <p>WAC 173-401- 630(1) (3/5/16)</p>	<p>Rejected fuel loads must be removed from the SPI facility by the close of business on the business day following the day in which the fuel was received.</p> <p>Combustion of wet fuel, i.e., fuel with moisture content greater than or equal to 55 percent, shall not be considered as an affirmative defense to an excess emission condition for the wood-fired boiler. Use of such fuels is a foreseeable occurrence, and as such, compliance with all permit limits and applicable regulations shall be required at all times unless the NWCAA has determined that the cause of the wet fuel condition is due to an unavoidable or emergency situation.</p>	<p>Submit to the NWCAA by February 28 for the previous calendar year a summary describing the source and quantities of all alternative fuel combusted in the boiler. The report shall include information on all loads of fuel rejected and the reason the fuel was rejected, information on the types of contaminants found in the fuel from each source of fuel (e.g. plastic, rubber, painted wood, asbestos-containing materials, salts, etc.), and the results of the bucket tests recorded during the year.</p> <p><i>Directly enforceable - Sufficiency</i></p> <p>Keep records of rejected fuel loads.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.3	PSD 05-04 Amendment 3 Condition 10 (04/23/24)	<p><u>Boiler fuel data conversions</u> "per MMBtu" shall be determined by:</p> <ul style="list-style-type: none"> • 40 CFR Part 60 Appendix A, Method 19 titled "Determined F Factors" (in the 2004 version of 40 CFR Part 60: Paragraph 12.3.2), or • 40 CFR Part 60 Appendix A, Method 19 Factors from table "F Factors for Various Fuels" (Table 19-2). The factor shall reflect the proportions of wood, bark, and natural gas in the fuel by either: <ul style="list-style-type: none"> ○ Determining the wood and bark proportions of the fuel used during the test based on randomized fuel sampling following procedure outlined in the corresponding test plan approved by Ecology and Northwest Clean Air Agency, or ○ A default assumption of equal proportions of wood and bark. Example: a 50:50 wood/bark mixture with no natural gas will have an F_d factor of 9,420 dscf/MMBtu. 	Maintain records of MMBtu determinations as required in the 40 CFR Part 60 Appendix A Method 19.
5.1.4	PSD 05-04 Amendment 3 Conditions 5 & 18.3.3 (04/23/24)	<p><u>Boiler fuel - natural gas limitation</u></p> <p>The wood-fired cogeneration unit may burn natural gas in the wood-fired cogeneration unit only to ignite the fuel or to maintain good combustion.</p>	Maintain records of natural gas consumed by the cogeneration unit. Records shall include date, times, quantity and the reason for use of natural gas by the cogeneration unit.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.5	40 CFR Part 60 Subpart Db §60.42b(k)(2) (1/20/11), §60.44b(d) (2/16/12), §60.49b(d)(1) and (r)(1) (2/16/12) NWCAA 104.2 (5/14/2020)	<p><u>Boiler fuel - NO_x and SO₂ limitation</u></p> <p>The annual capacity factor for natural gas shall not exceed 10 percent (0.10). The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.</p>	<p>Record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood for the reporting period.</p> <p>Obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas.</p> <p>Reports shall be submitted to the Administrator certifying that only natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period.</p> <p><i>Annual capacity factor</i> means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.6	PSD 05-04 Amendment 3 Conditions 4.1.1 and 4.2.1 (04/23/24) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Boiler startup</u> defined:</p> <p>Cold startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is 150 °F or lower. A cold startup ends upon the earlier of:</p> <ul style="list-style-type: none"> • Four hours after starting wood fuel feed to the boiler, • Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11% and less than or equal to 13% for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppmv, • Steam flow exceeded 150,000 pounds over the previous hour, or • 24 hours after starting or resuming feeding fuel of any type. <p>A warm startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is higher than 150 °F. A warm startup ends upon the earlier of:</p> <ul style="list-style-type: none"> • Four hours after starting wood fuel feed to the boiler, • Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11% and less than or equal to 13% for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppmv, • Steam flow exceeded 150,000 pounds over the previous hour, or • Eight hours after starting or resuming feeding fuel of any type. 	<p><i>Directly Enforceable - Gapfill</i></p> <p>Maintain records in accordance with Section 2.4; furnace temperature, fuel feed start and stop, and steam production including times and dates to demonstrate that a startup has occurred.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.7	PSD 05-04 Amendment 3 Conditions 4.1.2 and 4.2.2 (04/23/24) WAC 173-401-615(1)(b) & (c), (10/17/02)	<p><u>Boiler shutdown</u> defined:</p> <p>A cold shutdown is one wherein wood fuel feed stops, and the furnace is allowed to cool to 150 °F or lower. A cold shutdown ends when:</p> <ul style="list-style-type: none"> • No fuel of any type is being feed, and the furnace temperature is 150 °F or lower and the FD fan is off-line, or • 24 hours after wood fuel feed was stopped, whichever comes first. <p>A warm shutdown is one wherein wood fuel feed stops, but the furnace temperature does not cool to 150 °F or lower before wood fuel feed is resumed.</p> <p>A warm shutdown ends when:</p> <ul style="list-style-type: none"> • Wood fuel feed is resumed, • No fuel of any type is being feed, and the furnace temperature is 150 °F or lower (at which point the shutdown becomes a "cold shutdown"), or • 24 hours after wood fuel feed was stopped, whichever comes first. 	<p><i>Directly enforceable - Gapfill</i></p> <p>Maintain records of furnace temperature, fuel feed start and stop, and steam production, including times and dates to demonstrate that a shutdown has occurred.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.8	<p>OAC 938c Conditions 3 and 4 (05/08/13)</p> <p>NWCAA 367 (7/14/05)</p> <p>CAM 40 CFR §64.3(b); §64.6(c), §64.7(c), (d), and (e), §64.9(a) and (b) (10/22/97) WAC 173-401-615(4) (10/17/02)</p> <p>NWCAA 104.2 (5/14/2020)</p>	<p><u>Boiler stack opacity</u></p> <p>The exhaust stack from the wood-fired boiler shall not emit any air pollutants which exhibit greater than the following opacity limitations:</p> <ul style="list-style-type: none"> a) 20% opacity for a period or periods aggregating more than 3 minutes in any 1 hour as measured by a continuous opacity monitoring system (COMS). b) 5% opacity (1-hour average) as measured by a COMS, except for periods of soot-blowing. c) 10% opacity (aggregated 3 minutes in any 1 hour) as measured by WA DOE Method 9A. <p>Soot-blowing shall occur as a regularly scheduled event and shall not exceed 1 hour per 8-hour shift.</p> <p>Soot-blowing shall not cause the boiler stack to exceed 10% opacity (1-hour average) as measured by COMS. Deviations from the regular soot-blowing schedule that result in excess emissions shall trigger agency notification.</p>	<p>Install and operate a COMS for measurement of opacity at the wood-fired boiler/ESP exhaust stack, downstream from the particulate matter control device in accordance with NWCAA Regulation 367 and Appendix A and applicable 40 CFR Part 60 Appendix A and B specifications.</p> <p>Record and maintain a soot-blowing schedule. Maintain records of soot-blowing including start and stop times.</p> <p>Annually, conduct a 40 CFR 60 Appendix A Method 9 test. Notification and reports shall be provided to the NWCAA as specified in NWCAA Regulation Appendix A.</p> <p><i>Compliance assurance monitoring (applies to opacity limit under c):</i></p> <p>Monitor opacity using the COMS as per non-CAM monitoring in AOP term 5.1.8.</p> <p>Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within 4 hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift.</p> <p>Keep records of hourly voltage measurements. Keep records of any repairs.</p> <p>Report according to the provisions of AOP term 2.4.8.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.9	40 CFR Part 60 Subpart Db §60.43b(f), (g), §60.46b(d)(7), §60.48b(a), (e)(1) §60.49b(d), (f), (h)(3), and (w) (1/28/09) NWCAA 104.2 (5/14/2020)	<u>Boiler stack opacity</u> SPI shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Standard applies at all times, except during periods of startup, shutdown or malfunction.	Install and operate a COMS for measurement of opacity at the wood-fired boiler/ESP exhaust stack, downstream from the particulate matter control device in accordance with NWCAA Regulation 367 and Appendix A and applicable 40 CFR Part 60 Appendix A and B specifications. Maintain records of opacity. Submit excess emission reports for all 6-minute periods during which average opacity exceeds standards. The reporting period for the reports required under 40 CFR 60 Subpart Db is each 6 month period. All reports shall be submitted to the NWCAA and shall be postmarked by the 30th day following the end of the reporting period.
5.1.10	OAC 938c Conditions 5 and 6 (05/03/13)	<u>Boiler stack ammonia limit</u> Emissions of ammonia from the wood-fired boiler shall not exceed 50 ppmvd NH ₃ corrected to 7% O ₂ as a 24-hour average.	Demonstrate compliance at least once every twelve months in accordance with Bay Area Air Quality Management District Source Test Procedure #1B (BAAQMD ST-1B) or alternative method approved by NWCAA. Monitor and record SNCR feed rate (ammonia or urea) and NO _x emissions during the tests. Maintain and operate the boiler and urea injection system (SNCR system) in accordance with good air pollution control practices and in a manner minimizing particulate and visible emissions from the unit. At least 30 days prior to any modification of the SNCR injection system, a written notification to the NWCAA is required and an updated Ammonia Emissions Monitoring Plan must be submitted evaluating a predictive relationship between boiler and SNCR parameters and emissions of ammonia.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.11	PSD 05-04 Amendment 3 Conditions 6.1, 11, 17.1, 17.3, and 18.2.2. (04/23/24) NWCAA 367 (7/14/05)	<p><u>Boiler stack NO_x limits</u></p> <p>NO_x emissions shall not exceed, on a daily average:</p> <ul style="list-style-type: none"> • 0.13 lb NO_x/MMBtu based on the heat input value of the fuel • 56 lb NO_x/hr 	<p>Monitor continuing compliance with a CEMS that satisfies the requirements of 40 CFR 60.48b(b) through (f) and Section 2.1.9. Compliance will be determined from the arithmetic mean of the hours of valid NO_x emissions data in lb NO_x/MMBtu. Data that is "valid" shall be as defined in 40 CFR 60.13(h). A calendar day used for compliance monitoring shall have at least 18 hours of valid data. Valid data from any calendar day having fewer than 18 hours of valid data shall be included in either the following or preceding day's data, whichever is contiguous, and the 24-hour average calculated using the cumulative hours of the conjoined periods.</p> <p>Follow permit term 5.1.3 (EPA Method 19) for calculation of lb/MMBtu from ppm.</p> <p>Annual NO_x CEMS RATA certification shall be conducted concurrently with CO CEMS RATA certification.</p> <p>Quarterly, submit NO_x emissions data in continuing performance monitoring reports in accordance with 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.12	PSD 05-04 Amendment 3 Conditions 6.4, 15.1.1, 15.1.3, 15.1.4, 18.2.2.2.7, and 18.2.2.2.8 (04/23/24)	<p><u>Boiler stack SO₂ limits</u></p> <p>SO₂ emissions shall not exceed:</p> <ul style="list-style-type: none"> • 0.025 lb SO₂/MMBtu on a 3-hour average, based on the heat input value of the fuel • 47.1 tons SO₂ over any consecutive 12-month period. 	<p>Demonstrate continuing compliance with the arithmetic mean of not less than three 1-hour Method 6, 6A, or 6C samples (unless an equivalent test method has been approved by Ecology and NWCAA) by an independent testing vendor at least once every 12 months. Follow permit term 5.1.3 (Method 19) to develop a lb/MMBtu emission factor. Multiply emission factor by fuel heat input rate to determine SO₂ mass emissions.</p> <p>If three consecutive tests (each test being the average of three 1-hour samples) have emissions less than 0.019 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.019 lb SO₂/MMBtu or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Monitor continuous compliance on a monthly basis by multiplying SO₂ emission factor (developed during the most recent compliance test) by monthly average firing rates (unless an equivalent test method has been approved by Ecology and NWCAA). Calculate and show mass emission rates determined monthly using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19, unless otherwise approved by Ecology and NWCAA.</p> <p>Quarterly, submit SO₂ emissions data in continuing performance monitoring reports in accordance with 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.13	PSD 05-04 Amendment 3 Conditions 6.2, 12, 17.2, 17.3, 18.2.2.2.2, 18.2.2.2.3, and 18.2.2.2.4 (04/23/24) NWCAA 367 (7/14/05)	<p><u>Boiler stack CO limits</u></p> <p>CO emissions shall not exceed;</p> <ul style="list-style-type: none"> • 0.28 lb CO/MMBtu, 24-hour rolling average based on the heat input value of the fuel except during startup and shutdown • 400 lb CO/hr 1-hour average, during cold startups and shutdowns • 300 lb CO/hr 1-hour average, during warm startups and shutdowns • 659 tons CO in any consecutive 12-month period (including startups and shutdowns). 	<p>Monitor CO continuing compliance at all times the furnace temperature exceeds 150 °F by a CEMS that satisfies the requirements in 40 CFR 60, Appendix B, Performance Specification 4, 40 CFR 60, Appendix F and Section 2.1.9.</p> <p>Compliance shall be demonstrated by averaging the arithmetic mean of the emissions data for each operating scenario and averaging period.</p> <p>The span and linearity calibration gas concentrations in Method 10 will be appropriate to the CO concentration limits specified in this condition.</p> <p>Follow permit term 5.1.3 (EPA Method 19) for calculation of CO emission factor in lb/MMBtu from ppm, using a value of 7.270E-08 pound of CO per standard cubic foot of stack gas. Multiply CO emission factor in lb/MMBtu by fuel input rate in MMBtu/hr to get CO emission rate in pounds per hour.</p> <p>Quarterly, submit CO emissions (lb/MMBtu and 12-month total data, as well as times, durations, and average hourly CO mass emissions for any cold or warm start-ups and shutdowns) in continuing performance monitoring reports in accordance with 5.1.17.</p>

<p>5.1.14</p>	<p>PSD 05-04 Amendment 3 Conditions 6.3, 13.1, 18.2.2.2.5 and 18.2.2.2.6 (04/23/24)</p> <p>CAM 40 CFR §64.3(b); §64.6(c), §64.7(c), (d), and (e), §64.9(a) and (b) (10/22/97) WAC 173-401-615(4) (10/17/02)</p>	<p><u>Boiler stack PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀ emissions shall not exceed:</u></p> <ul style="list-style-type: none"> • 0.02 lb PM₁₀/MMBtu 24-hour average, based on the heat input value of the fuel • 37.7 tons PM₁₀ in any consecutive 12-month period 	<p>Monitor continuing compliance by conducting 40 CFR Part 60 Appendix A Methods 5 (in the manner prescribed in 40 CFR 60.46b(d)) and 202 by an independent testing vendor at least once every 12 months.</p> <p>Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.</p> <p>The emission rate expressed in lb PM₁₀/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6). Equivalent concentration test methods may be used if approved in advance by Ecology and NWCAA.</p> <p>Monitor compliance with the mass emission limit calculating the arithmetic mean of the test results in tpy PM₁₀ based on monthly average firing rates.</p> <p>If three consecutive tests (each test being the average of three 2-hour samples) have emissions less than 0.015 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.015 lb/MMBtu or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Quarterly, submit PM₁₀ emissions (12-month total data) in continuing performance monitoring reports in accordance with 5.1.17.</p> <p><i>Compliance Assurance Monitoring:</i></p> <p>Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within 4 hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift.</p> <p>Keep records of hourly voltage measurements. Keep records of any repairs.</p> <p>Report according to the provisions of AOP term 2.4.8.</p>
---------------	---	--	--

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.15	40 CFR Part 60 Subpart Db §60.43b(g), §60.43b(h)(4), §60.46b(b), (d)(1)-(6), (j), §60.49b(d) (2/16/12) CAM 40 CFR §64.3(b); §64.6(c), §64.7(c), (d), and (e), §64.9(a) and (b) (10/22/97) WAC 173-401-615(4) (10/17/02) NWCAA 104.2 (5/14/20)	<u>Boiler stack PM limit</u> Emission of particulate matter shall not exceed <ul style="list-style-type: none"> • 0.085 lb PM/MMBtu Standard applies at all times, except during periods of startup, shutdown or malfunction.	Demonstrate compliance by performance testing in accordance with 40 CFR Part 60 Appendix A, Methods 1, 3 and 5 upon request by the administrator. Maintain records of each fuel combusted on a daily basis as required in Section 2.4 <i>Compliance Assurance Monitoring:</i> Monitor the secondary voltage to each transformer/rectifier set hourly. Record hourly voltage values of each transformer/rectifier set. If an hourly voltage value is less than 10 kV or more than 55 kV, constituting an excursion, notify immediately the maintenance department. Inspect the ESP within 4 hours of receiving notification of a voltage excursion. Make needed repairs as soon as practicable. If the opacity monitor is not functioning during an excursion, plant personnel must make visual opacity readings of the boiler stack once per shift. Keep records of hourly voltage measurements. Keep records of any repairs. Report according to the provisions of AOP term 2.4.8.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.16	PSD 05-04 Amendment 3 Conditions 6.5, 16.1, 18.2.2.2.9, and 18.2.2.2.10 (04/23/24)	<p><u>Boiler stack VOC limits</u></p> <p>Emissions calculated as propane (MW 44) shall not exceed:</p> <ul style="list-style-type: none"> • 0.019 lb VOC/MMBtu 1-hour average, based on the heat input value of the fuel • 35.8 tons VOC in any consecutive 12-month period 	<p>Monitor continuous compliance with the arithmetic mean of not less than three Method 25, 25A, or 25B samples (unless an equivalent test method has been approved by Ecology) by an independent testing vendor at least once every 12 months, to coincide with RATA for the CEMS. Use Method 19 (with VOC as propane) and fuel heat input rate to determine VOC mass emissions.</p> <p>If three consecutive tests (each test being the average of three 1-hour samples) have emissions less than 0.014 lb/MMBtu, testing interval goes to at least once every 24 months. Any test with an average of 0.014 lb/MMBtu or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Monitor continuous compliance on an hourly basis by multiplying VOC emission factor (developed during most recent compliance test) by hourly average firing rates (unless an equivalent test method has been approved by Ecology and NWCAA).</p> <p>Monitor continuous compliance on a monthly basis from the arithmetic mean of the most recent test results and monthly average firing rates. Mass emission rates will be determined using Method 19 with indicated calculations modified to be applicable to VOCs measured as propane (unless an equivalent test method has been approved by Ecology and NWCAA).</p> <p>Quarterly, submit VOC emissions (12-month total data) in continuing performance monitoring reports in accordance with 5.1.17.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.17	PSD 05-04 Amendment 3 Conditions 18.1 and 18.2 (04/23/24)	<p><u>Boiler reports:</u></p> <p>Quarterly, submit continuing written compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).</p>	<p>The report shall include:</p> <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O& M Manual. • NOx emissions (lb/MMBtu) since the last report • CO emission (lb/MMBtu) since the last report • For each month since the last report, show the 12-month CO mass emissions ending with that month • The times, durations, and average hourly CO mass emissions for any cold or warm start-ups and shutdowns • Results of any required source tests for PM10 since the last report. • 12-month PM10 mass emissions ending with that month • Results of any required source tests for SO₂ since the last report • For each month since the last report, show the 12-month SO₂ mass emissions ending with that month • Results of any required source tests for VOCs since the last report • For each month since the last report, show the 12-month VOC mass emissions ending with that month. • The duration and nature of any CEMS down-time excluding zero and span checks • Results of any CEMS audits or accuracy checks

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.18	40 CFR §72.6(b)(4)(ii) (3/1/01) WAC 173-401-615(1)(b) & (c), (10/17/02) NWCAA 104.2 (5/14/20)	<p><u>Cogeneration unit regulatory status:</u></p> <p>Supply equal to or less than one-third the potential electrical output capacity or equal to or less than 219,000 MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis).</p> <p>If in any three calendar year period, the unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the Acid Rain Program.</p>	<p><i>Directly enforceable - Gapfill</i></p> <p>Maintain records of electricity generation and sales in accordance with Section 2.4.</p>
5.1.19	40 CFR §60.40Da(a) (2/16/12) WAC 173-401-615(1)(b) & (c), (10/17/02) NWCAA 104.2 (5/14/20)	<p>If SPI sells to a utility power distribution system an annual average of more than one-third of a unit’s potential electrical output capacity and more than 25 MW net-electrical output, that unit shall be an affected unit, subject to the applicable requirements of 40 CFR 60 Subpart Da.</p>	<p><i>Directly enforceable - Gapfill</i></p> <p>Maintain records of electricity generation and sales in accordance with Section 2.4.</p>
<p>Provisions of 40 CFR 63 Subpart DDDDD (Boiler MACT)</p>			

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.20	40 CFR 63 Subpart DDDDD §63.7500(a), §63.7505(a), §63.7515(d), §63.7540(a)(12) and (b), §63.7545(a) and (e)(8)(i), §63.7550(a), (b), (c)(1), (c)(5)(i)- (iii), (xiv), (xvii), and (h)(3), §63.7555(a), Table 3 Line 1, Table 9 (11/20/15) NWCAA 104.2 (5/14/20)	<p><u>Boiler Tune-Up – with Continuous Oxygen Trim</u></p> <p>Conduct a tune-up of the boiler every five years. Conduct subsequent annual tune-ups no more than 61 months after the previous tune-up. The tune-up 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 summarizing inspection.</p>	<p>Submit a signed certification in the Notification of Compliance Status (NCS) in accordance with AOP Term 3.2.18 that indicates a tune-up was completed. Include a statement in the NCS, as applicable, "This facility complies with the initial tune-up according to the procedures in §63.7540(a)(10)(i) through (iv)."</p> <p>Submit a compliance report every five calendar years. The compliance report shall include, among other things, the date of the most recent tune-up and burner inspection and if applicable, a statement that no deviations occurred. The compliance report shall be certified by the Responsible Official.</p> <p>Reports are due, in accordance with AOP Term 4.1, 30 days after the close of the period that the reports cover.</p> <p>If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx).</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.21	40 CFR 63 Subpart DDDDD §63.7500(f), §63.7505(e), §63.7535(b), §63.7555(d)(10)-(13), Table 3 Lines 5 and 6 (11/20/15) NWCAA 104.2 (5/14/20)	<u>Startup and shutdown provisions</u> Emission limitations, work practice standards, and operating limits apply at all times the affected unit is operating except during periods of startup and shutdown during which time you must comply only with the work practice standards in Table 3, lines 5 and 6 of 40 CFR 63 Subpart DDDDD.	Operate all CMS during startup and shutdowns. Use only natural gas for startups. Maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. Maintain records of the type and amount of fuels used during each startup and shutdown. If you choose to comply using definition (1) of “startup” in §63.7575: <ul style="list-style-type: none"> • Vent all emissions to the main stack once you fire non-clean fuels, and engage all applicable control devices. If you choose to rely on definition (2) of “startup” in §63.7575: <ul style="list-style-type: none"> • Vent all emissions to the main stack once you fire non-clean fuels, and engage all applicable control devices so as to comply with emission limits within 4 hours of start of supplying useful thermal energy. • Engage and operate PM control within one hour of first feeding non-clean fuels • Develop and implement a written startup and shutdown plan as specified in §63.7505(e) Collect monitoring data during startups as specified in §63.7535(b) and §63.7555(d)(10)-(13)
5.1.22	40 CFR 63 Subpart DDDDD §63.7505(c), §63.7515(e), (f), §63.7521(a), (c) - (e), §63.7530(c), Table 6 (11/20/15) NWCAA 104.2 (8/31/15)	<u>Fuel analysis</u> If the emission rate calculated according to §63.7530(c) is less than the applicable emission limit, you may comply with the limits in 5.1.25, 5.1.26, or 5.1.27 through a fuel analysis. Conduct fuel analyses for chloride and mercury according to the procedures in §63.7521(c) – (e) and Table 6. Conduct analysis for TSM if you are opting to comply with the TSM alternative standard.	Calculate emission rates based on §63.7530(c). Conduct fuel analyses monthly. Complete the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. Determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu. Report results of fuel analyses to NWCAA within 60 days after completion.

<p>5.1.23</p>	<p>40 CFR 63 Subpart DDDDD §63.7515(a)-(c), §63.7520 (a)-(e), §63.7555(a)(2), §63.7560, Tables 2, 4, 5, 7, and Table 8 line 10a (11/20/15) NWCAA 104.2 (5/14/20)</p>	<p><u>Stack testing:</u> If complying with the limits in 5.1.25, 5.1.26, or 5.1.27 through stack testing: Conduct each performance test required by AOP terms 5.1.25, 5.1.26, and 5.1.27 according to the requirements in Tables 5 and 7 to 40 CFR 63 Subpart DDDDD. Conduct tests at representative operating load conditions. Conduct a minimum of three separate test runs for each performance test required. Each test run must comply with the minimum sampling times or volumes specified in Table 2. Conduct tests annually. The first test must be completed not later than 180 days after 1/31/2016, and subsequent tests must be completed no more than 13 months after the previous performance test. If your performance tests for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If a performance test shows emissions exceeded 75 percent of the emission</p>	<p>Keep records of performance tests in a form suitable and readily available for expeditious review. Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. You can keep the records off site for the remaining 3 years. Collect operating load data or steam generation data every 15 minutes. Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test. Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.</p>
---------------	---	--	---

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
		limit for the pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period are at or below 75 percent of the emission limit.	
5.1.24	40 CFR 63 Subpart DDDDD §63.7500(a), §63.7505(a), (c), §63.7510(e), §63.7525(a), (d), Table 2 line 7a (11/20/15) NWCAA 104.2 (5/14/20)	<u>CO limit</u> Demonstrate compliance with the following CO limit using CEMS: 720 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average.	Follow MR&R under AOP term 5.1.29.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.25	40 CFR 63 Subpart DDDDD §63.7490(d), §63.7500(a), §63.7505(a), (c), §63.7510(b), (e), §63.7515(a), (b), (c) and (f), §63.7520, §63.7530(c), Table 2 line 7b, Table 4 line 7, Table 5 line 1, and Table 6 line 4 (11/20/15) NWCAA 104.2 (8/31/15)	<p><u>Filterable PM/TSM limit</u></p> <p>Demonstrate compliance with one of the following:</p> <ul style="list-style-type: none"> • filterable PM limit using a stack test: 3.7E-02 lb per MMBtu of heat input. • TSM¹ limit using a stack test: 2.4E-04 lb per MMBtu of heat input. <p>Use fuel analysis if the emission rate of TSM calculated according to §63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.</p>	<p>If demonstrating compliance through stack testing:</p> <ul style="list-style-type: none"> • Follow MR&R under AOP term 5.1.23. • For filterable PM testing use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 5 or 17, and 19 of 40 CFR Part 60 Appendix A using specific sampling volumes from Table 2 Line 7. • For TSM testing use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 29, and 19 of 40 CFR Part 60 Appendix A. <p>Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx).</p> <p>If you elect to demonstrate compliance using fuel analysis, use the methods in line 4 of Table 6 and follow MR&R under AOP term 5.1.22.</p>

¹ *Total selected metals (TSM)* means the sum of the following metallic hazardous air pollutants: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.26	40 CFR 63 Subpart DDDDD §63.7490(d), §63.7495(b), §63.7500(a), §63.7505(a), (c), §63.7510(b), (e), §63.7515(a), (b), (c) and (f), §63.7520, §63.7530(c), Table 2 line 1a, Table 4 line 7, Table 5 line 3 and Table 6 line 2 (11/20/15) NWCAA 104.2 (8/31/15)	<p><u>HCl limit</u></p> <p>Demonstrate compliance with one of the following</p> <ul style="list-style-type: none"> HCl limit using a stack test: 2.2E-02 lb per MMBtu of heat input. <p>Use fuel analysis if the emission rate of HCl calculated according to §63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.</p>	<p>If demonstrating compliance through stack testing:</p> <ul style="list-style-type: none"> Follow MR&R under AOP term 5.1.23. Use Methods 1, 2 or 2F or 2G, 3A or 3B, 4, 19, and 26 or 26A of 40 CFR Part 60 Appendix A, using specific sampling volumes from Table 2 Line 1. <p>Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx).</p> <p>If you elect to demonstrate compliance using fuel analysis, use the methods in line 2 of Table 6 and follow MR&R under AOP term 5.1.22.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.27	40 CFR 63 Subpart DDDDD §63.7490(d), §63.7495(b), §63.7500(a), §63.7505(a) and (c), §63.7510(b) and (e), §63.7515(a), (b), (c) and (f), §63.7520, §63.7530(c), Table 2 line 1b, Table 4 line 7, Table 5 line 4, and Table 6 line 1 (11/20/15) NWCAA 104.2 (5/14/20)	<u>Mercury limit</u> Demonstrate compliance with one of the following <ul style="list-style-type: none"> • Mercury limit using a stack test: 5.7E-06 lb per MMBtu of heat input. • Use fuel analysis if the emission rate of mercury calculated according to §63.7530(c) is less than the applicable emission limit. Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits. 	If demonstrating compliance through stack testing: <ul style="list-style-type: none"> • Follow MR&R under AOP term 5.1.23. • Use Methods 1, 2, 2F or 2G, 3A or 3B, 4, 29, 19 and 30A or 30B of 40 CFR Part 60 Appendix A, using specific sampling volumes from Table 2 Line 1. Report results within 60 days after the completion of the performance tests. If available, the compliance reports shall be submitted electronically via CEDRI (www.epa.gov/cdx). If you elect to demonstrate compliance using fuel analysis, use the methods in line 1 of Table 6 and follow MR&R under AOP term 5.1.22.
5.1.28	40 CFR 63 Subpart DDDDD §63.7500(a)(2), §63.7525(c), Table 4 line 4a (11/20/15) NWCAA 104.2 (5/14/20)	<u>Opacity</u> Maintain opacity to less than or equal to 10% opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).	Follow MR&R under AOP term 5.1.30.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.29	40 CFR 63 Subpart DDDDD §63.7525(a), (d), §63.7535 (11/20/15) NWCAA 367 (7/14/05) NWCAA 104.2 (5/14/20)	<u>CO CEMS</u> Install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in §63.7525(a)(1)-(7) and (d).	Operate and maintain the CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, 40 CFR 60 appendix F, §63.7540(a)(8), and NWCAA 367 and NWCAA Appendix A. You must operate the monitoring system and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods, and required monitoring system quality assurance or control activities.
5.1.30	40 CFR 63 Subpart DDDDD §63.7525(c), §63.7535 (11/20/15) NWCAA 367 (7/14/05) NWCAA 104.2 (5/14/20)	<u>Opacity COMS</u> Install, certify, operate and maintain a continuous emission monitoring system for opacity according to the procedures in §63.7525(c)(1)-(7).	Operate and maintain the COMS according to the applicable procedures under Performance Specification 1, 40 CFR part 60, appendix B, 40 CFR 60 appendix F, §63.7540(a)(8), and NWCAA 367 and NWCAA Appendix A. You must operate the monitoring system and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods, and required monitoring system quality assurance or control activities.
5.1.31	40 CFR 63 Subpart DDDDD §63.7540(a), (b), and (d), §63.7550 Tables 2, 3, 4, 8, and 9 (11/20/15) NWCAA 104.2 (5/14/20)	<u>Continuous compliance</u> You must demonstrate continuous compliance with each emission limit in Table 2 to subpart DDDDD, the work practice standards in Table 3 to subpart DDDDD, and the operating limits in Table 4 to subpart DDDDD that applies to you according to the methods specified in Table 8 to subpart DDDDD.	Keep records of the type and amount of all fuels burned in the boiler. Report each deviation according to the requirements in §63.7550. Submit the compliance reports required in Table 9 to subpart DDDDD according to the schedule in §63.7550(b) containing the information in §63.7550(c) as applicable. Keep copies of each notification and report submitted to comply with subpart DDDDD.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.1.32	40 CFR 63 Subpart DDDDD §63.7500(a)(3) (11/20/15) NWCAA 104.2 (5/14/20)	<u>Work practice standards</u> At all times, you must operate and maintain the boiler and 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 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
5.1.33	40 CFR 63 Subpart DDDDD Table 4 line 7, Table 8 line 10 (11/20/15) NWCAA 104.2 (5/14/20)	<u>Work practice standards</u> Maintain the operating load of the boiler such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test.	Collect operating load data or steam generation data every 15 minutes.

Table 5-2 Specifically Applicable Requirements – EU-2, Cooling Towers

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.2.1	OAC 938c Condition 22 (5/8/13)	The owner or operator shall install, operate, and maintain drift eliminators with at least a 0.0005% design drift loss on the cooling tower.	The design drift loss shall be demonstrated by manufacturer specifications.
5.2.2	OAC 938c Condition 23 (5/8/13)	Only water treatment chemicals that do not contain chromium or chromium-compounds shall be used in the cooling tower.	Keep on-site Material Safety Data Sheets (MSDS) for all water treatment chemicals.

Table 5-3 Specifically Applicable Requirements – EU-3, Planer Mill

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.3.1	PSD 05-04 Amendment 3 Conditions 7 and 13.2 (04/23/24) CAM: 40 CFR §64.3(b), §64.6(c), §64.7(c)-(e), §64.9(a)-(b) (10/22/97) WAC 173-401- 615(4) (10/17/02) WAC 173-401- 630(1) (3/5/16) NWCAA 104.2 (5/14/20)	<p><u>Planer baghouse stack PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀</u> emissions shall not exceed:</p> <ul style="list-style-type: none"> • 0.005 gr PM₁₀/dscf 1-hour average • 9.4 tons PM₁₀ in any consecutive 12-month period 	<p>Monitor continuous compliance by 40 CFR Part 60 Appendix A Methods 5 and 202 by an independent testing vendor at least once every 12 months. Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples. Equivalent concentration test methods may be used if approved in advance by Ecology and NWCAA.</p> <p>If three consecutive tests (each test being the average of three 2-hour samples) have PM₁₀ concentrations less than 0.0025 gr/dscf, testing interval goes to at least once every 36 months. Any test with an average PM₁₀ concentration of 0.0025 gr/dscf or greater causes the testing interval to go back to at least once every 12 months.</p> <p>Determine an emission factor, in units of lb/Mbf, based on the most recent PM₁₀ test results and the planer mill production rate maintained during the corresponding tests.</p> <p><i>Directly Enforceable - Sufficiency:</i> Record quantity of lumber processed by the planer mill each month in units of Mbf. Within 30-days of the end of each month use the most recently determined emission factor to calculate PM₁₀ emissions in from the planer mill in lb/month. Add this value to PM₁₀ emissions for the most recent 11 months to and then divide by 2,000 to get tons PM₁₀ for the most recent consecutive 12-month period. Report PM₁₀ emissions according to term 5.3.2.</p> <p><i>Compliance Assurance Monitoring:</i> Observe the planer baghouse stack at least once per operating day while the baghouse is operating and controlling emissions from planer operations. If, at any time, visible emissions are observed by plant personnel, SPI will take immediate corrective action and will maintain records of observations and corrective action taken.</p> <p>Once per operating day, check the pressure taps for plugging, and check and record the differential pressure of the baghouse. If the baghouse is operating outside of the range 1.0-4.0 in. water, shut down immediately the baghouse and all equipment routed to it. Do not resume operation until the problem has been identified and corrected. Maintain a written log of the differential pressure gauge readings. Include in the log any bag failures or repairs, the time and date that the inspection or repair was conducted, and the initials of the individual performing the inspection or repair.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.3.2	PSD 05-04 Amendment 3 Conditions 18.2.2.1, and 18.2.2.3 (04/23/24)	<u>Planer baghouse reports:</u> Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).	The report shall include: <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O& M Manual. • PM₁₀ stack concentration from most recent compliance test in gr/dscf • PM₁₀ emissions in lb/MMBtu, consecutive 12-month total, for each month of the reporting period.

Table 5-4 Specifically Applicable Requirements – EU-4, Dry Kilns

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.1	OAC 938c, Conditions 15 and 16 (5/8/13)	<u>Lumber kilns HAP emissions</u> SPI is allowed to process Western Hemlock and/or Douglas-Fir in the kilns.	No wood species other than Western hemlock or Douglas fir shall be processed in the kilns without prior written approval from the NWCAA. Each calendar month, SPI shall record the quantity of Douglas fir and the quantity of hemlock dried in each kiln for that month and for the previous 12 month period
5.4.2	OAC 938c, Condition 17 (5/8/13)	<u>Lumber kilns HAP emissions</u> At no time shall any kiln dry-bulb temperature setpoint or the actual dry-bulb temperature in any dry kiln exceed 200°F.	Sierra Pacific shall continuously monitor and record the dry-bulb temperature in each dry kiln using a device accurate to within ± 0.50 °F.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.3	PSD 05-04 Amendment 3 Conditions 8.1, 14, and 18.2.2.4.1 (04/23/24)	<u>Lumber kilns PM/PM₁₀/PM_{2.5} limits (filterable + condensable) expressed as PM₁₀ emissions shall not exceed 5.86 tons PM₁₀ in any consecutive 12-month period</u>	<p>Monitor continuous compliance: for each wood species processed, separately determine drying kiln loading in board feet each day.</p> <p>Each month's drying kiln PM₁₀ emissions shall be determined based on each specie's emission factor:</p> <ul style="list-style-type: none"> • Douglas fir: 0.02 lb PM₁₀/Mbf • western hemlock: 0.02 lb PM₁₀/Mbf • Other wood species <ul style="list-style-type: none"> ○ If ≤ 10% monthly production, use 0.04 lb/Mbf or value approved in writing by Ecology and NWCAA ○ If > 10% monthly production, use value approved in writing by Ecology and NWCAA <p>Quarterly, submit PM₁₀ emissions (12-month total data) and daily kiln loading per species in continuing performance monitoring reports in accordance with 5.4.6.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.4	PSD 05-04 Amendment 3 Conditions 8.2, 16.2, and 18.2.2.4.2 (04/23/24) WAC 173-401-630(1) (3/5/16)	<p><u>Lumber drying kilns VOC limit</u></p> <p>VOC emissions, calculated as pinene (10 carbons per molecule, MW = 136) shall not exceed 120 tons VOC in any consecutive 12-month period.</p>	<p>Operate the computerized steam management system for the dry kilns to minimize steam demand in accordance with the manufacturer's specifications.</p> <p>Record, on a monthly basis, dry kiln production each species of wood in board feet.</p> <p>Monitor continuous compliance monthly calculating VOC for each month's production for each species, based on the following VOC emission factors:</p> <ul style="list-style-type: none"> • Douglas Fir: 0.6 pound VOC per thousand board feet (lb/Mbf) • Western Hemlock: 0.33 lb/Mbf • Other wood species: <ul style="list-style-type: none"> ○ If ≤ 10% monthly production, use 0.6 lb/Mbf or value approved in writing by Ecology and NWCAA ○ If > 10% monthly production, use value approved in writing by Ecology and NWCAA <p>Quarterly, submit VOC emissions (12-month total data) and daily kiln loading per species in continuing performance monitoring reports in accordance with 5.4.6.</p> <p><i>Directly Enforceable - Sufficiency</i></p> <p>Add month's VOC emissions to previous 11 month's VOC emissions to get consecutive 12-month emissions.</p>
5.4.5	OAC 938c, Condition 18 (5/8/13)	<p><u>Opacity</u></p> <p>The opacity of emissions from the dry kilns shall not exceed 10% for a period or periods aggregating more than 3 minutes in any 1 hour, as determined by DOE Method 9A.</p>	<p>Monthly, conduct an opacity observation of the dry kilns month during operation. Inspections are to be performed during daylight hours while the kilns are in operation. If, during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, SPI shall, as soon as possible, but no later than within 24 hours of the initial observation, take corrective action until there are no visible emissions or, alternatively, record the opacity using DOE Method 9A or shut down the kiln until it can be repaired.</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.4.6	PSD 05-04 Amendment 3 Condition 16.2, 14, 18.2.1, and 18.2.2.4 (04/23/24)	<u>Lumber kiln reports:</u> Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter).	The report shall include: Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O& M Manual. <ul style="list-style-type: none"> • MBf per day totals for each day of the reporting period – by wood species • PM₁₀ emissions in tons/yr, consecutive 12-month total, for each month of the reporting period. • VOC emissions in tons/yr, consecutive 12-month total, for each month of the reporting period.

Table 5-5 Specifically Applicable Requirements – EU-5, Anti-mold Spray Chamber

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.5.1	PSD 05-04 Amendment 3 Condition 3 (04/23/24) WAC 173-401- 615(1)(b) & (c), (10/17/02)	<u>Fugitive Emissions</u> SPI-Skagit shall use only wood preservatives that have been approved by the USEPA under the Federal Insecticide, Fungicide, and Rodenticide Act.	<i>Directly enforceable - Gapfill</i> Maintain records, such as manufacturer specification sheet or MSDS, showing EPA approval.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.5.2	OAC 938c, Conditions 19 and 20 (5/8/13)	<p><u>Fugitive Emissions</u> SPI shall collect emissions from the spray chamber and shall vent all such emissions to a mist eliminator (demister). The demister shall be operated whenever anti-stain/brightener is applied.</p>	<p>SPI shall conduct monthly visual inspections during any month that the spray chamber is used, of the following:</p> <ul style="list-style-type: none"> a) Ductwork, to ensure structural integrity (no corrosion, holes, etc.), b) Fan, to ensure proper fan operation, and <p>Exhaust stack(s) and surrounding roof or structure, to ensure no anti-stain/brightener deposition which would indicate breakthrough or malfunction of the demister. If structural or mechanical problems are noted during such inspections, SPI shall correct problems identified by these inspections within 24 hours of initial discovery or discontinue anti-stain application. If anti-stain/brightener chemical deposition is discovered at the exhaust stack(s) or on surrounding roofs or structure, SPI shall perform a more detailed examination of the process to determine reasons for breakthrough, and SPI shall revise its Operation and Maintenance Plan to address any problems related to the breakthrough and any related problems with the demister within one week of initial discovery. Excess anti-stain/brightener deposition shall be removed from exhaust stack(s) and surrounding roofs or structure within 10 days of initial discovery.</p>
5.5.3	OAC 938c, Condition 21 (5/8/13)	<p>All anti-mold coating operations shall take place inside the spray chamber. Anti-mold coatings shall not be applied by hand or with hand held equipment.</p>	<p>No specific MR&R for this term</p>

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.5.4	PSD 05-04 Amendment 3 Conditions 9, 16.3, and 18.2.2.5 (04/23/24) WAC 173-401- 615(1)(b) & (c), (10/17/02)	<u>Anti-mold spray chamber VOC emissions limit.</u> VOC emissions shall not exceed 9 tons in any consecutive 12-month period Maintain as a "drip-free" design Operate and maintain the spray chamber mist eliminator and condensate recycle system in accordance with the manufacturer's specifications	Quarterly, submit continuing compliance reports to NWCAA and Ecology (postmarked no later than one calendar month after the close of each respective calendar quarter) that shall include: <ul style="list-style-type: none"> • Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the O& M Manual. • VOC emissions per consecutive 12-month total, for each month of the reporting period. <i>Directly Enforceable - Gapfill</i> Monitor continuous compliance by recording consumption in gallons of each wood treatment material in the anti-mold spray system on a monthly basis. Calculate VOC emissions in pounds per month from each wood treatment material by multiplying gallons per month by proportion of VOC content in MSDS for that material. Add up all VOC emissions from anti-mold coating operations for that month. Add monthly VOC emissions to VOC emissions for previous 11 months. Divide by 2,000 to get tons per consecutive-12 month period.

Table 5-6 Specifically Applicable Requirements – EU-6, Natural Gas Package Boiler

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.1	OAC 1089a Conditions 1, 3, and 4 (11/14/2014)	The annual capacity factor of the boiler shall not exceed 10% per calendar year. Burn only natural gas in the boiler.	Calculate the annual capacity factor annually by January 31 st for the previous calendar year. Keep records of the annual capacity factor, dates of boiler operation and amount of fuel combusted for a period of not less than 5 years. Make the records available to the NWCAA upon request.

Permit Term	Regulatory Citation	Regulatory Description	Monitoring, Recordkeeping, and Reporting Requirements
5.6.2	40 CFR 60 Subpart Dc §60.48c(g)(2), (i) (1/28/09) NWCAA 104.2 (8/31/15)	Each month record amount of natural gas burned in the boiler.	Maintain records for two years following the date of such records.
5.6.3	OAC 1089a Condition 2 (11/14/2014)	Visible emissions shall not exceed 5% opacity for more than 3 minutes (aggregate) within any 60-minute period.	Use Washington State Department of Ecology Method 9A.
5.6.4	OAC 1089a Condition 5 (11/14/2014)	Develop a written operating and maintenance manual for the boiler. Include in the manual practices for maintaining good air pollution control.	Keep the operating and maintenance manual up-to-date and on site.
5.6.5	40 CFR 63 Subpart DDDDD §63.7500(c), §63.7505(a), §63.7510(g), §63.7515(d), §63.7540(a)(10)(i)-(vi), (12), §63.7545(a), (e)(8)(i), §63.7550(a), (b)(1)-(4) Table 3 Line 1 (11/20/15) NWCAA 104.2 (8/31/15)	<u>Boiler Tune-Up</u> For limited use boilers, conduct a tune-up of the boiler every five years. 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 summarizing inspection.	Conduct the first tune-up not later than 61 months from the startup date, 7/27/2012. Each subsequent 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. Submit a signed certification in the Notification of Compliance Status (NCS) in accordance with AOP Term 3.2.18 that indicates a tune-up was completed. Include a statement in the NCS, as applicable, "This facility complies with the initial tune-up according to the procedures in 63.7540(a)(10)(i) through (iv)." 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, 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.

SECTION 6 INAPPLICABLE REQUIREMENTS

Many regulations do not apply to the emission units at SPI, in a specific or even in a general sense. Only requirements that are legally binding should be placed in this Air Operating Permit. Table 6.1 lists requirements that are deemed inapplicable to the facility. The basis for each determination of inapplicability is included.

Table 6-1 Inapplicable Requirements

Requirement	Emission Unit	Brief Discussion of Requirement	Basis
40 CFR Part 60 Subpart E	EU-1	New Source Performance Standards for incinerators	Only biomass and natural gas are fired in the boiler.
40 CFR Part 60 Subpart KKKK	EU-1	New Source Performance Standards for stationary combustion turbines	SPI operates a steam turbine.
40 CFR Part 60 Subpart Kb	Facility	New Source Performance Standards for Volatile Organic Liquid Storage Vessels	No storage vessels have been constructed at the facility.
40 CFR Part 63 Subpart Q	EU-2	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	SPI does not use chromium based water treatment chemicals in their cooling towers.
WAC 173-400-050(2), (4), and (5)	Facility	Emission Standards for Combustion and Incineration Units	The facility burns only clean hog fuel and biomass residuals, and is therefore not an incinerator or waste combustion unit.
WAC 173-400-070(1), (3) - (8)	Facility	Emission Standards for Certain Source Categories	SPI does not operate a wigwam burner, orchard heater, grain elevator, catalytic cracking unit, sulfuric acid plant, or sewage sludge incinerator.
WAC 173-433	EU-1	Solid Fuel Burning Devices	As defined in WAC 173-433-030(9), EU-1 is not a solid fuel burning device (greater than 1 MMBtu/hr).
WAC 173-434	EU-1	Solid Waste Incinerator Facilities	As defined in WAC 173-434-030, the facility is not defined as a solid waste incinerator.