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*Serving Clallam,
Grays Harbor, Jefferson,
Mason, Pacific, and
Thurston counties.*

Air Operating Permit (AOP)

McKinley Paper
Company –
Washington Mill

AOP – ~~Renewal~~Reopening for
Cause
~~18AOP130021RFC1549~~
Draft~~FINAL~~
~~August 17, 2021~~January 6,
2022

DRAFT



AIR OPERATING PERMIT

ISSUED IN ACCORDANCE WITH:
40 CFR Part 70, Chapter 70A.15 RCW, and Chapter 173-401 WAC

| | |
|------------------------------|---|
| PERMIT NO: | <u>18AOP130021RFC1549</u> |
| ISSUANCE DATE: | <u>August 17, 2021</u> <u>January 6, 2022</u> |
| EXPIRATION DATE: | <u>August 17, 2026</u> <add date when issued> |
| PERMITTEE & MAILING ADDRESS: | McKinley Paper Company 1815 Marine Drive Port Angeles, WA 98362 |
| FACILITY LOCATION: | same |
| PARENT COMPANY: | Bio Pappel S.A.B. de C.V. Av. Ejercito Nacional No. 1130 Piso 8 Col. Los Morales Polanco, CP 11510 Mexico, Mexico City Attention: Lic. Gabriel Villegas Salazar Director Juridico Corporativo (General Counsel) |
| FACILITY DESCRIPTION: | Pulp and Paper Manufacturer |
| ORCAA File #: | 153 |
| PRIMARY SIC: | 2621 |
| NAICS: | 322121 |

REVIEWED BY: _____

APPROVED BY: _____

DRAFT

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I. ABBREVIATIONS

The following is a list of abbreviations used in this permit.

| | |
|-------------------|---|
| A# | Refers to a specific administrative term or condition numbered “#” |
| Administrator | EPA Region X Administrator |
| AOP | Air Operating Permit |
| AP-42 | EPA Compilation of Emission Factors, AP-42, Fifth Edition, Volume I |
| AR# | Refers to a specific applicable requirement numbered “#” |
| ASTM | American Society for Testing and Materials |
| CEMS | Continuous Emissions Monitoring System |
| CFR | Code of Federal Regulations |
| CMS | Continuous Monitoring System |
| CO | Carbon monoxide |
| CO ₂ | Carbon Dioxide |
| COMS | Continuous Opacity Monitoring System |
| Ecology | Washington State Department of Ecology |
| EPA | U.S. Environmental Protection Agency |
| FCAA | Federal Clean Air Act |
| EU# | Refers to a specific emissions unit numbered “#” |
| G# | Refers to a specific general term or condition numbered “#” |
| grain/dscf | Concentration in terms of grains per dry standard cubic feet |
| HAP | Hazardous Air Pollutant |
| hp | Horsepower |
| M# | Refers to a specific monitoring term or condition numbered “#” |
| MACT | Maximum Achievable Control Technology |
| MMBtu/hr | Million British Thermal Units per hour |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NAICS | North American Industry Classification System |
| NCASI | The National Council for Air and Stream Improvement, Inc. (NCASI) |
| NOC | Notice of Construction |
| NO _x | Oxides of Nitrogen |
| NSPS | New Source Performance Standards |
| NSR | New Source Review |
| O ₂ | Oxygen |
| O&M | Operations and Maintenance Plan |
| PA# | Refers to a specific prohibited activity term or provision numbered “#” |
| PM | Particulate matter air pollution |
| PM ₁₀ | Particulate matter with aerodynamic diameter less than 10 microns |
| PM _{2.5} | Particulate matter with aerodynamic diameter less than 2.5 microns |
| ppm | Parts per million by volume (assumed standard and dry) |
| PSD | Prevention of Signification Deterioration |
| PW# | Refers to a plant-wide applicable requirement numbered “#” |
| RACT | Reasonably Available Control Technology |
| R# | Refers to a specific reporting term or condition numbered “#” |
| RCW | Revised Code of Washington |

| REQ | Requirement |
|-----------------|---|
| RICE | Reciprocating Internal Combustion Engine |
| RK# | Refers to a specific record keeping term or condition numbered “#” |
| S# | Refers to a specific permit shield term or provision numbered “#” |
| SDS | Safety Data Sheets or Material Safety Data Sheets |
| SIC | Standard Industrial Classification |
| SMP | Site-specific Monitoring Plan – required by Boiler MACT and must address comprehensive plans for all CMS and CEMS |
| SO ₂ | Sulfur dioxide |
| TSP | Total Suspended Particulate |
| TAP | Toxic Air Pollutant as defined in Chapter 173-460 WAC |
| TPY | Tons per year |
| VOC | Volatile Organic Compounds |
| WAC | Washington Administrative Code |
| § | Refers to a section out of the Code of Federal Regulation |

[END OF SECTION]

II. REGULATORY BASIS

Pursuant to Chapter 173-401 Washington Administrative Code (WAC), the “Permittee”, McKinley Paper Co. – Washington Mill (McKinley), is authorized to operate their pulp and paper mill (Facility) located at 1902 Marine Drive in Port Angeles, Washington, in accordance with the terms and conditions listed in this permit.

This permit includes terms and conditions sufficient to assure compliance with all applicable air-related requirements at the time the permit was issued. The terms and conditions in this permit contain applicable emission limitations, performance standards, operating requirements, and other air-related applicable requirements as required under WAC 173-401-600, and monitoring, recordkeeping, and reporting requirements as required under WAC 173-401-615. In instances where an applicable limit or standard does not specify monitoring, or specifies monitoring but the monitoring is insufficient to assure compliance with the requirement, monitoring sufficient to assure compliance was added to the permit under as required by WAC 173-401-615(1)(b), which is pursuant to authorities provided under 40 CFR §70.6(a)(3)(i)(B) and 40 CFR §70.6(c)(1) of the Federal Clean Air Act.

All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable under the Federal Clean Air Act (FCAA) unless specifically identified as not federally enforceable in the "regulatory basis" description that follows each condition. Conditions identified as "local only" are enforceable only by Olympic Region Clean Air Agency (ORCAA). Conditions identified as “state/local only” are enforceable only by ORCAA and state of Washington.

The conditions in this permit contain abbreviated and, in some cases, paraphrased versions of the language of the applicable requirements from the underlying laws, regulations and regulatory orders. Unless the text of the term is specifically identified to be directly enforceable, the language of the cited applicable requirement takes precedence. Any difference between the description of an applicable requirement in this permit compared to the corresponding law, regulation or order is provided for purposes of clarifying the underlying requirement. The legal requirement remains the underlying applicable requirement cited in the “Applicable Requirement” column of the tables and the citations contained in brackets at the end of each requirement. Any perceived conflicts between the permit and an underlying applicable requirement will be resolved by referring to the cited applicable requirement.

Unless otherwise stated, terms used in the conditions of this permit shall be defined consistent with their definitions from the corresponding referenced regulations. If not defined in the referenced regulations, terms shall be defined consistent with the definitions contained in Chapter 70A.15 RCW, WAC 173-401-200, WAC 173-400-030, and ORCAA Rule 1.4. Terms not defined in this permit or by applicable regulation shall be defined consistent with the Merriam-Webster's Collegiate Dictionary, Eleventh Edition © 2003 by Merriam-Webster Inc.

Unless otherwise stated, the versions of the referenced laws, regulations and orders cited in this permit are the versions that were in effect on the date this permit was issued.

[END OF SECTION]

III. EMISSION UNIT (EU) IDENTIFICATION

The following emissions units are covered under this permit.

TABLE 1: Emissions Units Covered Under Permit

| Emission Unit ID# | Description | Air Pollution Control Technology | Effective NOCs |
|-------------------|---|---|----------------------------|
| EU1 | #2 and #3 Refiner Lines: Decommissioned August 27, 2019 ▪ | N/A | N/A |
| EU2 | Boiler 8: Decommissioned January 2016 | N/A | N/A |
| EU3 | Boiler 9: ▪ Limited use boiler per 40 CFR §63.7575 ▪ Babcock and Wilcox type FM water tube boiler ▪ Rated at 157 MMBtu/hr (100,000 lbs/hr) ▪ Fuel: #6 fuel oil, # 2 fuel oil ▪ Max pressure: 300 psig ▪ Working pressure: 225 psig ▪ Constructed in 1981 | No mechanical devices, sulfur dioxide limitation met by sulfur content in oil | 81NOC326 15MOD1131 |
| EU4 | Boiler 10: ▪ Limited use boiler per 40 CFR §63.7575 ▪ Babcock and Wilcox type FM water tube boiler ▪ Rated 157 MMBtu/hr (100,000 lbs/hr) ▪ Fuel: #6 fuel oil, #2 fuel oil ▪ Max pressure: 300 psig ▪ Working pressure: 225 psig ▪ Constructed in 1981 | No mechanical devices, sulfur dioxide limitation met by limiting sulfur content in oil burned | 81NOC326 15MOD1131 |
| EU5 | Recycle Pulp Plant: ▪ Single-line continuous pulper capable of processing a variety of fiber feedstock. ▪ 900 ODTP/day (1,000 ADTP/day) permitted capacity ▪ 328,500 ODTP/year (365,000 ADTP/year) permitted capacity ▪ No chemical bleaching of pulp ▪ Fugitive source of Volatile Organic Compounds (VOC) including Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAP) ▪ Re-constructed in 2019 | No add on control technology | 19NOC1327 |
| EU6 | Paper Machines (1&2): ▪ Two paper machines ▪ Fugitive source of Volatile Organic Compounds (VOC) including Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAP) ▪ Gross combined production capacity of the paper machines does not exceed 840 air-dried tons per day. ▪ #1 Paper Machine was reconstructed in 2019 | No add-on control technology | 19NOC1327 |
| EU7 | Wastewater Treatment Plant: | None | None – NSR never triggered |

| | | | |
|------|--|---|----------|
| | <ul style="list-style-type: none"> ▪ Fugitive source of Volatile Organic Compounds (VOC) including Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAP) and methanol | | |
| EU8 | <p>Boiler 11:</p> <ul style="list-style-type: none"> ▪ Detroit Stoker, vibrating grate boiler meeting the definition of a hybrid suspension grate boiler in §63.7575. ▪ Rated at 420 MMBtu/hr heat input (gross) ▪ Designed to produce 225,000 lb/hr of saturated steam at 900 psi_g ▪ Combusts clean woody biomass including hog fuel, recycled wood-derived fuel, dewatered clarifier sludge, natural gas and diesel. | <ul style="list-style-type: none"> ▪ Selective non-catalytic reduction system (SNCR) for control of NO_x ▪ Electrostatic Precipitator (ESP) for control of particulate ▪ Condensing economizer for control of acid gases and particulate | 13MOD998 |
| EU9 | <p>Cogen Cooling Tower:</p> <ul style="list-style-type: none"> ▪ Two-cell cooling tower 5,500 gallons per minute | Cooling tower drift eliminators | 12NOC889 |
| EU10 | <p>Gasoline Dispensing:</p> <ul style="list-style-type: none"> ▪ 300 gallon above ground gasoline storage tank ▪ Not equipped with vapor recovery | None | 12NOC885 |
| EU11 | <p>Portable Temporary Generators:</p> <ul style="list-style-type: none"> ▪ 40 CFR Part 89 compliant ▪ Temporary (< 12-months) | None | N/A |
| EU12 | <p>Landfill:</p> <ul style="list-style-type: none"> ▪ 7 acre landfill ▪ Used to landfill boiler ash | Passive, landfill gas collection system | 03NOC318 |

Table Notes: The information in Table 2.1 is for purposes of description.

[END OF SECTION]

IV. PERMIT ADMINISTRATION (A)

A1. Permit Duration. This permit is issued for a fixed term of 5 years from date of issuance.

[Origin: WAC 173-401-610]

[Authority: WAC 173-401-600(1)(b)]

A2. Federally Enforceable Requirements.

a) All terms and conditions in this air operating permit, including any provision designed to limit potential to emit, are enforceable by the Administrator and citizens under the FCAA, except as indicated in b) below.

b) Notwithstanding subsection (a) of this condition, any terms and conditions included in this permit that are not required under the FCAA or under any of its applicable requirements are specifically designated as “state” or “local” only, and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to the requirements of WAC 173-401-810 and WAC 173-401-820.

[Origin: WAC 173-401-625]

[Authority: WAC 173-401-600(1)(b)]

A3. Standard Conditions:

a) **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for the 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 conditions of this permit. *[Origin: WAC 173-401-620(2)(b)]*

b) **Permit Actions.** This permit may be modified, revoked, reopened, and 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. *[Origin: WAC 173-401-620(2)(c)]*

c) **Property Rights.** This permit does not convey property rights of any sort, or any exclusive privilege. *[Origin: WAC 173-401-620(2)(d)]*

d) **Emission Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, other similar programs or processes for changes that are provided for in the permit. *[Origin: WAC 173-401-620(2)(g)]*

e) **Severability.** If any provision of this permit is to be held invalid, all unaffected provisions of the permit shall remain in effect and enforceable. *[Origin: WAC 173-401-620(2)(h)]*

f) **Permit Appeals.** This permit or any conditions in it may be appealed only by filing an appeal with the Washington State Pollution Control Hearings Board and serving it on ORCAA within thirty days from receiving the permit pursuant to RCW 43.21B.310. The provision for appeal in this section is separate from and in addition to any federal rights to petition and review under section 505(b) of the FCAA. *[Origin: WAC 173-401-620(2)(i)]*

g) **Permit continuation.** This permit and all terms and conditions contained herein, 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. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit any additional information identified as being needed to process the application by the deadline as specified, in writing, by ORCAA. *[Origin: WAC 173-401-620(2)(j)]*

[Origin: Listed per sub-condition]

[Authority: WAC 173-401-620(2)]

A4. Permit Renewal Application. The Permittee shall submit a complete renewal application to ORCAA at least 12 months, but no more than 18 months, prior to the expiration date of this permit.

[Origin: WAC 173-401-710(1)]

[Authority: WAC 173-401-600(1)(b)]

A5. Permit Expiration – Application Shield. Permit expiration terminates the Permittee’s right to operate unless a timely and complete renewal application has been submitted consistent with condition A4. All terms and conditions of the permit shall remain in effect after the permit itself expires if a timely and complete permit application has been submitted.

[Origin: WAC 173-401-710(3)]

[Authority: WAC 173-401-600(1)(b)]

A6. Permit Revocation. The permitting authority may revoke a permit only upon the request of the Permittee or for cause. The permitting authority shall provide at least thirty days written notice to the holder of a current operating permit prior to revocation of the permit or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the Permittee/applicant an opportunity to meet with the permitting authority prior to the authority's final decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the Permittee satisfies the specified conditions before the effective date.

[Origin: WAC 173-401-710(4)]

[Authority: WAC 173-401-600(1)(b)]

A7. Reopening for Cause - Proceedings to Reopen. The permit shall be re-opened and revised under any of the following circumstances:

- a) 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);
- b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
- c) ORCAA or the Administrator determines that the permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- d) ORCAA or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue this permit shall follow the same procedures that apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopening under this section shall not be initiated before a notice of such intent is provided to the Permittee by the permitting authority. Such notice shall be made at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Origin: WAC 173-401-730]

[Authority: WAC 173-401-600(1)(b)]

A8. Changes not Requiring Permit Revision/Off Permit Changes. The Permittee may make the changes described in WAC 173-401-722 and WAC 173-401-724 without revising this permit, provided the changes satisfy the criteria set forth in those sections, including the requirements to notify ORCAA and EPA.

[Origin: WAC 173-401-722; WAC 173-401-724]

[Authority: WAC 173-401-600(1)(b)]

A9. Administrative Permit Amendments. The Permittee may request an "administrative permit amendment" for the following types of permit revisions:

- a) Correction of typographical errors;
- b) Change the name, address, or phone number of any person identified in the permit, or provide a similar minor administrative change at the source;
- c) Require more frequent monitoring or reporting by the Permittee;
- d) Allow for a change in ownership or operational control of a source where the permitting authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility,

coverage, and liability between the current and new Permittee has been submitted to the permitting authority; and,

- e) Incorporate into the AOP, permit the terms, conditions, and provisions from orders approving NOC applications processed under an EPA-approved program.

Application and approval of administrative permit amendment applications shall conform to the procedures in WAC 173-401-720.

[Origin: WAC 173-401-720]

[Authority: WAC 173-401-600(1)(b)]

A10. Permit Modifications. Permit revisions which cannot be accomplished using the provisions for administrative permit amendments shall be applied for and approved as a permit modification according to WAC 173-401-725.

[Origin: WAC 173-401-725]

[Authority: WAC 173-401-600(1)(b)]

A11. Credible Evidence. For purposes of certifying compliance or establishing whether or not the Permittee 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 the requirements if the appropriate performance or compliance test or procedure had been performed.

[Origin: 40 CFR § 51.212; 40 CFR § 52.12; 40 CFR § 52.33; 40 CFR § 61.12]

[Authority: WAC 173-401-600(1)(a)]

A12. Emergency Provision:

- a) **Definition.** An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God and force majeure, which requires immediate corrective action to restore normal operation, and causes the source to exceed a technology-based emission limitation under the AOP, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- b) **Effect of an emergency.** An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations.
- c) **Reporting.** To qualify as an emergency, the Permittee must report the emergency to ORCAA according to condition R4.
- d) **Criteria.** The affirmative defense of emergency must be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that demonstrating to ORCAA that:
 - i) An emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - ii) The Facility was at the time being properly operated;

- iii) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the AOP; and
- iv) The notice submitted to ORCAA must contain descriptions of:
 - (1) The emergency;
 - (2) Steps taken to mitigate emissions;
 - (3) Corrective actions taken;
 - (4) The probable cause; and,
 - (5) Preventive measures taken.
- e) **Burden of proof.** In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- f) **Relationship to other rules.** This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Origin: WAC 173-401-615; WAC 173-401-645; ORCAA Rule 8.7 (local only)]

[Authority: WAC 173-401-600(1)(b)]

A13. Unavoidable Excess Emissions (Current SIP). The following conditions apply until the effective date of EPA's removal of the September 20, 1993 version of WAC 173-400-107 from the Washington State Implementation Plan after which they become inapplicable:

- a) **Effect of "Unavoidable Excess Emissions" Determination.** Excess emissions determined to be unavoidable under the procedures and criteria in this condition shall be excused and not subject to penalty.
- b) **Burden of Proof.** To qualify for relief, the Permittee shall have the burden of proving to ORCAA in an enforcement action, the excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief (from penalty).
- c) **Criteria.** Excess emissions due to an upset or malfunction will be considered unavoidable provided the Permittee:
 - i) Reports as required under condition R4.
 - ii) Upon request by ORCAA, submits 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.
 - iii) For excess emissions due to startup or shutdown conditions, the Permittee adequately demonstrates the excess emissions could not have been prevented through careful planning and design and, if a bypass of control equipment occurs, such bypass was necessary to prevent loss of life, personal injury, or severe property damage.
 - iv) For excess emissions due to scheduled maintenance, the Permittee adequately demonstrates the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.
 - v) For excess emissions due to a malfunction or upset, the Permittee adequately demonstrates that:

- (1) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
- (2) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- (3) 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 Permittee knew or should have known that an emission standard or permit condition was being exceeded.

[Origin: WAC 173-400-107; ORCAA Rule 8.7 (local only)]

[Authority: WAC 173-401-600(1)(b)]

A14. Unavoidable Excess Emissions (Post SIP Change). The following conditions apply starting the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the Washington State Implementation Plan:

- a) Effect of "Unavoidable Excess Emissions" Determination.** Excess emissions determined to be unavoidable under the procedures and criteria in this section are:
 - i)** A violation subject to WAC 173-400-230 (3), (4), and (6); but
 - ii)** Not subject to civil penalty under WAC 173-400-230(2).
- b) Determination.** ORCAA determines whether excess emissions are unavoidable based on the information supplied by the Permittee and the criteria in subsection (f) of this condition.
- c) Burden of Proof.** To qualify for relief, the Permittee shall have the burden of proving to ORCAA in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under (a)(ii) of this condition.
- d) Limitation.** This condition (condition A14) does not apply to an exceedance of an emission standard in 40 CFR Parts 60, 61, 62, 63, or 72, or ORCAA's adoption by reference of these federal standards.
- e) Startups and Shutdowns.** Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under subsection (g) of this section.
- f) Criteria.** Excess emissions due to an upset or malfunction will be considered unavoidable provided the Permittee reports as required under R4 and adequately demonstrates to ORCAA 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 Permittee 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, when the Permittee knew or should have known that an emission

- standard or other permit condition was being exceeded (Actions taken could include slowing or shutting down the emission unit as necessary to minimize emissions);
- iv)** If the emitting equipment could not be shut down 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;
 - v)** 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;
 - vi)** The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible; and
 - vii)** All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality.
- g) Required information.** In addition to the information required under condition R4, the excess emissions report to ORCAA must include:
- i)** Properly signed contemporaneous records or other relevant evidence documenting the Permittee's actions in response to the excess emissions event;
 - ii)** 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
 - iii)** Any additional information requested by ORCAA to support the claim the excess emissions were unavoidable.

[Origin: WAC 173-400-108; WAC 173-400-109; ORCAA Rule 8.7 (local only)]

[Authority: WAC 173-401-600(1)(b)]

[END OF SECTION]

V. GENERAL TERMS AND CONDITIONS (G)

G1. Operating Permit Fees: The Permittee shall pay operating permit fees according to ORCAA Rule 3.2 as follows:

- a) Operating permit fees include annual air operating permit fees and annual Ecology development and oversight fees. *[Origin: ORCAA Rule 3.2(c)]*
- b) Upon receipt of a fee invoice from ORCAA, annual fees are due and payable and shall be deemed delinquent if not fully paid within thirty (30) days. However, the Permittee may choose to pay annual fees in quarterly installments by indicating so on the fee invoice received and remitting payment of the first quarterly installment back to the Agency. These installments shall be due October 1, January 1, and April 1, following initial payment. Quarterly installments shall be equal to twenty-five percent (25%) of the total fee amount due. Any penalty shall be in addition to the fee amount due. *[Origin: ORCAA Rule 3.2(j)]*
- c) Clarification. ORCAA prints the fee due date directly on all operating permit fee invoices. Any operating permit fees not paid on or before the due date printed on the invoice are considered late. *[Added for clarification per WAC 173-401-630]*
- d) Late Payment. The Permittee shall pay a late penalty equal to twenty-five percent (25%) of the fee amount due if assessed by ORCAA for failure to pay the annual fee or installment by the Invoice Due Date. Any late penalty shall be in addition to the fee amount due. *[Origin: ORCAA Rule 3.2(k)]*
- e) Annual fees may be appealed per the procedure specified in ORCAA Rule 1.8. The basis for such appeals shall be limited to arithmetic or clerical errors. *[Origin: ORCAA Rule 3.2(l)]*
- f) Transfer of ownership of an Operating Permit source shall not affect any obligation to pay annual fees required by ORCAA Rule 3.2. Any liability for fee payment, including payment of delinquent fees and other penalties, shall survive any transfer of ownership of an Operating Permit source. *[Origin: ORCAA Rule 3.2(n)]*

[Origin: ORCAA Rule 3.2 and as noted per sub-condition above]

[Authority: WAC 173-401-620(2)]

G2. Duty to Supplement or Correct Application. The Permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information.

[Origin: WAC 173-401-500(6)]

[Authority: WAC 173-401-600(1)(b)]

G3. Confidential Information. The Permittee is responsible for certifying and clearly identifying any information considered proprietary and confidential. In the case where a Permittee has submitted information to ORCAA under a claim of confidentiality, ORCAA may also require the Permittee to submit a copy of such information directly to the Administrator of EPA. The Permittee is responsible for clearly identifying information considered proprietary and

confidential prior to submittal to ORCAA. In addition, all confidential information shall be submitted according to ORCAA's Public Records and Confidentiality Procedures.

[Origin: WAC 173-401-500(5); WAC 173-401-630(1); ORCAA Rule 1.6 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G4. Duty to Provide Information. The Permittee shall furnish to ORCAA, within a reasonable time, any information that ORCAA 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 ORCAA copies of records that the Permittee is required to keep by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to ORCAA along with a claim of confidentiality per condition R2. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70A.15.2510.

[Origin: WAC 173-401-620(2)(e)]

[Authority: WAC 173-401-620(2)]

G5. Certification. All documents required to be submitted by this permit shall contain certification by a responsible official of truth, accuracy, and completeness. Documents include any application form, report, or compliance certification including but not limited to test plans and results, monitoring plans and results, applications, emissions inventory submittals, equipment malfunction reports or annual compliance certification. Such certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Provided, however, where a report is sent more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification.

[Origin: WAC 173-401-520; WAC 173-401-615(3)(a); WAC 173-401-630(1)]

[Authority: WAC 173-401-600(1)(b)]

G6. Duty to comply. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 70.A15 RCW 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.

[Origin: WAC 173-401-620(2)(a)]

[Authority: WAC 173-401-620(2)]

G7. Compliance Maintenance. The Permittee shall maintain compliance 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.

[Origin: WAC 173-401-510(2)(h)(iii); WAC 173-401-630(3)]

[Authority: WAC 173-401-600(1)(b)]

G8. Inspection and Entry. Upon presentation of appropriate credentials, the Permittee shall allow a representative from ORCAA or an authorized representative to perform the following:

- a) Enter upon the premises where a Chapter 173-401 WAC source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b) Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
- c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
- e) Nothing in this condition or permit shall limit the ability of EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

[Origin: WAC 173-401-630(2)]

[Authority: WAC 173-401-600(1)(b)]

G9. Access for Inspection. No person shall refuse entry or access to an ORCAA representative who requests entry for the purpose of inspection, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection.

[Origin: ORCAA Rule 1.5(e) (local only); ORCAA Rule 7.1 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G10. Insignificant Emission Units. The following applies to emissions units determined insignificant based on actual emissions in accordance with WAC 173-401-530(1)(a):

- a) Any emission unit or activity qualifying as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) shall not exceed the emission thresholds specified in WAC 173-401-530(4) until this permit is modified.
- b) Upon request from the permitting authority the Permittee must provide sufficient documentation to enable the permitting authority to determine the emission unit or activity has been appropriately listed as insignificant.
- c) Upon request from the permitting authority, at any time during the term of the permit, the Permittee shall demonstrate to the permitting authority the actual emissions of any unit or activity claimed insignificant on the basis of actual emissions are below the emission thresholds listed in WAC 173-401-530(4).

[Origin: WAC 173-401-530]

[Authority: WAC 173-401-600(1)(b)]

G11. New Source Review. Prior to commencing any new installation, replacement, modification or alteration of any stationary source, emission unit, area source or fugitive source, the Permittee shall secure all necessary approvals under Rule 6.1 of ORCAA Regulations.

[Origin: WAC 173-400-110; WAC 173-460-040; ORCAA Rule 6.1 (local only); ORCAA Rule 8.6(a) (local only)]

[Authority: WAC 173-401-600(1)(b)]

G12. Replacement or Substantial Alteration of Existing Control Equipment. Notification, review and approval by ORCAA according to Rule 6.1 of ORCAA's regulations is required prior to replacing or substantially altering any approved air pollution control technology or device.

[Origin: WAC 173-400-114; ORCAA Rule 6.1.10 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G13. Temporary Sources. The Permittee may operate portable air contaminant sources at temporary locations within the Facility subject to this permit provided the Permittee has complied with the requirements for temporary portable sources under ORCAA Rule 6.1.1.

[Origin: WAC 173-401-635; ORCAA 6.1.1(local only)]

[Authority: WAC 173-401-600(1)(b)]

G14. Prevention of Significant Deterioration (PSD). A PSD permit application must be filed by the permittee and a PSD permit issued by Department of 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).

[Origin: WAC 173-400-117 (state only); WAC 173-400-700, -710, -720, -730, -740, -750 (state only)]

[Authority: WAC 173-401-600(1)(b)]

G15. Demolition and Asbestos Projects. The Permittee shall comply with all notification and approval requirements in Rule 6.3 of ORCAA Regulations prior to commencing any asbestos, renovation, or demolition project at the Facility as defined in ORCAA Rule 6.3.1. The Permittee shall conduct all renovation, demolition and asbestos projects in accordance with applicable asbestos control standards and requirements in ORCAA Rule 6.3.

[Origin: ORCAA Rule 6.3 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G16. Demolition and Renovation Projects. The Permittee shall notify ORCAA prior to commencing any renovation or demolition activities at the Facility as defined in 40 CFR §61.141. The Permittee shall conduct all renovation, demolition and asbestos projects in

accordance with applicable asbestos control standards and requirements in Subpart M of 40 CFR Part 61.

[Origin: 40 CFR Part 61, Subpart M]

[Authority: WAC 173-401-600(1)(a)]

G17. Protection of Stratospheric Ozone. The Permittee shall comply with the standards for recycling and emissions reduction as provided in 40 CFR Part 82, Subparts B and F.

[Origin: 40 CFR Part 82, Subparts B & F]

[Authority: WAC 173-401-600(1)(a)]

G18. Reasonably Available Control Technology (RACT):

- a) General Standards for Maximum Emissions.** All emissions units are required to use reasonably available control technology (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. *[Origin: WAC 173-400-040(1)(c) (state/local only)]*
- b) General Standards for Maximum Particulate Matter.** All emissions units are required to use reasonably available control technology (RACT) which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of ORCAA Regulations. *[Origin: ORCAA Rule 8.3 (local only)]*
- c) Emission standards and other requirements contained in rules or regulatory orders in effect at the time of this permit issuance shall be considered RACT for the purposes of issuing this permit.** *[Origin: WAC 173-401-605(3)]*

[Origin: Listed by sub-condition]

[Authority: WAC 173-401-600(1)(b)]

G19. Outdoor Burning. The requirements under ORCAA Rule 6.2 and Chapter 173-425 WAC apply to all outdoor burning conducted at the Facility.

[Origin: Chapter 173-425 WAC; ORCAA Rule 6.2 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G20. Wood Heating. Any wood combustion device used for space heating shall comply with the requirements in ORCAA Rule 8.1 and Chapter 173-433 WAC.

[Origin: Chapter 173-433 WAC; ORCAA Rule 8.1 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G21. Burning Used Oil in Land Based Facilities: The Permittee may not burn used oil as fuel at the Facility unless:

- a)** The used oil meets the standards in ORCAA Rule 8.9. *[Origin: ORCAA Rule 8.9 (local only)]*
- b)** If burned in an emissions unit, the Permittee first secures approval of the fuel change according to condition G11. *[Origin: ORCAA Rule 6.1 (local only)]*

[Origin: Listed by sub-condition]

[Authority: WAC 173-401-600(1)(b)]

G22. Gasoline Dispensing Facilities. Any gasoline dispensing facility located within the property boundary of the major source regulated by this AOP shall comply with the requirements in ORCAA Rule 8.12 and WAC 173-491-040.

[Origin: WAC 173-491-040 (state/local only); ORCAA Rule 8.12 (local only)]

[Authority: WAC 173-401-600(1)(b)]

G23. Greenhouse Gas Reporting Fee. The Permittee must pay a greenhouse gas (GHG) reporting fee for each year they are required to submit a GHG report to Ecology. Fees will be paid according to Ecology's fee schedule. Fees must be paid within sixty days of receipt of Ecology's billing statement.

[WAC 173-441-110 (state only)]

[Authority: WAC 173-401-600(1)(b)]

[END OF SECTION]

V. PROHIBITED ACTIVITIES (PA)

PA1. Emissions Detrimental to Persons or Property Prohibited. 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.

[Origin: WAC 173-400-040(1)(a) (state/local only); WAC 173-400-040(6) (state/local only); ORCAA Rule 7.6 (local only)]

[Authority: WAC 173-401-600(1)(b)]

PA2. Unreasonable Odors Prohibited. No person shall cause or allow the emission or generation of any odor from any source, that unreasonably interferes with another person's use and enjoyment of their property.

[Origin: ORCAA Rule 8.5(c) (local only)]

[Authority: WAC 173-401-600(1)(b)]

PA3. Unreasonable Fallout Prohibited. No person shall cause or permit the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

[Origin: WAC 173-400-040(1)(a); WAC 173-400-040(3); ORCAA Rule 8.3(e) (local only)]

[Authority: WAC 173-401-600(1)(b)]

PA4. Concealment and Masking Prohibited:

- a) No person shall cause or allow the installation or use of any device or use of any means, which conceals or masks an emission of air contaminant, which would otherwise violate any provisions of ORCAA's Regulations or chapter 173-400 WAC.
- b) No person shall cause or allow the installation or use of any device or use of any means designed to conceal or mask the emission of an air contaminant, which causes detriment to health, safety, or welfare of any person, or cause damage to property or business.
- c) 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.

[Origin: 40 CFR § 63.4(b); WAC 173-400-040(1)(a) (state/local only); WAC 173-400-040(8) (state/local only); ORCAA Rule 7.5 (local only)]

[Authority: WAC 173-401-600(1)(b)]

PA5. Circumvention Prohibited. Building, erecting, installing, or using any article, machine, equipment, or process to conceal an emission, that would otherwise constitute noncompliance with a relevant standard, is prohibited. Such concealment includes, but is not limited to:

- a) 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; and,
- b) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.

[Origin: 40 CFR § 60.12; 40 CFR § 63.4(b)]

[Authority: WAC 173-401-600(1)(a)]

PA6. Fragmentation Prohibited. Fragmentation 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.

[Origin: 40 CFR § 63.4(c)]

[Authority: WAC 173-401-600(1)(a)]

PA7. False or Misleading Statements Prohibited. No person shall willfully make a false or misleading statement to ORCAA as to any matter within the jurisdiction of ORCAA. 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.

[Origin: WAC 173-400-105(6) (state/local only); ORCAA Rule 7.2 (local only)]

[Authority: WAC 173-401-600(1)(b)]

[END OF SECTION]

VI. APPLICABLE EMISSIONS LIMITS, WORK PRACTICE AND OPERATING REQUIREMENTS (APPLICABLE REQUIREMENTS)

| AR# | Requirements | Applicability | Monitoring |
|--|--|--|------------|
| General Standards and Limits Applying Facility-wide | | | |
| 1.1 | <p>Opacity Standard (State). 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 as determined by ecology method 9A. The following are exceptions to this standard:</p> <ol style="list-style-type: none"> 1) When the owner or operator of a source supplies valid data to show the presence of uncombined water is the only reason for the opacity to exceed twenty percent. 2) The soot blowing or grate cleaning alternate visible emission standard described in WAC 173-400-040(2)(a)(i), until the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. 3) The following exceptions upon the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP: <ol style="list-style-type: none"> a) The exception for soot blowing or grate cleaning of a wood-fired boiler described in WAC 173-400-040(2)(a)(ii) b) The exception for startup and shutdown of a hog fuel or wood-fired boiler in operation before January 24, 2018 as described in WAC 173-400-040(2)(e); and, c) The exception for curing furnace refractory in a lime kiln or boiler described in WAC 173-400-040(2)(f). <p>Reference Test Method: Ecology Method 9A.</p> <p><i>[Origin: WAC 173-400-040(1)(a) (state/local only); WAC 173-400-040 (2) (state/local only)]</i></p> <p><i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies Facility-wide to emissions from vents, stacks and ducts. | M1 M2 |
| 1.2 | <p>Opacity Standard (ORCAA).</p> <ol style="list-style-type: none"> a) In equipment or facilities, including boilers using hogged fuel, regardless of their date of installation, no person shall cause or allow the emission to the outdoor atmosphere, for more than three (3) minutes in any one hour, of a gas stream containing air contaminants which are greater than 20% opacity. b) Observations shall be made by trained and certified observers or by LIDAR instrumentation. c) The exceptions to the opacity standard stated in (a) above are as follows: <ol style="list-style-type: none"> i) Emissions occurring due to soot blowing or grate cleaning may be greater than 20% opacity; providing the operator can demonstrate soot blowing or grate cleaning will not exceed a total of 15 minutes in | Applies Facility-wide to emissions from vents, stacks and ducts. | M1 M2 |

| AR# | Requirements | Applicability | Monitoring |
|-----|---|--------------------------|----------------|
| | <p>any consecutive 8 hours. This practice, except for testing and troubleshooting, is to be scheduled for the same approximate times each day and ORCAA shall be advised of the schedule.</p> <p>ii) When the owner or operator of a source supplies valid data to show the presence of uncombined water is the only reason for the opacity to exceed 20%.</p> <p>Reference Test Method: Ecology Method 9A.</p> <p><i>[Origin: ORCAA Rule 8.2 (local only)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | | |
| 1.3 | <p>Fugitive Emissions Control. The owner or operator of any emission unit engaging in materials handling, construction, demolition or any other operation which is a source of fugitive emissions shall take reasonable precautions to prevent release of air contaminants from the operation.</p> <p><i>[Origin: WAC 173-400-040(1)(a); WAC 173-400-040(4)(a)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies Facility-wide | M1 M2 M4 |
| 1.4 | <p>Fugitive Dust Control. The owner or operator of a source or activity, that generates fugitive dust, must take reasonable precautions to prevent fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions.</p> <p><i>[Origin: WAC 173-400-040(1)(a) (state/local only); WAC 173-400-040(9)(a) (state/local only); ORCAA Rule 8.3(c)-(d) (local only)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies Facility-wide | M1 M2 M4 |
| 1.5 | <p>Odor Control (State). Any person who shall cause or allow the generation of any odor from any source or activity which may unreasonably interfere with any other property owner's use and enjoyment of her or his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.</p> <p><i>[Origin: WAC 173-400-040(1)(a) (state/local only); WAC 173-400-040(5) (state/local only)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies Facility-wide | M3 |
| 1.6 | <p>Odor Control (ORCAA). Reasonably available control technology (RACT) shall be installed and operated to mitigate odor-bearing gases emitted into the atmosphere to a minimum, or, so as not to create air pollution.</p> <p><i>[Origin: ORCAA Rule 8.5(a) (local only)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies Facility-wide | M3 |
| 1.7 | <p>Sulfur dioxide. No person shall cause or allow the emission of a gas containing sulfur dioxide from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for</p> | Applies Facility-wide | M5 |

| AR# | Requirements | Applicability | Monitoring |
|-----|---|--|------------------|
| | <p>combustion sources, and based on the average of any period of sixty consecutive minutes.</p> <p>Reference Test Methods: 40 CFR Part 60 Appendix A.</p> <p><i>[Origin: WAC 173-400-040(1)(a); WAC 173-400-040(7)]</i> <i>[Authority: WAC 173-401-600(1)(b); WAC 173-401-605(1)]</i></p> | | |
| 1.8 | <p>Particulate Standards for Combustion Units. No person shall cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf), except, for an emissions unit combusting waste wood for the production of steam. No person shall allow the emission of particulate matter in excess of 0.46 gram per dry cubic meter at standard conditions (0.2 grain/dscf), as measured by 40 CFR Part 60, Appendix A, Test Method 5 (in effect on the date in WAC 173-400-025) or approved procedures in <i>Source Test Manual - Procedures for Compliance Testing</i>, state of Washington, department of ecology, as of September 20, 2004, on file at ecology.</p> <p>Reference Test Methods: 40 CFR Part 60, Appendix A, Test Method 5 (in effect on the date in WAC 173-400-025) or approved procedures in <i>Source Test Manual - Procedures for Compliance Testing</i>, state of Washington, department of ecology, as of September 20, 2004, on file at ecology.</p> <p><i>[Origin: WAC 173-400-050(1) (state/local only)]</i> <i>[Authority: WAC 173-401-600(1)(b); WAC 173-401-605(1)]</i></p> | <p>Applies Facility-wide to combustion emissions units</p> | <p>M1 M2</p> |
| 1.9 | <p>ORCAA Particulate Standards.</p> <p>a) In equipment or facilities except boilers using hog fuel, no person shall cause or allow the emission of particulate matter to the outdoor atmosphere from any single source in excess of 0.10 grains per standard cubic foot of gas (calculated at 7% oxygen). Particulate test procedures, on file at the Authority, will be used to determine compliance. The Authority includes the Method 5 back-half condensable particulate matter for determining compliance with particulate matter standards.</p> <p>b) Hogged Fuel Boilers: No person shall cause or allow the emission of particulate matter to the outdoor atmosphere from any single source in excess of 0.20 grains per standard cubic foot of gas (calculated at 7% oxygen). Particulate test procedures, on file at the Authority, will be used to determine compliance. The Authority includes the Method 5 back-half condensable particulate matter for determining compliance with particulate matter standards.</p> <p>Reference Test Methods: Particulate test procedures, on file at the Authority, will be used to determine compliance. The Authority includes the Method 5 (EPA Reference Method 5 from 40 CFR Part 60, Appendix A) back-</p> | <p>Applies Facility-wide to all emissions units</p> | <p>M1 M2</p> |

| AR# | Requirements | Applicability | Monitoring |
|---|---|--|------------|
| | <p>half condensable particulate matter for determining compliance with particulate matter standards.</p> <p><i>[Origin: ORCAA Rule 8.3(a)&(b) (local only)]</i> <i>[Authority: WAC 173-401-600(1)(b); WAC 173-401-605(1)]</i></p> | | |
| 1.10 | <p>Particulate Standards for Process Units. No person shall cause or allow the emission of particulate material from any general process operation in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas.</p> <p>Reference Test Methods: Test methods from 40 CFR Parts 51, 60, 61, or 63 (in effect on the date in WAC 173-400-025) and any other approved test procedures in ecology's "Source Test Manual - Procedures For Compliance Testing" as of September 20, 2004, must be used to determine compliance.</p> <p><i>[Origin: WAC 173-400-040(1)(a); WAC 173-400-060 (state/local only)]</i> <i>[Authority: WAC 173-401-600(1)(b); WAC 173-401-605(1)]</i></p> | Applies Facility-wide to all process emissions units | M1 M2 |
| 1.11 | <p>Maintenance and Repair of Process and Air Pollution Control Equipment. All air contaminant sources are required to keep any process and air pollution control equipment in good operating condition and repair.</p> <p><i>[Origin: ORCAA Rule 8.8 (local only)]</i> <i>[Authority: WAC 173-401-600(1)(b)]</i></p> | Applies to any emissions unit with connected air pollution control equipment | RK9 |
| 1.12 | <p>Volatile Organic Compound (VOC) Limit. Approval of either a Prevention of Significant Deterioration (PSD) application per WAC 173-400-720 or a determination by the Washington Department of Ecology that PSD does not apply is required if combined emissions from the recycle pulp plant and paper machines, as determined based on ORCAA-approved emissions factors and actual production rates exceed 69.9 tons per any consecutive 12-month period.</p> <p><i>[Origin: 19NOC1327, condition 2b]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Recycle Pulp Plant and Paper Machines | M24 M25 |
| Applicable Requirements for Boiler 9 (EU3) and Boiler 10 (EU4) | | | |
| N/A | <p>Classification under 40 CFR Part 63, Subpart DDDDD: For purposes of regulation under 40 CFR Part 63, Subpart DDDDD, Boiler 9 (EU3) and Boiler 10 (EU4) are classified as existing "Limited-use" boilers. Limited-use boiler or process heater means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable annual capacity factor of no more than 10 percent.</p> | Boiler 9 (EU3) Boiler 10 (EU4) | N/A |
| 2.1 | <p>Sulfur Dioxide Limit. Combined, cumulative emissions of SO₂ from Boiler 9 (EU3) and Boiler 10 (EU4) shall not exceed 639 tons per any 12-consecutive month period.</p> | Boiler 9 (EU3) Boiler 10 (EU4) | M8 |

| AR# | Requirements | Applicability | Monitoring |
|---|---|-----------------------------------|------------|
| | <i>[Origin: 81NOC326] [Authority: WAC 173-401-600(1)(c)]</i> | | |
| 2.2 | Boilers 9 & 10 NO_x Limit. Combined, cumulative emissions of NO _x from Boiler 9 (EU3) and Boiler 10 (EU4) shall not exceed 195 tons per any 12-consecutive month period. <i>[Origin: 81NOC326] [Authority: WAC 173-401-600(1)(c)]</i> | Boiler 9 (EU3) Boiler 10 (EU4) | M9 |
| 2.3 | Operating Limits: Except during periods of startup and shutdown of the cogeneration plant, Boiler 9 and Boiler 10 shall not operate while the cogeneration plant is operating. <i>[Origin: 15MOD112521NOR1544, condition 27] [Authority: WAC 173-401-600(1)(c)]</i> | Boiler 9 (EU3) Boiler 10 (EU4) | M7 |
| 2.4 | Limited Use Boiler Condition. Boiler 9 and Boiler 10 shall each combust no more than 137,352 MMBtu of fuel over each 12-consecutive month period on a gross heat input basis. <i>[Origin: 15MOD1131, condition 1] [Authority: WAC 173-401-600(1)(c)]</i> | Boiler 9 (EU3) Boiler 10 (EU4) | M7 |
| 2.5 | Part 63 Requirement to Maintain Proper Operation: The permittee shall operate and maintain Boiler 9 and Boiler 10, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to 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. <i>[Origin: 40 CFR Part 63, Subpart DDDDD: §63.7500(a)(3); §63.7500(f)] [Authority: WAC 173-401-600(1)(c)]</i> | Boiler 9 (EU3) Boiler 10 (EU4) | RK3 RK9 |
| 2.6 | Part 63 Work Practice Standards: The permittee shall conduct a tune-up of Boiler 9 and Boiler 10 every 5 years as specified in §63.7540. <i>[Origin: 40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 3 to Subpart DDDDD of Part 63.] [Authority: WAC 173-401-600(1)(c)]</i> | Boiler 9 (EU3) Boiler 10 (EU4) | RK3 |
| Applicable Requirements for Recycle Pulp Plant (EU5) | | | |
| 3.1 | Design Capacity Limit. Operating capacity of the recycle pulp plant shall be no more than 900 oven-dry tons of pulp per day. <i>[Origin: Origin: 19NOC1327, condition 1b]</i> | Recycle Pulp Plant | M23 |

| AR# | Requirements | Applicability | Monitoring |
|---|---|-------------------------------------|------------|
| | <i>[Authority: WAC 173-401-600(1)(c)]</i> | | |
| 3.2 | Bleaching Prohibited. Chemical bleaching in the pulping process is prohibited. <i>[Origin: Origin: 19NOC1327, condition 1c]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i> | Recycle Pulp Plant | M26 |
| 3.3 | Emissions Limits. Combined emissions from the recycle pulp plant, as determined based on ORCAA-approved emissions factors and actual production rates, shall not exceed the following limits over any consecutive 12-month period: a) 423.4 lbs Acetaldehyde b) 18.2 lbs Chloroform c) 50.4 lbs Formaldehyde d) 61.3 lbs Methylene Chloride <i>[Origin: 19NOC1327, condition 2a]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i> | Recycle Pulp Plant | M25 |
| Applicable Requirements for Paper Machines #1 and #2 (EU6) | | | |
| 4.1 | Production Limit. Gross combined production capacity of the paper machines does not exceed 840 air-dried ton per day. <i>[Origin: 19NOC1327, condition 1c]</i> <i>[Authority: WAC 173-401-600(1)(d)]</i> | Paper Machine 1 and Paper Machine 2 | M23 |
| 4.2 | Emissions Limits. Combined emissions from the paper machines, as determined based on ORCAA-approved emissions factors and actual production rates, shall not exceed the following limits over any consecutive 12-month period: a) 3,710 lbs Acetaldehyde b) 1,230 lbs Chloroform c) 3,190 lbs Formaldehyde d) 947 lbs Methylene Chloride <i>[Origin: 19NOC1327, condition 2a]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i> | Paper Machine 1 and Paper Machine 2 | M24 |
| Applicable Requirements for Wastewater Treatment Plant (EU7) | | | |
| N/A | The Wastewater Treatment Plant (EU7) is subject to plant-wide operating requirements only. | Wastewater Treatment Plant | N/A |
| Applicable Requirements for Cogeneration Facility Boiler 11 (Boiler 11 or EU8) | | | |
| N/A | Classification under 40 CFR Part 63, Subpart DDDDD. For purposes of regulation under 40 CFR Part 63, Subpart DDDDD, Boiler 11 is classified as a new boiler under both “Hybrid suspension grate boiler designed to burn | Boiler 11 | N/A |

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| | biomass/biobased solids” and “Units in all subcategories designed to burn solid fuel” classifications. | | |
| 5.1 | <p>Requirement to Enclose Fuel and Ash Handling Equipment. The Permittee shall mix fuel and convey it to the cogeneration plant and convey boiler ash from the cogeneration plant to storage bins in an enclosed structure. Visible emissions from vents and openings in the structure shall not exceed 10 percent opacity as determined by Ecology Method 9A.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 2]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M1 M2 M4 |
| 5.2 | <p>Approved Cogeneration Plant Fuels. The Permittee shall burn only clean woody biomass, recycled wood-derived fuel, dewatered wastewater treatment sludge, natural gas, and ultra-low sulfur diesel fuel in the cogeneration plant. For the purpose of this order:</p> <ul style="list-style-type: none"> a) Clean woody biomass, also known as hog fuel or hogged fuel, is defined as any woody material that meets the definition of clean cellulosic biomass in §241.2 of 40 CFR Part 241, Subpart A (§241.2). b) Recycled wood-derived fuel is defined as any woody, non-hazardous secondary material that has been declared non-waste by the standards and procedures outlined in §241.3. c) Dewatered wastewater treatment sludge is defined as clarifier sludge consisting largely of pulp and paper fibers and produced on site that has been declared non-waste by the standards and procedures outlined in §241.3. d) Natural gas means any fuel defined as natural gas in §63.7575, including propane and LPG. e) Ultra-low sulfur diesel fuel means fuel oils containing less than 0.05 weight percent nitrogen and less than 0.0015 weight percent sulfur that comply with the specifications for fuel oils numbers 1 and 2 as defined by ASTM D396 or diesel fuel numbers 1 and 2 as defined by ASTM D975. Ultra-low sulfur fuel oil may contain any percentage of biodiesel that complies with the specifications in ASTM 6751, provided the nitrogen and sulfur limits are met by the liquid fuel mixture. <p><i>[Origin: 15MOD112521NOR1544, condition 3]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M22 |
| 5.3 | <p>Post-Consumer Wood Fuel Quality Assurance:</p> <ul style="list-style-type: none"> a) The permittee shall devise and implement a Post-Consumer Wood Quality Assurance Plan (PC Wood Plan). b) The PC Wood Plan shall be written and available on-site. c) Post-consumer and recycled wood derived fuel combusted in the cogeneration plant shall meet the criteria established in the PC Wood Plan. | Boiler 11 | RK7 |

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| | <p>d) All post-consumer and recycled wood fuel shall be inspected according to the PC Wood Plan.</p> <p>e) The permittee shall only accept recycled wood fuel from suppliers that certify on a monthly basis, or whenever they deliver fuel, that their fuel meets the requirements of the latest PC Wood Plan.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 5]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | | |
| 5.4 | <p>Total Maximum Heat Input Rate. The Permittee shall limit the heat input rate to the Boiler 11 (EU7) based on all fuels to 420 million Btu per hour (MMBtu/hr) averaged over a 24-hour period.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 6]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M16 M22 |
| 5.5 | <p>Boiler 11 Fossil Fuel Limitation. The Permittee shall limit the consumption of fossil fuel in the Boiler 11 to:</p> <p>a) Periods of startup, shutdown, and transient flame stabilization.</p> <p>b) An annual capacity factor of less than 10 percent of the total potential annual heat input calculated monthly on a 12-continuous month basis, and</p> <p>c) No more than 210 MMBtu/hr heat input calculated as an hourly average.</p> <p>d) Biodiesel, biogas, and other renewable analogs of fossil fuels shall not be counted toward the annual capacity factor limit for fossil fuels.</p> <p><i>[13MOD998, condition 7]</i> <i>[Origin: 15MOD112521NOR1544, condition 7]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M22 |
| 5.6 | <p>Boiler 11 Solid Fuel Feed. The Permittee shall not feed solid fuel into the firebox of the cogeneration plant unless the electrostatic precipitator is operating.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 8]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M17 M22 |
| 5.7 | <p>Boiler 11 Wastewater Treatment Sludge Feed. The Permittee shall not feed wastewater treatment sludge into the firebox of the cogeneration plant unless the electrostatic precipitator is operating and the direct contact condensing economizer is operating.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 9]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M17 M22 |
| 5.8 | <p>CO Emission Limit (BACT). The permittee shall not cause or allow CO emissions from the Boiler 11 stack that exceeds 0.35 lb/MMBtu heat input, one-hour average, except during startup and shutdown.</p> | Boiler 11 | M13 M18 M19 |

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| | Reference test methods as specified in Attachment 2. [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | | M20 |
| 5.9 | CO Emission Limit (BACT): The permittee shall not cause or allow CO emissions from the cogeneration plant stack that exceeds 147 lb/hr, one hour average, at all times. Reference test methods as specified in Attachment 2. [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | Boiler 11 | M13 M18 M19 M20 |
| 5.10 | Boiler 11 CO Emission Limits (Part 63). The permittee shall not cause or allow CO emissions from the cogeneration plant boiler stack that exceed the 900 ppmvd @ 3% O2 (30-day rolling ave) determined by CO CEMS, excluding emissions during startup or shutdown. When testing is required or requested, reference test methods as specified in Attachment 2 shall be used. [Origin: 15MOD112521NOR1544 , condition 14; 40 CFR Part 63, §63.7500(a)(1); Table 1] [Authority: WAC 173-401-600(1)(a)&(c)] | Boiler 11 | M13 M18 M19 M20 |
| 5.11 | Boiler 11 NO_x Emission Limit (BACT). The permittee shall not cause or allow NO _x emissions from the Boiler 11 stack that exceed 0.13 lb/MMBtu, rolling 12-continuous-month average based on all steam generating hours Reference test methods as specified in Attachment 2. [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | Boiler 11 | M14 M18 M19 M20 |
| 5.12 | Boiler 11 NO_x Emission Limit (BACT). The permittee shall not cause or allow NO _x emissions from the cogeneration plant stack that exceed 65 lb/hr, one hour average at all times. Reference test methods as specified in Attachment 2. [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | Boiler 11 | M14 M18 M19 M20 |
| 5.13 | Boiler 11 PM Emission Limit (BACT). The permittee shall not cause or allow PM emissions from the cogeneration plant stack that exceed the following limits: 0.020 lb/MMBtu, including both filterable and condensable matter, based on three tests of at least one hour duration | Boiler 11 | M12 M16 M17 M18 |

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| | Reference test methods as specified in Attachment 2 except, EPA Methods 5, 5B, or 17 (front half), Method 19, and Method 201, 201A, or 202 (back half). [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | | M19 |
| 5.14 | Boiler 11 PM (Filterable) Emission Limit (Part 60). The permittee shall not cause or allow filterable PM from the cogeneration plant stack that exceeds 0.085 lb/MMBtu at all times except during startup shutdown, or malfunction. Reference test methods as specified in Attachment 2: EPA Method 5, 5B, or 17 and Method 19 [Origin: 15MOD112521NOR1544 , condition 13 <add part 60 basis>] [Authority: WAC 173-401-600(1)(a)&(c)] | Boiler 11 | M12 M16 M17 M18 M19 |
| 5.15 | Boiler 11 Filterable PM Emission Limits (Part 63). The permittee shall not cause or allow filterable PM emissions from the cogeneration plant boiler stack that exceed the following limits, except during periods of startup and shutdown: a) 2.6E-2 lb/MMBtu of heat input Reference test methods as specified in Attachment 2: EPA Method 5 or 17 and Method 19. Also, collect a minimum of 3 dscm per run. [Origin: 15MOD112521NOR1544 , condition 14; 40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); Table 1 to Subpart DDDDD of Part 63] [Authority: WAC 173-401-600(1)(a)&(c)] | Boiler 11 | M12 M16 M17 M18 M19 |
| 5.16 | Boiler 11 SO₂ Emission Limit (BACT). The permittee shall not cause or allow SO ₂ emissions from the cogeneration plant stack that exceed the following limits: 76 tons per continuous 12-month period Reference test methods as specified in Attachment 2. EPA Method 6C [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | Boiler 11 | M11 M18 M19 |
| 5.17 | Boiler 11 SO₂ Emission Limit (BACT): The permittee shall not cause or allow SO ₂ emissions from the cogeneration plant stack that exceed the following limits: 56 lb/hr, one hour average, at all times Reference test methods as specified in Attachment 2: EPA Method 6C [Origin: 15MOD112521NOR1544 , condition 10] [Authority: WAC 173-401-600(1)(c)] | Boiler 11 | M11 M18 M19 |

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| 5.18 | <p>Boiler 11 VOC Emission Limit (BACT). The permittee shall not cause or allow VOC emissions from the cogeneration plant stack that exceed the following limits: 0.015 lb/MMBtu, based on three tests of at least one hour duration</p> <p>Reference test methods as specified in Attachment 2: EPA Method 19, and 25A or 25B</p> <p><i>[Origin: 15MOD112521NOR1544, condition 10]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M13 M18 M19 |
| 5.19 | <p>Boiler 11 Acrolein Emission Limit (tBACT). The permittee shall not cause or allow Acrolein emissions from the cogeneration plant stack that exceed 1.0E-04 lb/MMBtu, based on three tests of at least one hour duration.</p> <p>NCASI Method IM/CAN/WP99.02</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M13 M18 M19 |
| 5.20 | <p>Boiler 11 Ammonia (NH₃) Emission Limit (tBACT): The permittee shall not cause or allow NH₃ emissions from the cogeneration plant stack that exceed 25 ppmdv, corrected to 7% O₂, averaged over all steam producing hours per calendar day (midnight to midnight).</p> <p>EPA Method 320 or CTM 027</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M10 M18 M19 |
| 5.21 | <p>Boiler 11 Benzene Emission Limit (tBACT): The permittee shall not cause or allow Benzene emissions from the cogeneration plant stack that exceed 7.2E-04 lb/MMBtu, based on three tests of at least one hour duration.</p> <p>NCASI Method IM/CAN/WP99.02</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M13 M18 M19 |
| 5.22 | <p>Boiler 11 Formaldehyde Emission Limit (tBACT). The permittee shall not cause or allow Formaldehyde emissions from the cogeneration plant stack that exceed 5.0E-05 lb/MMBtu, based on three tests of at least one hour duration.</p> <p>NCASI Method IM/CAN/WP99.02</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M13 M18 M19 |

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| 5.23 | <p>Boiler 11 Hydrogen Chloride (HCl) Emission Limit (tBACT). The permittee shall not cause or allow HCl emissions from the cogeneration plant stack that exceed 0.004 lb/MMBtu, based on three tests of at least one hour duration.</p> <p>Reference test methods as specified in Attachment 2: EPA Methods 19 and 26</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M17 M18 M19 |
| 5.24 | <p>Boiler 11 HCl Emission Limit (Part 63). The permittee shall not cause or allow HCl emissions from the cogeneration plant boiler stack that exceed the following limits, except during periods of startup and shutdown:</p> <p>a) 2.2E-02 lb/MMBtu of heat input</p> <p>Reference test methods as specified in Attachment 2: EPA Methods 19 and 26. For Method 26A, collect a minimum of 1 dscm per run; for Method 26 collect a minimum of 120 liters per run.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 14; 40 CFR Part 63, §63.7500(a)(1); and, Table 1 to Subpart DDDDD of Part 63]</i> <i>[Authority: WAC 173-401-600(1)(a)&(c)]</i></p> | Boiler 11 | M17 M18 M19 |
| 5.25 | <p>Boiler 11 Dioxin/Furan Emission Limit (tBACT). The permittee shall not cause or allow Dioxin/Furan emissions from the cogeneration plant stack that exceed 1.6E-12 lb/MMBtu, based on three tests of at least one hour duration.</p> <p>EPA Methods 19 and 23</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M17 M18 M19 |
| 5.26 | <p>Boiler 11 Mercury Emission Limit (Part 63). The permittee shall not cause or allow Mercury emissions from the cogeneration plant boiler stack that exceed the following limits, except during periods of startup and shutdown:</p> <p>a) 8.0E-07 lb/MMBtu of heat input</p> <p>Reference test methods as specified in Attachment 2: EPA Method 29, 30, or 30A, or ASTM Method D6784 and Method 19. For Method 29, collect a minimum of 4 dscm per run; for Method 30A or Method 30B, collect a minimum sample as specified in the method; for ASTM D6784 collect a minimum of 4 dscm.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 14; 40 CFR Part 63, §63.7500(a)(1); and, Table 1 to Subpart DDDDD of Part 63]</i> <i>[Authority: WAC 173-401-600(1)(a)&(c)]</i></p> | Boiler 11 | M12 M17 M18 M19 |

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| 5.27 | <p>Boiler 11 Opacity Limit (BACT). The Permittee shall limit visible emissions from the cogeneration plant stack as follows:</p> <ul style="list-style-type: none"> a) No greater than 5%, (60 minute average); and b) No greater than 10%, (6 minute average). <p>These limits apply at all times, except for periods of startup, shutdown, or malfunction.</p> <p>Ecology Method 9A</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | M12 |
| 5.28 | <p>Boiler 11 Opacity Limit (Part 60). The permittee shall not cause or allow emissions from the cogeneration plant stack that exceeds 20% opacity, six-minute average, except for one six minute period per hour of up to 27% opacity, at all times except during startup shutdown, or malfunction.</p> <p>EPA Method 9</p> <p><i>[Origin: 15MOD112521NOR1544, condition 11 <add Part 60 basis>]</i> <i>[Authority: WAC 173-401-600(1)(a)&(c)]</i></p> | Boiler 11 | M12 |
| 5.29 | <p>Boiler 11 Operations and Maintenance Plan. The permittee shall develop, implement, and modify when necessary an operation and maintenance (O&M) plan to assure continuous compliance with all applicable air regulations and standards. The O&M plan shall be retained on site and made available to ORCAA for review when requested.</p> <p><i>[Origin: 15MOD112521NOR1544, condition 28]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | RK7 |
| 5.30 | <p>Boiler 11 - Site Specific Part 63 Compliance Monitoring Plan. The permittee shall develop a site specific monitoring plan according to the requirements of §63.7505(d) for the use of all continuous monitoring systems used to demonstrate compliance with the Part 63 emission limits. The site-specific monitoring plan shall be retained on site and made available to the ORCAA upon request.</p> <p><i>[Origin: 40 CFR 63, §63.7505(d); 15MOD112521NOR1544, condition 29]</i> <i>[Authority: WAC 173-401-615(1)(a)&(c)]</i></p> | Boiler 11 | RK7 |
| 5.31 | <p>Boiler 11 Part 63 Requirement to Maintain Proper Operation. At all times, the permittee shall operate and maintain Boiler 11, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results,</p> | Boiler 11 | RK7 RK9 |

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| | <p>review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p> <p><i>[40 CFR Part 63, §63.7500(a)(3); §63.7500(f)]</i> <i>[Authority: WAC 173-401-600(1)(a)]</i></p> | | |
| 5.32 | <p>Part 63 Work Practice Standards for Boiler 11. The following work practice standards apply:</p> <ul style="list-style-type: none"> a) The permittee shall conduct a tune-up of Boiler 11 every 5 years as specified in §63.7540(a)(12); and b) The permittee shall conduct a one-time energy assessment performed by a qualified energy assessor that meets the requirements for energy assessments in Table 3 to Subpart DDDDD of Part 63. <p><i>[40 CFR Part 63, §63.7500(a)(1); and, Table 3 to Subpart DDDDD of Part 63]</i> <i>[Authority: WAC 173-401-600(1)(a)]</i></p> | Boiler 11 | RK7 |
| 5.33 | <p>Part 63 Startup & Shutdown Standards for Boiler 11. The following work practice standards apply:</p> <ul style="list-style-type: none"> a) The permittee shall comply with all applicable emission limits at all times except for startup or shutdown periods conforming with the work practice standards in this condition; b) The permittee must operate all continuous monitoring systems (CMS) during startup and shutdown; c) One or a combination of the following clean fuels shall be used during startup: natural gas, synthetic natural gas, propane, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, and liquefied petroleum gas; d) If the permittee starts or shuts down Boiler 11 firing biomass or bio-based solids emissions must be vented to the main stack and all of the applicable control devices shall be engaged except the selective non-catalytic reduction (SNCR) system, which shall be started as expeditiously as possible; e) Startup ends when steam or heat is supplied for any purpose; and f) The permittee must collect all monitoring data during periods of startup and shutdown required by this permit. <p><i>[40 CFR Part 63, §63.7500(a)(1); and, Table 3 to Subpart DDDDD of Part 63]</i> <i>[Authority: WAC 173-401-600(1)(a)]</i></p> | Boiler 11 | M17 M22 |
| 5.34 | <p>Establishing Boiler 11 (EU8) Operating Limits (Subpart DDDDD). Boiler MACT operating limits for Boiler 11 must be established and reestablished during any performance testing required by condition M19 as follows:</p> <ul style="list-style-type: none"> a. Establish a specific limit for maximum operating load for Boiler 11 using data from the operating load monitors or from steam generation monitors as follows: | Boiler 11 | M18 M19 |

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| | <ul style="list-style-type: none"> i) Collect operating load or steam generation data a minimum of every 15 minutes during the entire period of the performance test. ii) Determine the average operating load by computing the hourly averages using all of the 15-minute or more frequent readings taken during each performance test. iii) Determine the highest hourly average of the three test run averages during the performance test and multiply this by 1.1 (110 percent) as the operating limit. <p>b. Establish minimum pH and liquid flow-rate operating ranges for the condensing economizer as follows:</p> <ul style="list-style-type: none"> i) Collect pH and liquid flow-rate data a minimum of every 15 minutes during the entire period of the performance tests. ii) Determine the hourly average pH and liquid flow rate by computing the hourly averages using all of the 15-minute or more frequent readings taken during each performance test. iii) Set the minimum pH and liquid flow rate operating limits at the higher of the minimum values established during the performance tests. <p><i>[Origin: 40 CFR § 63.7530(b)(4)(i); Items 1c, 2a, and 5 of Table 7 to 40 CFR 63 Subpart DDDDD]</i> <i>[Authority: WAC 173-401-600(1)(a); WAC 173-401-605(1)]</i></p> | | |
| 5.35 | <p>Boiler 11 Operating Limits (Subpart DDDDD).</p> <p>a) The Permittee must maintain the following operating limits for Boiler 11 established per condition AR5.34, except during periods of startup and shutdown of Boiler 11:</p> <ol style="list-style-type: none"> 1. Opacity to less than or equal to 10 percent opacity (daily block average); 2. Maintain the 30-day rolling average operating load of the Boiler 11 such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test demonstrating compliance with the limits in conditions AR5.10, AR5.15, AR5.24 and AR5.26; 3. Maintain the 30-day rolling average condensing economizer effluent pH at or above the lowest one-hour average pH and the 30-day rolling average liquid flow rate at or above the lowest one-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the HCl emission limitation in condition AR5.24. <p><i>[Origin: Items 2, 4a, and 7 of Table 4 to 40 CFR 63 Subpart DDDDD]</i></p> <p>b) Operation of Boiler 11 above the established maximum or below the established minimum operating limits of this condition shall constitute a deviation of established operating limits except during performance tests conducted to determine, or to establish new operating limits.</p> <p><i>[Origin: 40 CFR § 63.7540(a)(1)]</i></p> | Boiler 11 | M12 M15 |

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| | <p>c) The operating limits of this condition must be confirmed and reestablished during performance tests according to condition AR5.34. <i>[Origin: 40 CFR § 63.7540(a)(1)]</i></p> <p>d) The Permittee must demonstrate continuous compliance with each operating limit of this condition based on monitoring according to conditions M17, M18 and M22. <i>[Origin: 40 CFR § 63.7540(a); Table 8 to 40 CFR 63 Subpart DDDDD]</i></p> <p><i>[Origins: specified by sub condition]</i> <i>[Authority: WAC 173-401-600(1)(a)]</i></p> | | |
| 5.36 | <p><u>Voluntary Limit on Annual NOx Emissions: Emissions of NOx from Boiler #11 shall not exceed 215 tons per consecutive 12-month period determined based on continuous emissions monitoring.</u></p> <p><i>[Origin: 21NOR1544, condition 43]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Boiler 11 | |
| Applicable Requirements for Cogeneration Plant Cooling Towers (EU9) | | | |
| 6.1 | <p>Cooling Tower Drift Eliminator Specifications: When in operation, the owner or operator shall install, operate, and maintain drift eliminators with an actual drift loss rate of no more than 0.002%.</p> <p>Reference Method: Drift loss rate shall be determined based on the Heated Glass Bead Isokinetic (HBIK) Test Method (Cooling Tower Institute ATC-140) and Recommended Practice for Airflow Testing of Cooling Towers (Cooling Tower Institute PFM-143).</p> <p><i>[Origin: 12NOC889, condition 2]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Cogen Plant Cooling Towers | none |
| 6.2 | <p>Maximum Exhaust Velocity: Exhaust velocity through the mist eliminators shall be maintained at or below 800 feet per minute.</p> <p><i>[Origin: 12NOC889, condition 3]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Cogen Plant Cooling Towers | none |
| 6.3 | <p>Cooling Tower Water Quality: The following shall apply:</p> <ul style="list-style-type: none"> a) Only filtered water shall be used for the cooling water source. b) McKinley shall not add treatment chemicals to water that enters or circulates through the cooling tower. c) TDS in the cooling tower water shall not exceed 1,000 parts per million (ppm) based on a 60 day average. d) Chlorine in the cooling tower water shall not exceed 0.5 mg/L, daily average. <p>Reference Methods: SM 4500-CL Chlorine (free) and SM 2540C, Total Dissolved Solids, from "Standard Methods for the Examination of Water & Wastewater"</p> | Cogen Plant Cooling Towers | none |

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|---|--|-------------------------------|------------|
| | <p><i>[Origin: 12NOC889, condition 4]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | | |
| 6.4 | <p>Cooling Tower Operations and Maintenance Plan: The owner or operator shall develop, implement, and modify when necessary an operation and maintenance (O&M) plan to assure continuous compliance with requirements applying to the Cooling Tower. The O&M plan shall be retained on site and made available to ORCAA for review when requested. At a minimum, the O&M plan shall contain the following:</p> <ul style="list-style-type: none"> a) Criteria and schedule for routine inspection and maintenance of the cooling towers to check for signs of corrosion, misalignment, and wear. b) Procedure and schedule for demonstrating and maintaining compliance with the maximum drift loss specification of condition AR6.1. c) Procedures and schedule for demonstrating and maintaining compliance with the maximum exhaust velocity requirement of condition AR6.2, including how cooling tower fan speeds will be regulated. d) Routine inspection and maintenance of the associated equipment to check for signs of wear and clogging: <ul style="list-style-type: none"> i. Drift eliminators. ii. Nozzles. iii. Fill material. e) Cooling tower water quality monitoring. <p><i>[Origin: 12NOC889, condition 6]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Cogen Plant Cooling Towers | none |
| Applicable Requirements for Gasoline Dispensing (EU10) | | | |
| 7.1 | <p>Gasoline Dispensing Product Use Limits: Gasoline throughput shall not exceed 10,000 gallons per year.</p> <p><i>[Origin: 12NOC885, condition 2]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Gasoline Dispensing | M6 |
| 7.2 | <p>Gasoline Dispensing Operation and Maintenance: The owner or operator shall develop and implement an Operations and Maintenance (O&M) plan. The plan shall be kept on site and be made available to all operators. At a minimum, the O&M Plan shall include a self- inspection log for the dispensing equipment, and:</p> <ul style="list-style-type: none"> a) Equipment maintenance procedures to ensure that all system components are kept free of discernible leaks; b) A section identifying possible equipment defects, including, but not limited to: | Gasoline Dispensing | M6 |

| AR# | Requirements | Applicability | Monitoring |
|---|--|---------------------|------------|
| | <ul style="list-style-type: none"> i. Absence or disconnection of any component required in the certification of the above ground storage tank; ii. Cut, torn, crimped, kinked or flattened dispensing hose; and iii. Dripping nozzle, missing latch coil or damaged splash guard. <p><i>[Origin: 12NOC885, condition 3]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | | |
| 7.3 | <p>Gasoline Dispensing Equipment Failures and Repairs: In the event that defects or malfunctions are identified in the operation of the aboveground storage tank or dispensing equipment, repairs and corrective actions shall be performed in accordance with the following:</p> <ul style="list-style-type: none"> a) All defective aboveground storage tank and dispensing equipment shall be repaired or adjusted within 24 hours of detection unless parts must be ordered. If replacement parts are required, they shall be ordered within two working days from detecting the defect and replacements shall be made within five working days after receipt of the ordered parts. <p><i>[Origin: 12NOC885, condition 4]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Gasoline Dispensing | M6 M9 |
| Applicable Requirements for Portable Temporary Generators (EU11) | | | |
| 8.1 | <p>Fuel Requirements: All nonroad engines must use ultra-low sulfur diesel or ultra-low sulfur biodiesel (a sulfur content of 15 ppm or 0.0015% sulfur by weight or less), gasoline, natural gas, propane, liquefied petroleum gas (LPG), hydrogen, ethanol, methanol, or liquefied/compressed natural gas (LNG/CNG). A facility that receives deliveries of only ultra-low sulfur diesel or ultra-low sulfur biodiesel is deemed to be compliant with this fuel standard.</p> <p><i>[Origin: WAC 173-400-035(3)]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Nonroad Engines | M8 |
| Applicable Requirements for Landfill (EU12) | | | |
| 9.1 | <p>The Permittee shall take reasonable and appropriate precautions for preventing fugitive dust and emissions from the landfill.</p> <p><i>[Origin: 03NOC318, condition 1]</i> <i>[Authority: WAC 173-401-600(1)(c)]</i></p> | Landfill | M4 |

[END OF SECTION]

VII. MONITORING TERMS AND CONDITIONS (M)

M1. Opacity Surveys. The Permittee shall conduct visual opacity surveys of the Facility during daylight hours at least monthly.

- a) Surveys shall be conducted from locations with a clear view of the Facility and where the sun is not directly in the observer's eyes. Survey locations shall be at least 15 feet but not more than 0.25 miles from each emission point.
- b) Surveys shall be conducted while the Facility is operating and when both steam and paper are being produced.
- c) Observer certification for plume evaluation is not required to conduct the survey. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. As a minimum, the observer must be trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, position of the sun and amount of ambient lighting, observer position relative to source and sun, and the presence of uncombined water.
- d) The survey shall consist of a visual scan of the Facility and direct observation of all stacks to identify any visible emissions excluding water vapors.
- e) Each stack shall be observed for a total of at least 15 seconds during the survey.
- f) Any visible emissions other than uncombined water shall be recorded as a positive reading associated with the emission point or stack.
- g) If it is not possible to conduct the survey due to inclement weather conditions, the Permittee shall make three attempts during the day to conduct the survey. All attempts to conduct the survey shall be recorded in accordance with condition **Error! Reference source not found.**

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M2. Opacity Compliance Demonstration Required:

- a) When required by ORCAA, or when point or fugitive opacity is observed during surveys required under M1, other than visible emissions due to uncombined water, the Permittee shall:
 - i) For emissions from stacks or points, complete a Reference Method Opacity Test of any emissions stack or point exhibiting opacity in accordance with condition M2b; or,
 - ii) For fugitive emissions, determine and document that reasonable and/or appropriate precautions are being taken to prevent the fugitive emissions. The determination shall be completed within 24 hours of the opacity survey.
- b) **Opacity Reference Method Test Procedures.** When required, pursuant to condition M2a, the Permittee shall conduct a Reference Method Opacity Test consistent with the applicable opacity reference test methods as follows:
 - i) Certified opacity readings shall be completed within 1 hour of the opacity survey that initially triggered the reference test method readings unless the subject

emission unit is not operating, or lack of daylight or weather conditions prevent conducting the testing;

- ii) A Visible Emissions Observation Form (provided in Attachment 2) must be completed for each required Reference Method Opacity Test;
- iii) Certified opacity readings shall be performed by persons with current EPA Method 9 certification in plume evaluation;
- iv) All certified opacity readings shall be performed during periods when the subject emissions unit is operating;
- v) If the subject emissions unit is down for maintenance or not operating, the Permittee shall commence compliance verification within one hour after the unit comes back on line;
- vi) If it is not possible to perform certified opacity readings due to inclement weather conditions or lack of daylight, the Permittee shall document the conditions and shall make repeated daily attempts to conduct the testing until it is accomplished;
- vii) Opacity shall be computed from visual observations consistent with the Reference Test Methods of each applicable opacity limit;
- viii) For both reference test methods, the minimum duration for certified readings shall not be less than 12 minutes;
- ix) For Ecology Method 9A:
 - (1) If any individual reading made at 15-second intervals is higher than 20% opacity, certified readings must be conducted for a full 60 minutes or until readings indicate the general 20% opacity standard was exceeded; and,
 - (2) The opacity standard is exceeded if there are more than 12 individual readings, during any consecutive 60-minute period, for which an opacity greater than the standard is recorded; and,
- x) For EPA Method 9, the opacity standard is exceeded if the average of 24 consecutive observations recorded at 15-second intervals is greater than the standard.

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M3. Monitoring Air Impacts Detrimental or a Nuisance to Persons or Property. The Permittee shall monitor all air quality related complaints directed to the Facility as follows:

- a) The Permittee shall provide an automatic phone recording system or an onsite contact person available to the general public for filing a complaint whenever the Facility is operating.
- b) The Permittee shall monitor complaints received in a timely manner by investigating and assessing the validity of each complaint, and documenting the complaint in accordance with RK8.

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M4. Fugitive Emissions, Odors and Dust Control Monitoring. The Permittee shall monitor operations to assess whether reasonable and appropriate precautions for preventing fugitive

emissions, including odors, and fugitive dust are practiced throughout the Facility. Monitoring shall consist of a monthly audit of operations with the potential for fugitive emissions, odors or dust. The audit shall cover, but shall not be limited to, the reasonable and appropriate practices identified in Table M1.

TABLE M1: Monitoring Reasonable and Appropriate Precautions for Preventing Fugitive Emissions and Dust

| Area or EU | Reasonable and Appropriate Precautions |
|------------|---|
| Boiler | <ol style="list-style-type: none"> 1. Adequately enclosing boiler ash collection piles and bins to prevent boiler ash becoming airborne. 2. Transferring and loading ash in a manner that does not result in visible airborne ash. 3. Transporting ash in enclosed containers or trailers adequately covered so as to prevent visible airborne dust. |

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M5. Sulfur Dioxide Emissions Monitoring. When required, SO₂ emissions rates shall be determined via mass-balance calculation methods using the average percent by weight of sulfur in the fuel combusted, the actual amount of fuel combusted, and assuming all sulfur is converted to SO₂. The following fuel-specific monitoring is required:

TABLE M2: Fuel-Specific Sulfur Monitoring

| Approved Fuel Type | Required Monitoring |
|--------------------|---|
| #2 Fuel Oil | <p>The Permittee shall verify via fuel certifications, SDS or written contract with the #2 fuel oil supplier the sulfur content of the fuel purchased and that it was 0.5% sulfur by weight or less.</p> <p><i>[Origin: N/A - gap filling monitoring]</i></p> |
| Diesel | <p>The Permittee shall verify via fuel certifications, SDS or written contract with the diesel supplier that the sulfur content of the fuel purchased was 0.0015% sulfur or less.</p> <p><i>[Origin: N/A - gap filling monitoring]</i></p> |
| Wood Derived Fuels | <p><u>-Biomass fuel must be sampled during testing and analyzed for moisture, heat content and percent sulfur.</u></p> <p><i>[Origin: 21NOR1554 condition 23 m]</i></p> <p>At least annually the Permittee must determine through testing the heat content (MMBtu/ton) and percent by weight of sulfur of a representative sample of the hog fuel pile using test methods recommended by NCASI.</p> <p><i>[Origin: N/A - gap filling monitoring]</i></p> |

| | |
|-----------------------------------|---|
| Wastewater Treatment Plant Sludge | At least annually the Permittee must determine through testing the percent moisture, heat content (MMBtu/ton solids) and percent by weight of sulfur of the sludge as combusted using test methods recommended by NCASI. <i>[Origin: N/A - gap filling monitoring]</i> |
|-----------------------------------|---|

[Origins: ~~N/A - gap filling monitoring as indicated in table above~~]

[Authority: WAC 173-401-615(1) (b)]

M6. Aboveground Gasoline Storage Tank Inspections. The permittee shall conduct quarterly inspections of the aboveground gasoline storage tank and associated gasoline dispensing equipment. The quarterly inspections shall:

- a) Document the gasoline throughput since the last quarterly inspection and determine the cumulative annual gasoline throughput;
- b) Determine whether system components have been kept free of discernible leaks since the last inspection;
- c) Identify any equipment defects and schedule for repair; and
- d) Document any repairs on system components completed since the last inspection.

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M7. Monitoring Operation of Boilers 9 and 10s: The Permittee shall continuously monitor operations of Boilers 9 (EU3) and 10 (EU4) as follows:

- a) The operational status in terms of whether the boiler is operating (*fuel combusted and steam sent to the mill*), on warm standby (*combusting fuel but not sending steam to the mill*) or shut down for each (*no fuel being combusted*);
- b) The date and time of each start-up and shut-down;
- c) The hourly fuel consumption rates of each boiler; and,
- d) The cumulative amount of fuel combusted over the previous 12-consecutive month period in terms of MMBtu on a gross heat input basis determined monthly for each boiler based on the gross or higher heating value (HHV) of the fuel and the monitored amount of fuel consumed.

[Origin: N/A - gap filling monitoring for a), b) and c); 15MOD1131, condition 2 for d)]

[Authority: WAC 173-401-615(1)(a) and (b)]

M8. SO₂ Emissions Monitoring for Boilers 9 and 10. On a monthly basis the permittee shall determine the total combined amount of SO₂ emissions from Boilers 9 and 10 over the previous month and 12 consecutive month periods based on the actual amount of fuel oil combusted and the actual sulfur content of the oil burned. Fuel usage shall be monitored using a flow meter and cumulative fuel usage shall be recorded on a monthly basis. Fuel sulfur content shall be monitored per condition M5. SO₂ emissions shall be calculated by the following mass balance equations:

Mass Balance on SO₂:

$$\frac{\text{gallons oil}}{\text{Month}} \times \left(8.1 \frac{\text{lb oil}}{\text{gallon oil}} \right) \times \left(\frac{\%S}{100} \right) = \frac{\text{lb S}}{\text{Month}}$$

Assume 100% conversion of S to SO₂:

$$S + O_2 \rightarrow SO_2 \quad \therefore \frac{\text{lb S}}{\text{Month}} \times \left(\frac{\text{mole SO}_2}{32 \text{ lb S}} \right) \times \left(\frac{64 \text{ lb SO}_2}{\text{mole SO}_2} \right) = \frac{\text{lb SO}_2}{\text{Month}}$$

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M9. NO_x Emissions Monitoring for Boilers 9 and 10. On a monthly basis the permittee shall determine the total combined amount of NO_x emissions from Boilers 9 and 10 over the previous month and 12 consecutive month periods. NO_x emissions shall be calculated using the following equation and NO_x emissions factors from the most recent Reference Method stack testing of each boiler:

$$\text{NO}_x \text{ for Boiler 9: } \frac{1,000 \text{ gallons oil}}{\text{Month}} \times \left(\frac{\text{lb NO}_x}{1,000 \text{ gallon oil}} \right) = \frac{\text{lb NO}_x \text{ for \#9 Boiler}}{\text{Month}}$$

$$\text{NO}_x \text{ for Boiler 10: } \frac{1,000 \text{ gallons oil}}{\text{Month}} \times \left(\frac{\text{lb NO}_x}{1,000 \text{ gallon oil}} \right) = \frac{\text{lb NO}_x \text{ for \#10 Boiler}}{\text{Month}}$$

Total NO_x for Boiler 9 and Boiler 10:

$$\frac{\text{lb NO}_x \text{ for \#9 Boiler}}{\text{Month}} + \frac{\text{lb NO}_x \text{ for \#10 Boiler}}{\text{Month}} = \frac{\text{Total lb NO}_x \text{ for \#9 and \#10 Boiler}}{\text{Month}}$$

[Origin: gap filling monitoring]

[Authority: WAC 173-401-615(1) (b)]

M10. Boiler 11 Ammonia Monitoring: The Permittee shall install, calibrate, maintain and operate continuous emissions monitoring system (CEMS) to measure and record ammonia (NH₃) emissions from the Boiler 11 as follows:

- a) **Certification.** The NH₃ CEMS shall be certified according to EPA PPS-001, Preliminary Performance Specifications for Ammonia Continuous Emission Monitors. [Origin: [15MOD112521NOR1544](#), condition 19d]
- b) **Q/A Procedures.** Quality assurance procedures for all gaseous pollutant CEMS shall conform to the requirements of 40 CFR Part 60, Appendix F. [Origin: [15MOD112521NOR1544](#), condition 19]
- c) **NH₃ CEMS Data Conversions:** Daily average NH₃ concentrations in ppmvd at 7% O₂ based on all steam producing hours per calendar day (midnight to midnight) shall be calculated from the CEMS raw data. [Origin: added provision]

- d) Compliance Evaluation:** Compliance shall be evaluated by comparing daily average NH₃ emission concentrations in ppmvd at 7% O₂ with the Boiler 11 NH₃ limit. *[Origin: added provision]*

[Origin: ~~15MOD112521NOR1544~~, condition 19; added provisions]

[Authority: WAC 173-401-615(1)(a); WAC 173-401-630(1)]

~~**M11. Boiler 11 SO₂ Monitoring:** Continuing compliance with the SO₂ limits in conditions 5.16 and 5.17 shall be monitored intermittently through stack testing and monthly by calculating SO₂ emissions rates using an SO₂ emission factor determined from the most recent SO₂ stack test. The Permittee shall install, calibrate, maintain and operate continuous emissions monitoring system (CEMS) to measure and record SO₂ emissions from the Boiler 11 as follows:~~

~~**a) Certification.** The SO₂ CEMS shall be certified according to Performance Specification 2 of 40 CFR Part 60, Appendix B. *[Origin: 15MOD1125, condition 19c]*~~

~~**b) Q/A Procedures.** Quality assurance procedures for all gaseous pollutant CEMS shall conform to the requirements of 40 CFR Part 60, Appendix F. *[Origin: 15MOD1125, condition 19d]*~~

~~**c) SO₂ CEMS Data Conversions:**~~

~~**i)** Hourly average SO₂ emissions shall be calculated in the following units for all periods of operation:~~

~~(1) Concentrations in terms of ppm, dry at 3% O₂. *[Origin: added provisions]*~~

~~(2) Pollutant mass rates in terms of lbs/hour. *[Origin: added provisions]*~~

~~**ii)** Pollutant mass rates in terms of lbs/hr shall be calculated using stack gas flow data from the Flow CMS required in condition M15. The equations used for these calculations shall be described in the SMP. *[Origin: added provisions]*~~

~~**d) M11. Compliance Evaluation:** Compliance shall be evaluated by comparing hourly average SO₂ emissions rates in lbs/hr and cumulative SO emissions in tons per 12-month period with their respective limits. *[Origin: added provision]*~~

~~*[Origin: ~~15MOD112521NOR1544~~, condition 169; added provisions]*~~

~~*[Authority: WAC 173-401-615(1)(a); ~~WAC 173-401-630(1)~~]*~~

M12. Boiler 11 Continuous Opacity Monitoring System: The Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of emissions from the Boiler 11 and record the output of the system as follows:

a) Location and Certification: The COMS shall be situated at the ESP outlet and shall be certified pursuant to Performance Specification 1 of 40 CFR Part 60, Appendix B. *[Origin: ~~15MOD112521NOR1544~~, condition 19]*

b) COMS Specifications:

i) Performance Specifications. The COMS must be installed, operated, and maintained according to Performance Specification 1 (PS1) at appendix B to of 40 CFR Part 60. *[Origin: 40 CFR § 60.13(a); 40 CFR § 63.7525(c)(1)]*

ii) Visual Readout. The COMS read out (that component of the COMS that provides a visual display or record) must be readily accessible on site for operational control or inspection by the operator of the equipment. *[Origin: 40 CFR § 63.8(c)(2)(ii)]*

c) **Operational Requirements:**

- i) **Sampling Frequency.** Except as provided in sub-condition (b)(iii) below, the COMS shall be in continuous operation and 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. *[Origin: 40 CFR § 60.13(e); 40 CFR § 63.7525(c)(3)]*
- ii) **Exceptions.** The COMS must operate and collect data at all required intervals at all times the boiler is operating, except for periods of COMS malfunctions or out of control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled COMS maintenance. *[Origin: 40 CFR § 63.7535(b)]*
- iii) **Automated Daily Check of Zero and Span Calibration Drifts.** The COMS must automatically, intrinsic to the opacity monitor, check the zero (between 0 percent and 16 percent opacity) and upscale (between 30 percent and 80 percent opacity) calibration drifts at least once daily. Daily is defined as any portion of a calendar day in which the unit operates. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. *[Origin: 40 CFR § 60.13(d)]*
- iv) **Span.** The span value shall be between 60 and 80 percent. *[Origin: 40 CFR § 60.48b(e)(1)]*
- v) **Quality Assurance Procedures.** The COMS shall be subject to the quality assurance procedures under Procedure 3 in appendix F of 40 CFR Part 60. *[Origin: 40 CFR § 60.13(a)]*
- vi) **Deviations General.** Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of these monitoring requirements. *[Origin: 40 CFR § 63.7525(c)(6)]*
- vii) **Out of Control Periods:**
 - (1) Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from these monitoring requirements. *[Origin: 40 CFR § 63.7525(c)(6)]*
 - (2) Out-of-control periods mean that one or more COMS parameters falls outside of the acceptable limits established in Procedure 3 in appendix F of 40 CFR Part 60, including:
 - (a) **Daily Assessments.** Whenever calibration drift (CD) for either the zero or span calibration exceeds 4% opacity, the COMS is out-of-control. The beginning of the out-of-control period is the time corresponding to the completion of the daily calibration drift check. The end of the out-of-control period is the time corresponding to the completion of appropriate adjustment and subsequent successful CD assessment. *[Origin: Section 3.1(1) of Procedure 3 in appendix F of 40 CFR Part 60]*

(b) **Quarterly and Annual Assessments.** Whenever an annual zero alignment or quarterly performance audit fails to meet the criteria established in paragraphs (2) and (3) of section 10.4 of Procedure 3 in appendix F of 40 CFR Part 60, the COMS is out-of-control. The beginning of the out-of-control period is the time corresponding to the completion of the performance audit indicating the failure to meet these established criteria. The end of the out-of-control period is the time corresponding to the completion of appropriate corrective actions and the subsequent successful audit (or, if applicable, partial audit). *[Origin: Section 3.1(2) of Procedure 3 in appendix F of 40 CFR Part 60]*

viii) **Reporting Out-of-Control Periods.** Periods the COMS was out of control including any periods that the COMS failed to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit must be identified in quarterly or semiannual monitoring reports. *[Origin: 40 CFR § 63.7525(c)(6); 40 CFR § 63.7535(c); 40 CFR § 63.7535(d)]*

d) **Maintenance:**

i) **Maintenance.** The Permittee is required to complete COMS repairs in response to malfunctions or out-of-control periods and to return the COMS to operation as expeditiously as practicable. A COMS malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. COMS system failures that are caused in part by poor maintenance or careless operation are not malfunctions. *[Origin: 40 CFR § 63.7535(b)]*

ii) **Spare Parts.** The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available. *[Origin: 40 CFR § 63.8(c)(1)(ii)]*

iii) **Replacements.** The Permittee shall conduct a Field Audit Performance Test of any COMS in accordance with PS1 after replacing the COMS and at such other times as may be required by ORCAA. *[Origin: 40 CFR § 60.13(c)]*

e) **Data Reduction and Recording:**

i) **6-minute averages.** COMS data shall be reduced to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. *[Origin: 40 CFR § 60.13(h); 40 CFR § 63.8(g)(2)]*

ii) **60-minute averages.** COMS data shall be reduced to 60-minute averages. *[Origin: ~~15MOD112521NOR1544~~, condition 12a]*

iii) **Daily block averages.** COMS data shall be reduced to daily block averages. *[Origin: 40 CFR § 63.7525(c)(7)]*

iv) **Data Recording.** The averages described in (e)(i) through (iii) above must be determined and recorded for all periods during which the COMS is not out of control. *[Origin: 40 CFR § 63.7525(c)(7)]*

v) **Data Recording.** The data may be recorded in reduced or nonreduced form. *[Origin: 40 CFR § 63.8(g)(3)]*

vi) **Data Conversion and Rounding.** All emission data shall be converted into the averages and statistics required in (e)(i) and (e)(ii) above and daily block averages for

reporting purposes. After conversion into required averages, the data may be rounded to the nearest 1 percent opacity. *[Origin: 40 CFR § 63.8(g)(4)]*

vii) Data Exclusions:

- (1) **General.** For purposes of monitoring compliance with all opacity limits, data recorded during periods of unavoidable COMS 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 averages, except as required in sub-condition (e)(vi)(3) below. *[Origin: 40 CFR § 63.8(g)(5)]*
- (2) **Startup and Shutdown.** Except as required in Condition (e)(vi)(3) below, data recorded during periods startup and shutdown must:
 - (a) Not be included in any data averages used for monitoring compliance with the Subpart Db opacity limit in condition AR5.28, the Boiler MACT opacity operating limit in condition AR5.35 and the opacity limit from NOC 15MOD525 in condition AR5.27. *[Origin: 40 CFR § 63.7535(c)]*
 - (b) Be considered for monitoring compliance with the ORCAA and Washington State general opacity limits in conditions PW1.1 and PW1.2, respectively. *[Origin: added provision]*
- (3) **Breakdowns.** During startup or shutdown periods when the Permittee took actions different from the procedures specified in the SSM plan required under condition AR5.30, data averages must include any data recorded during periods of COMS breakdown or malfunction. *[Origin: 40 CFR § 63.8(g)(5); §63.10(b)(2)(vii)(A) or (B)]*

f) Compliance Evaluations:

- i)** Compliance with 6-minute average opacity limits using EPA Method 9 as the Reference Test Method shall be evaluated by comparing with COMS data reduced according to sub-condition e(i) above. *[Origin: added provisions]*
- ii)** Compliance with the 60-minute average opacity limit shall be evaluated by comparing with COMS data reduced according to sub-condition e(ii) above. *[Origin: added provisions]*
- iii)** Compliance with the daily block average opacity operating condition shall be evaluated by comparing COMS data reduced according to sub-condition e(iii) above with the daily block average limit established per condition AR5.34. *[Origin: 40 CFR § 63.7525(c)(7)]*
- iv)** COMS data reduced according to sub-condition e(i) shall also be used as an indicator of compliance with opacity limits using Ecology Method 9A as the Reference Test Method. *[Origin: added provisions]*

[Origins: 40 CFR § 60.48b(a); 40 CFR § 63.7525(c); NOC # ~~15MOD112521~~NOR1544, condition 20; added provisions]

[Authority: WAC 173-401-615(1)(a); WAC 173-401-615(1)(b); WAC 173-401-615(1)(c)]

M13. Boiler 11 CO CEMS. The Permittee shall install, certify, operate and maintain continuous emission monitoring systems for CO (CO CEMS) and oxygen (O₂ CEMS), and monitor emissions of CO and O₂ during all periods of operation of the Boiler 11 as follows:

- a) Site Specific Monitoring Plan.** Both CEMS must be operated and maintained according to the site-specific monitoring plan (SMP) required by condition AR5.30. *[Origin: 40 CFR § 63.7505(d)(4)]*
- b) Performance Specifications and Quality Assurance Procedures:**
- i)** The Permittee must install, certify, operate, and maintain the CO CEMS according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B and Procedure 1 at 40 CFR, Part 60, Appendix F, Quality Assurance Procedures. *[Origin: 40 CFR § 63.7525(a)(2); 40 CFR § 63.7525(a)(2)(iii)]*
 - ii)** The Permittee must install, certify, operate, and maintain the O₂ CEMS according to the applicable procedures under Performance Specification 3 at 40 CFR part 60, appendix B and Procedure 1 at 40 CFR, Part 60, Appendix F, Quality Assurance Procedures. *[40 CFR § 63.7525(a)(2); 40 CFR § 63.7525(a)(2)(iii); 15MOD112521NOR1544, condition 21]*
- c) CEMS Location.** The CO and oxygen levels shall be monitored at the same location at the outlet of Boiler 11. *[Origin: 40 CFR § 63.7525(a)(1)]*
- d) Span.** The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration, which, based on a 900 ppm CO limit is 1,800 ppm @ 3% oxygen. *[Origin: 40 CFR § 63.7525(a)(2)(iii)]*
- e) Required Operation.** The Permittee must operate the CO CEMS and collect data at all required intervals at all times the Boiler 11 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, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CEMS maintenance as defined in the written SMP required by condition AR5.30. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation are required to be completed as expeditiously as practicable. *[Origin: 40 CFR § 63.7535(b)]*
- f) Non-compliant CEMS.** Any CO CEMS that does not comply with this condition cannot be used to meet any requirement to demonstrate compliance with any of the applicable CO emissions limits in this permit. *[Origin: 40 CFR § 63.7525(a)(2)(iv)]*
- g) Failure to Monitor a Deviation.** Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. *[Origin: §63.7535(d)]*
- h) Daily Calibration.** The CO CEMS must automatically 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 each operating day in accordance with the written procedure in the SMP required by condition AR5.30. The zero and span must, at 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. *[Origin: 40 CFR § 63.7525 (a)(2)(iii); 40 CFR § 60.13(d)(1); Procedure 1 at 40 CFR, Part 60, Appendix F, Quality Assurance Procedures]*

- i) CEMS Cycle Frequency.** The CO CEMS must complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect CO and oxygen data concurrently. Collect at least four CO and oxygen CEMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed. *[Origin: 40 CFR § 63.7525(3)]*
- j) CEMS Instrument Detection Level.** For purposes of determining compliance, except for the 30-day rolling average CO emissions limit required in condition AR5.35, CEMS measurements below the instrument detection level must use the instrument detection level in the algorithm used for determining CO emissions over the averaging period. *[Origin: 40 CFR § 63.7520(f)]*
- k) Out of control periods.** The CO CEMS is out of control if:
 - i)** The zero (low-level) or high-level calibration drift (CD) of the CO measuring instrument exceeds 180 ppm (two times the applicable CD specification in the applicable performance specification);
 - ii)** CD of the O₂ analyzer drifts by more than 0.5 percent O₂ from the reference value of the gas, gas cell or optical filter; or,
 - iii)** The CEMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit. *[Origin: 40 CFR § 63.8(c)(7)(i)]*
- l) Corrective Actions.** When the CO CEMS is out of control, the Permittee shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The Permittee 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 Permittee conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this condition. 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 CO CEMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement under this permit. *[Origin: 40 CFR § 63.8(c)(7)(ii)]*
- m) Relative Accuracy Test Audit (RATA).** During each RATA test run of the CO CEMS, emission data for CO must be collected concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10 at 40 CFR part 60, appendix A-4. The relative accuracy testing must be at representative operating conditions. *[Origin: 40 CFR § 63.7525(a)(2)(ii)]*

- n) Concurrent RATA.** The Relative Accuracy Test Audit (RATA) required for the NO_x and CO CEMS will be scheduled to occur during simultaneous test periods. *[Origin: Added per WAC 173-401-630(1)]*
- o) Performance Evaluations.** The permittee must follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to 40 CFR Part 60. *[Origin: 40 CFR § 63.7525(a)(2)(i)]*
- p) CEMS Data Conversions:**
- i)** Data 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. *[Origin: 40 CFR § 63.7525(4); 40 CFR § 63.8(g)(2)]*
 - ii)** Hourly average CO emissions shall be calculated in the following units for all periods of operation:
 - (1) Concentrations in terms of ppm, dry at 3% O₂. *[Origin: 40 CFR § 63.7525(5)]*
 - (2) Emissions rates in terms of lbs/MMBtu heat input. *[Origin: 40 CFR § 63.7525(5)]*
 - (3) Pollutant mass rates in terms of lbs/hour. *[Origin: added provisions]*
 - iii)** Emissions rates in terms of lbs/MMBtu heat input shall be calculated according to EPA Method 19 from Appendix A of 40 CFR Part 60. Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate O₂ correction percentage for the fuel type burned in the unit, and must also take into account that the 3 percent oxygen correction is to be done on a dry basis. These calculations shall be described in the SMP required by condition AR5.30. *[Origin: added provisions]*
 - iv)** Pollutant mass rates in terms of lbs/hr shall be calculated using stack gas flow data from the Flow CMS required in condition M15. The equations used for these calculations shall be described in the SMP. *[Origin: added provisions]*
 - v)** All raw data collected during all periods shall be used in calculating hourly averages, except data recorded during the following periods may be excluded:
 - (1) Monitoring system malfunctions or out-of-control periods;
 - (2) Repairs associated with monitoring system malfunctions or out-of-control periods; and,
 - (3) Required monitoring system quality assurance or control activities. *[Origin: 40 CFR § 63.7525(a)(6); 40 CFR § 63.7535(c); 40 CFR § 63.7535(d)]*
- q) Compliance Evaluation:** Compliance shall be evaluated by computing CO emissions in terms of the following averages and comparing with the corresponding CO limit in like units and averaging period:
- (1) 30-day rolling average concentrations in terms of ppm dry at 3% O₂ for all periods of operation excluding startup or shutdown;
 - (2) 1-hour average emission rates in terms of lbs/MMBtu heat input for all periods of operation except startup or shutdown; and,
 - (3) 1-hour average pollutant mass rates in terms of lbs/hr for all periods of operation. *[Origin: added provisions]*

[Origin: as specified per sub-condition]

[Authority: WAC 173-401-615(1)(a); WAC 173-401-600(1)(a); WAC 173-401-630(1)]

M14. Boiler 11 NO_x CEMS. The Permittee shall monitor continuing compliance with NO_x limits using a CEMS that measures and records NO_x emissions from the boiler exhaust stack during all periods of operation. To accomplish this, the Permittee shall install, certify, operate and maintain continuous emission monitoring systems for NO_x (NO_x CEMS) and oxygen (O₂ CEMS) according to 40 CFR § 60.48b(b) through 40 CFR § 60.48b(f) as follows:

- a) Site Specific Monitoring Plan.** Both CEMS must be operated and maintained according to the site-specific monitoring plan (SMP) required by condition AR5.30. *[Origin: added provision]*
- b) Performance Specifications:**
 - i)** The NO_x CEMS must be installed, operated, and maintained according to Performance Specification 2 (PS2) at appendix B to of 40 CFR Part 60. *[Origin: 40 CFR § 60.13(a); 40 CFR § 60.48b(e)]*
 - ii)** The O₂ CEMS must be installed, operated and maintained according to the applicable procedures under Performance Specification 3 at 40 CFR part 60, appendix B and Procedure 1 at 40 CFR, Part 60, Appendix F, Quality Assurance Procedures. *[Origin: added provisions]*
- c) CEMS Location.** CEMS shall be installed such that representative measurements are obtained as specified in PS2. *[Origin: 40 CFR § 60.13(f); 40 CFR § 60.48b(e)]*
- d) Operating Requirement.** Both CEMS shall be operated and data recorded during all periods of operation of the boiler except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. *[Origin: 40 CFR § 60.48b(c)]*
- e) Quality Assurance Procedures.** The CEMS shall be subject to the quality assurance procedures under Procedure 1 in appendix F of 40 CFR Part 60. *[Origin: 40 CFR § 60.13(a); 40 CFR § 60.48b(e)]*
- f) CEMS Daily Calibration:** *[Origin: 40 CFR §60.13(d)(1); 40 CFR § 60.48b(e)]*
 - i)** The NO_x CEMS must automatically check the zero (between 0 and 60 ppm) and span (between 150 and 300 ppm) calibration drifts at least once each operating day in accordance with a written procedure.
 - ii)** The zero and span calibrations must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the Performance Specification 2 (PS2) at appendix B to of 40 CFR Part 60 (For a span value of 300 ppm, the PS2 limit is 7.5 ppm).
 - iii)** The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.
- g) Cycle Frequency.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the both CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. *[Origin: 40 CFR § 60.13(e)(2); 40 CFR § 60.48b(e)]*

- h) **Minimum Data Requirements.** NO_x emissions data must be obtained for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. *[Origin: 40 CFR § 60.48b(f)]*
- i) **Backup CEMS.** When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, NO_x emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this 40 CFR Part 60, Method 7A of appendix A of 40 CFR part 60, or other ORCAA-approved reference methods to provide *[Origin: 40 CFR § 60.48b(f)]*
- j) **Performance Evaluations.** The Permittee shall conduct CEMS performance evaluations in accordance with PS2 at such times as may be required by ORCAA. *[Origin: 40 CFR § 60.48b(e); 40 CFR § 60.13(c)]*
- k) **CEMS Data Conversions:**
 - i) 1-hour NO_x averages shall be computed per §60.13(h). *[Origin: 40 CFR § 60.48b(e); 40 CFR § 60.13(h)]*
 - ii) Hourly average NO_x emissions shall be calculated in the following units for all periods of operation:
 - (1) Concentrations in terms of ppm, dry at 3% O₂;
 - (2) Emissions rates in terms of lbs/MMBtu heat input; and,
 - (3) Pollutant mass rates in terms of lbs/hour and tons per consecutive 12-month period. *[Origin: 21NOR1544, condition 43added provisions]*
 - iii) Emissions rates in terms of lbs/MMBtu heat input shall be calculated according to EPA Method 19 from Appendix A of 40 CFR Part 60. Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate O₂ correction percentage for the fuel type burned in the unit, and must also take into account that the 3 percent oxygen correction is to be done on a dry basis. These calculations shall be described in the SMP required by condition AR5.30. *[Origin: added provisions]*
 - iv) Pollutant mass rates in terms of lbs/hr shall be calculated using stack gas flow data from the Flow CMS required in condition M15. The equations used for these calculations shall be described in the SMP. *[Origin: added provisions]*
- l) **Compliance Evaluation.** Compliance shall be evaluated by computing NO_x emissions in terms of the following averages for all periods of operation of the Boiler 11 and comparing results with the corresponding NO_x limit in like units and averaging period:
 - i) 24-hour average NO_x emission rates in lbs/MMBtu heat input determined from the arithmetic mean of each 24 continuous hours of NO_x emissions data;
 - ii) 30-day rolling average NO_x emission rates in lbs/MMBtu heat input;
 - iii) 12-month rolling average NO_x emission rates in lbs/MMBtu heat input; and,
 - iv) 12-month rolling cumulative tons of NO_x. *[Origin: added provisions]*

[Origins: provisions added to augment 15MOD112521NOR1544]

[Authority: WAC 173-401-630(1)]

M15. Stack Gas Flow Monitoring. The Permittee shall continuously monitor the volumetric flow of exhaust from Boiler 11 using a stack gas flow monitoring system (Flow CMS) during all

periods of operation of the boiler. The Flow CMS shall meet Performance Specification 6 of 40 CFR Part 60, Appendix B, or alternative performance specifications as approved by ORCAA.

[Origin: provisions added to augment ~~15MOD112521NOR1544~~]

[Authority: WAC 173-401-630(1)]

M16. Boiler Operating Load. The Permittee shall operate and maintain a continuous steam monitoring system (Steam CMS) to monitor steam production by the Boiler 11 in terms of lbs per hour of steam produced by the boiler as follows:

a) Operational Requirements:

i) The Steam CMS must operate and collect data at all times the Boiler 11 is operating and compliance is required, except periods of monitoring system malfunctions and scheduled Steam CMS maintenance as defined in the Permittee's SMP required under condition AR5.30. A Steam CMS malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data.

[Origin: 40 CFR § 63.7535(b)]

ii) The Steam CMS must complete a minimum of one cycle of operation every 15-minutes and must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data. *[Origin: 40 CFR § 63.8(c)(4)(ii); 40 CFR § 63.7525(d)(1)]*

iii) Any 15-minute period for which the Steam CMS is required to operate and collect data and data are not available for a required calculation constitutes a deviation from this monitoring requirement. *[Origin: 40 CFR § 63.7525(d)(3)]*

iv) The Steam CMS must be operated and maintained according to the protocols adopted in the Permittee's SMP required by condition AR5.30. *[Origin: 40 CFR § 63.7505(d)(4)]*

b) Quality Assurance Requirements:

i) The Steam CMS must be calibrated prior to use. *[Origin: 40 CFR § 63.8(c)(6)]*

ii) The Permittee must conduct a performance evaluation of the Steam CMS in accordance with quality assurance and control protocols adopted by the Permittee in their SMP required by condition AR5.30. *[Origin: 40 CFR § 63.7505(d)(3)]*

c) O&M Records:

i) Steam production data must be recorded every 15-minutes when the Boiler 11 is operating. *[Origin: Item 10 of Table 8 to 40 CFR Part 63 Subpart DDDDD]*

ii) The Permittee must record the results of each inspection, calibration, and validation check of the Steam CMS. *[Origin: 40 CFR § 63.7525(d)(5); WAC 173-401-615(1)(b)]*

d) Data Reduction:

i) The permittee shall calculate rolling 30-day average steam production for every hour the Boiler 11 operates except periods specified in condition dii below. *[Origin: 40 CFR § 63.7525(d)(3)]*

ii) Steam CMS data recorded during periods of startup, shutdown, Steam CMS malfunctions and Steam CMS repairs may not be used in data averages and calculations used to evaluate compliance with the steam operating requirement. All

data collected during all other periods must be used in assessing compliance.

[Origin: 40 CFR § 63.7535(c)]

- e) Compliance Evaluation.** Compliance shall be evaluated by comparing the 30-day average steam production of the Boiler 11 with the operating load limit established during performance testing as required by condition AR5.34. *[Origin: Item 10 of Table 8 to 40 CFR 63 Subpart DDDDD]*

[Origins: ~~15MOD112521NOR1544~~, condition 22; Item 2 of Table 4 to 40 CFR Part 63 Subpart DDDDD]

[Authority: WAC 173-401-615(1)(a); WAC 173-401-630(1)]

M17. Pollution Control Equipment Monitoring:

- a)** The Permittee shall install, calibrate, maintain and operate continuous monitoring systems (CMS) to measure and record the following equipment parameters according to the procedures in 40 CFR 63.7525(d)-(h):
- i)** Secondary voltage across and current to the electrostatic precipitator plates;
 - ii)** Pressure drop across the condensing economizer;
 - iii)** Fluid flow in the condensing economizer; and,
 - iv)** Effluent pH from the condensing economizer.

[Origin: ~~15MOD112521NOR1544~~, condition 22]

- b)** The flow sensor must:

- i)** Be installed in a position that provides a representative flow and minimizes the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances;
- ii)** Have a measurement sensitivity of no greater than 2 percent of the design flow rate; and,
- iii)** Be evaluated through a performance evaluation in accordance with the Permittee's SMP at the time of each performance test but no less frequently than annually.

[Origin: 40 CFR 63, §63.7525(e)]

- c)** The pressure sensor(s) must:

- i)** Be installed in a position that provides a representative measurement of the pressure (e.g., PM scrubber pressure drop) and minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices;
- ii)** Have a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less;
- iii)** Be checked at least once each process operating day to ensure pressure measurements are not obstructed (e.g., check for pressure tap pluggage daily);
- iv)** Be evaluated in accordance with the Permittee's SMP at the time of each performance test but no less frequently than annually; and,
- v)** Be evaluated or replaced if at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range

[Origin: 40 CFR 63, §63.7525(f)]

- d)** The pH sensor must:

- i) Be installed in a position that provides a representative measurement of the Condensing Economizer effluent pH;
- ii) Be calibrated in accordance with the Permittee's SMP and according to the manufacturer's instructions;
- iii) Be cleaned at least once each process operating day; and,
- iv) Be evaluated through a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with the Permittee's SMP at the time of each performance test but no less frequently than annually.

[Origin: 40 CFR 63, §63.7525(f)]

e) The ESP secondary electric power monitoring system must:

- i) Be installed to measure (secondary) voltage and current to the precipitator collection plates; and,
- ii) Be evaluated through a performance evaluation in accordance with the Permittee's SMP at the time of each performance test but no less frequently than annually.

[Origin: 40 CFR 63, §63.7525(g)]

f) Operational Requirements:

- i) All required CMS must operate and collect data at all times the Boiler 11 is operating and compliance is required, except periods of monitoring system malfunctions and scheduled CMS maintenance as defined in the Permittee's Site-specific Monitoring Plan (SMP) required under condition AR5.30. A CMS malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. *[Origin: 40 CFR § 63.7535(b)]*
- ii) Each CMS must complete a minimum of one cycle of operation every 15-minutes and must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data. *[Origin: 40 CFR § 63.8(c)(4)(ii); 40 CFR § 63.7525(d)(1)]*
- iii) Any 15-minute period for which a CMS is required to operate and collect data and data are not available for a required calculation constitutes a deviation from this monitoring requirement. *[Origin: 40 CFR § 63.7525(d)(3)]*
- iv) Each CMS must be operated and maintained according to the protocols adopted in the Permittee's SMP required by condition AR5.30. *[Origin: 40 CFR § 63.7505(d)(4)]*

g) Quality Assurance Requirements:

- i) Each CMS must be calibrated prior to use. *[Origin: 40 CFR § 63.8(c)(6)]*
- ii) The Permittee must conduct a performance evaluation of each CMS in accordance with quality assurance and control protocols adopted by the Permittee in their SMP required by condition AR5.30. *[Origin: 40 CFR § 63.7505(d)(3)]*
- iii) Each CMS must be checked daily for indication that the system is responding. *[Origin: 40 CFR § 63.8(c)(6)]*
- iv) If any CMS system includes an internal system check, results must be recorded and checked daily for proper operation. *[Origin: 40 CFR § 63.8(c)(6)]*

h) O&M Records:

- i) CMS data must be recorded every 15-minutes when the Boiler 11 is operating. *[Origin: Item 4 of Table 8 to 40 CFR Part 63 Subpart DDDDD]*
- ii) The Permittee must record the results of each inspection, calibration, and validation check of a required CMS. *[Origin: 40 CFR § 63.7525(d)(5); WAC 173-401-615(1)(b)]*
- i) Data Reduction:**
 - i) The permittee shall calculate rolling 30-day averages from CMS data for every hour the Boiler 11 operates except periods specified in condition i)dii below. *[Origin: 40 CFR § 63.7525(d)(3)]*
 - ii) CMS data recorded during periods of startup, shutdown, CMS malfunctions and CMS repairs may not be used in data averages and calculations used to evaluate compliance with any operating requirement of condition AR5.35. All data collected during all other periods must be used in assessing compliance. *[Origin: 40 CFR § 63.7535(c)]*
- j) Compliance Evaluation.** Compliance shall be evaluated by comparing 30-day averages with their respective operating limit established during performance testing as required by condition AR5.34. *[Origin: Item 10 of Table 8 to 40 CFR 63 Subpart DDDDD]*

[Origins: ~~15MOD112521NOR1544~~, condition 22; Item 2 of Table 4 to 40 CFR Part 63 Subpart DDDDD]

[Authority: WAC 173-401-615(1)(a); WAC 173-401-630(1)]

M18. Boiler 11 - Stack Testing Requirements: When stack testing is required to demonstrate initial or continuing compliance with any of the emission limits, the following procedures shall be followed:

- a) Site-specific Test Plan. Before conducting a required performance test, the Permittee must develop and submit to ORCAA for approval, a site-specific test plan according to 40 CFR 63.7(c).**

~~M18. _____~~

- a)b) _____** The following test methods shall be used, as required, unless permission is given in advance to use an alternative method:
 - i) Stack sampling locations and traverse points shall be determined by Method 1 of 40 CFR Part 60, Appendix A.
 - ii) Gas velocity and volumetric flow rates shall be determined by Method 2, 2F, or 2G of 40 CFR Part 60, Appendix A.
 - iii) Oxygen concentration of the stack gas shall be determined by Method 3A or 3B of 40 CFR Part 60, Appendix A.
 - iv) Moisture content of the stack gas shall be determined by Method 4 of 40 CFR Part 60, Appendix A.
 - v) Filterable PM concentration shall be determined by Method 5, 5B, or 17 of 40 CFR Part 60, Appendix A.
 - vi) SO₂ concentration shall be determined by Method 6C of 40 CFR Part 60, Appendix A.
 - vii) NO_x concentration shall be determined by Method 7E of 40 CFR Part 60, Appendix A.
 - viii) Method 9 of 40 CFR Part 60, Appendix A shall be used to determine stack opacity.

- ix)** CO concentration shall be determined by Method 10 of 40 CFR Part 60, Appendix A.
- x)** Method 19 of 40 CFR Part 60, Appendix A shall be used to convert emission concentrations to emission rates in lb/MMBtu by using the dry basis F-Factor and concentration of oxygen.
- xi)** Dioxin/furan concentration shall be determined by Method 23 of 40 CFR Part 60, Appendix A and converted to toxic equivalents (TEQ) using the factors in Table 11 of 40 CFR Part 63, Subpart DDDDD.
- xii)** VOC concentration shall be determined by Method 25 or 25A of 40 CFR Part 60, Appendix A.
- xiii)** HCl concentration shall be determined by Method 26 or 26A of 40 CFR Part 60, Appendix A.
- xiv)** Hg concentration shall be determined by Method 29, 30, or 30A of 40 CFR Part 60, Appendix A or ASTM Method D6784.
- xv)** Condensable PM concentration shall be determined by Method 201, 201A, or 202 of 40 CFR Part 51 Appendix M.
- xvi)** Ammonia concentration shall be determined by Method 320 of 40 CFR Part 63, Appendix A.
- xvii)** Concentrations of acrolein, benzene, and formaldehyde shall be determined by NCASI Method IM/CAN/WP99.02.
- b)c)** Each test shall be performed while the Boiler 11 is operating at a representative load and burning the fuel that will result in the maximum emissions of the pollutant tested, even if this requires multiple tests.
- c)d)** Steam production and electrical generation rates shall be monitored and recorded during each test.
- d)e)** Secondary voltage and current in the ESP shall be monitored and recorded during each test.
- e)f)** Fluid flow, pressure drop, and pH of the condensing economizer shall be monitored and recorded during each test when the condensing economizer is operating.
- f)g)** Emission concentrations and rates shall be determined based on measurements taken during at least three separate test runs of at least one hour duration each.
- g)h)** If stack testing is required for either CO or NO_x, both species shall be tested simultaneously.
- h)i)** If stack testing is required for ammonia, NO_x shall either be tested simultaneously or continuously monitored by the NO_x CEMS during the entire duration of each ammonia test.
- i)j)** An opacity test conforming to EPA Method 9 shall be performed whenever a source test is required for PM.
- j)k)** Testing required to demonstrate compliance with the Part 63 emission limits shall use the sampling durations, volumes, and span values specified in Table 1 of 40 CFR Part 63, Subpart DDDDD.
- k)l)** Performance tests required to demonstrate compliance with an emission limit originating in 40 CFR Part 60 or 63 shall include a Test Method Performance Audit (PA)

as required under 40 CFR 60.8(g) or 40 CFR 63.7(c)(2)(iii), as appropriate, provided audit samples are available from an accredited supplier.

(m) A performance evaluation of the Steam CMS (required to correlate CEMS data with mass emission rates for CO₂ and NO_x ~~and SO₂~~) shall be performed during each source test.

[Origin: [15MOD112521NOR1544](#), conditions [23](#) and [35](#); 40 CFR 60, §60.8(b),(c),(f)&(g) and §60.46b(d); and 40 CFR 63, §63.7(c)&(e); §63.7510(a); §63.7520 and §63.7530(a)&(b)]
[Authority: WAC 173-401-615(1)(a)]

M19. Boiler 11 - Stack Testing Frequency: The Permittee shall conduct stack testing when requested by ORCAA but at least as frequently as the following schedule:

- a) Stack testing to demonstrate continuing compliance with the emission limits for PM, VOC and HCl shall be performed at least annually. [Origin: [15MOD112521NOR1544](#), conditions [24\(a\)&\(c\)](#)]
- b) If compliance with the mass emission rate for CO₂ or NO_x or SO₂ cannot be demonstrated through use of a *continuous compliance demonstration method* as defined in §64.1, stack testing to verify correlation between CEMS data and mass emission rates shall be performed at least annually. [Origin: [15MOD112521NOR1544](#), condition [24\(b\)](#)]
- c) Stack testing to demonstrate continuing compliance with the Hg limit shall be performed at least annually unless less frequent testing is allowed under §63.7515, in which case the testing schedule in that section shall be followed. [Origin: [15MOD112521NOR1544](#), condition [24\(d\)](#)]
- d) If the Permittee plans to burn a new type of fuel or mixture of fuels and the fuel analysis indicates an increase in either HCl or Hg emissions, then the Permittee must perform a new test for HCl and/or Hg within 60 days of burning the new fuel. [Origin: [15MOD112521NOR1544](#), condition [24\(e\)](#); 40 CFR 63, §63.7530(b); 40 CFR 63, §63.7540(a)(4)&(6)]
- e) Stack testing to demonstrate continuing compliance with the emission limits for acrolein, benzene, formaldehyde, and dioxins/furans shall be performed at least once per AOP permit term. [Origin: [15MOD112521NOR1544](#), condition [24\(g\)](#)]
- f) No more than 13 months may pass between tests that are required annually. No more than 90 months may pass between tests that are required once per AOP permit term. [Origin: [15MOD112521NOR1544](#), condition [24](#)]

[Origins: cited per sub-condition]

[Authority: WAC 173-401-615(1)(a)]

M20. Boiler 11 - Relative Accuracy Test Audits (RATA): The Permittee shall perform an annual Relative Accuracy Test Audit (RATA) of the NO_x, CO and O₂ CEMS:

- a) The RATA shall be conducted in accordance with the procedures in Appendix F of 40 CFR Part 60 and the appropriate performance specifications in Appendix B of 40 CFR Part 60.
- b) RATA for all pollutants and oxygen shall be performed simultaneously.

- c) RATA shall be performed simultaneously with required stack testing or as soon afterwards as feasible.
- d) No more than 13 months shall pass between an annual RATA and the previous RATA.

[Origin: [15MOD112521NOR1544](#), condition 25; 40 CFR 63, §63.7525]

[Authority: WAC 173-401-615(1)(a)]

M21. Boiler 11 - Performance Evaluations of the Control Equipment CMS: The Permittee shall test the condensing economizer CMS according to the following schedule:

- a) Performance evaluations of the condensing economizer pressure drop and water flow monitoring systems shall be conducted prior to but no longer than one month of conducting annual performance testing for either HCl and PM, HCl or Hg, but at least annually.
- b) A performance evaluation of the condensing economizer pH meter, including a two point calibration with one of the two buffer solutions within 1 of the pH of the operating limit, shall be conducted quarterly and prior to but no longer than one month of conducting annual performance testing for HCl.

[Origin: [15MOD112521NOR1544](#), condition 26; 40 CFR 63, §63.7525(e)(4), (f)(5), and (g)(4)]

[Authority: WAC 173-401-615(1)(a)&(c)]

M22. Monitoring Operation of Boiler 11: The Permittee shall continuously monitor operation of Boiler 11 and record:

- a) The operational status in terms of whether Boiler 11 is operating (*fuel combusted and steam sent to the mill*), on warm standby (*combusting fuel but not sending steam to the mill*) or shut down (*no fuel being combusted*);
- b) The date and duration of each start-up and shut-down;
- c) The amount of fossil fuel combusted in the boiler during each startup, shutdown and for transient flame stabilization in terms of MMBTU/hr per each fuel type;
- d) The amount of sludge combusted in the boiler in terms of % solids and MMBTU/hr;
- e) The annual capacity factor of each type of fuel combusted determined monthly and on a 12-continuous month basis; and,
- f) The cumulative amount of all fuels combusted over the previous 12-consecutive month period in terms of MMBtu on a gross heat input.

[Origin: N/A - gap filling monitoring]

[Authority: WAC 173-401-615(1)(b)]

M23. Paper Plant Production Monitoring: The following shall be continuously monitored:

- a) Pulp production in terms of oven-dry tons of pulp per day;
- b) Paper production in terms of air-dried ton per day; and,
- c) Steam production in terms of gross pounds per hour of saturated steam produced by Boiler 11.

[Origin: 19NOC1327, condition 3]

[Authority: WAC 173-401-615(1)(a)]

M24. Paper Machined Emissions Monitoring: Combined emissions of the following pollutants from all paper machines in terms of pounds per consecutive 12-month period shall be calculated monthly based on monitored daily production rates and ORCAA-approved emissions factors:

- a) Acetaldehyde;
- b) Chloroform;
- c) Formaldehyde;
- d) Methylene Chloride; and,
- e) Volatile Organic Compounds (VOC)

[Origin: 19NOC1327, condition 4]

[Authority: WAC 173-401-615(1)(a)]

M25. Pulp Plant Emissions Monitoring: Combined emissions of the following pollutants from the recycle pulp plant in terms of pounds per consecutive 12-month period shall be calculated monthly based on monitored daily production rates and ORCAA-approved emissions factors:

- a) Acetaldehyde;
- b) Chloroform;
- c) Formaldehyde;
- d) Methylene Chloride; and,
- e) Volatile Organic Compounds (VOC)

[Origin: 19NOC1327, condition 4]

[Authority: WAC 173-401-615(1)(a)]

M26. Recycle Pulp Plant Chemicals. The Permittee shall monitor the type and composition of all chemicals added to the feedstock and pulp in the Recycle Pulp Plant.

[Origin: 19NOC1327, condition 1c]

[Authority: WAC 173-401-615(1)(a)]

M27. GHG Monitoring Requirements. The Permittee shall monitor Facility operations, fuel rates and composition of fuels as necessary to report GHG emissions to Ecology in accordance with Chapter 173-441 WAC. The following monitoring provisions apply:

- a) Permittee shall develop a written GHG monitoring plan in accordance with WAC 173-441-050(6)(e). The Permittee shall revise the GHG monitoring plan as needed to reflect changes in processes, monitoring instrumentation, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.
- b) If needed to monitor fuel consumption, flow meters and other measurement devices used to measure fuel feed rates, process steam flow rates, or feedstock flow rates to provide data to perform the GHG emissions calculations shall be calibrated according to the procedures specified in WAC 173-441-050(8).

[Origin: Chapter 173-441 WAC (state only)]

[Authority: WAC 173-401-615(1)(a)]

[END OF SECTION]

VIII. RECORDKEEPING (RK)

RK1. Retention and Availability of Records: The Permittee shall maintain all records required by this permit. All required records shall be retained for at least 5 years from the origination date and shall be available for inspection by ORCAA upon request.

[Origin: WAC 173-401-615(2)(c)]

[Authority: WAC 173-401-615(2)]

RK2. Record of Changes. The Permittee shall maintain records describing changes made resulting 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.

[Origin: WAC 173-401-615 (2)(b); WAC 173-401-724(5)]

[Authority: WAC 173-401-615(2)]

RK3. Monitoring Records. The Permittee shall keep the following records:

| Required Monitoring (Origin) | Required Monitoring Records |
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| Plant-wide Opacity Surveys <i>(Origin: M1)</i> | Records of each monthly opacity survey including: <ol style="list-style-type: none"> The date, location, time, wind direction, sky condition, sun location with respect to the facility; Identification the person conducting the survey/reading; Opacity observation results for all emissions units in terms of whether opacity was observed or not; Operating status of each emission unit operating conditions, results; and, Whether an opacity compliance demonstration per condition M2 was triggered for each emissions unit. |
| Opacity Compliance Demonstration Required <i>(Origin: M2)</i> | <ol style="list-style-type: none"> For emissions units triggering Reference Method testing for compliance with an opacity standard, record of any Reference Method opacity readings conducted including all information in the standard form provided in Attachment 3. Records confirming EPA Method 9 certification for any person conducting Reference Method opacity readings. For fugitive emissions units or activities triggering Reference Method testing for compliance with an opacity standard, records documenting whether reasonable and/or appropriate precautions were being taken to prevent the fugitive emissions. |
| Complaint Monitoring <i>(Origin: M3)</i> | See RK8 below. |
| Monthly Audit of Fugitive Emissions and Dust (Fugitive Emissions) <i>(Origin: M4)</i> | Records of monthly audits, including: <ol style="list-style-type: none"> The date, time and person conducting the audit; Identification of each fugitive emissions source evaluated and whether fugitive emissions was observed during the audit; For each fugitive emissions source evaluated, a description of the measures taken to prevent fugitive |

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| | <p>emissions and an assessment whether all reasonable and/or appropriate precautions were being taken;</p> <p>c) An assessment whether the O&M plan required by condition AR1.9 was being followed with respect to fugitive emissions from boiler ash and fuel handling; and,</p> <p>d) Recommendations of any additional measures to prevent fugitive emissions or dust.</p> |
| Fuel-specific Sulfur Monitoring (Origin: M5) | The specific records identified in Table M2 for each emissions unit and for each fuel type combusted. |
| Quarterly Above-ground Gasoline Storage Tank Inspections (Origin: M6) | <p>Records of the quarterly inspections shall include:</p> <p>a) The date, time and person conducting the quarterly inspection.</p> <p>b) Identification of each above-ground gasoline storage tank inspected.</p> <p>c) Whether leaks were observed during the inspection and the area or equipment component likely causing the leak.</p> <p>d) Record of equipment defects noted and recommended schedule for repair.</p> <p>e) Description of any repairs on system components completed since the last inspection.</p> |
| Boiler 9 and 10 Operating Records (Origin: M7) | <p>The following records regarding operation of Boiler 9 and Boiler 10:</p> <p>a) The operational status of each boiler in terms of whether the boiler is operating (fuel combusted and steam sent to the mill), on warm standby (combusting fuel but not sending steam to the mill) or shut down for each (no fuel being combusted);</p> <p>b) The date and time of each start-up and shut-down;</p> <p>c) The hourly fuel consumption rates of each boiler; and,</p> <p>d) The cumulative amount of fuel combusted over the previous 12-consecutive month period in terms of MMBtu on a gross heat input basis determined monthly for each boiler based on the gross or higher heating value (HHV) of the fuel and the monitored amount of fuel consumed.</p> |
| Record of Monthly SO ₂ Emissions Monitoring for Boilers 9, 10 and 11 (Origins: M5, M8 and M11) | <p>a) The total combined amount of SO₂ emissions from Boilers 9 and 10 over the previous month and 12 consecutive month periods in tons.</p> <p>b) <u>Total cumulative SO₂ emissions over the previous 12 consecutive months and average hourly mass rate over the same period for boiler 11.</u></p> <p>c) <u>The SO₂ emission factors used for each boiler.</u></p> <p>d) <u>Date of the stack test used to determine the SO₂ emissions factors.</u></p> <p>e) <u>The amount of fuel used during the month, and fuel grade (if applicable), sulfur content and heat content.</u></p> |
| Record of Monthly NO _x Emissions Monitoring for Boilers 9 and 10 (Origin: M9) | <p>a) The total combined amount of NO_x emissions from Boilers 9 and 10 over the previous month and 12 consecutive month periods in tons.</p> <p>b) The NO_x emission factor used</p> |

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| | <ul style="list-style-type: none"> c) Date of the stack test used to determine the NO_x emissions factor. d) The amount of fuel used during the month and fuel grade and heat content. |
| Boiler 11 Ammonia Monitoring Records (Origin: M10) | Daily average NH ₃ concentrations in ppmvd at 7% O ₂ based on all steam producing hours per calendar day (midnight to midnight). |
| Boiler 11 SO₂ Monitoring Records (Origin: M11) | SO₂ emissions in terms of the following units and averaging periods: a) Concentrations in ppm, dry at 3% O₂ (hourly ave). b) Pollutant mass rates in terms of lbs/hour- |
| Boiler 11 Opacity Monitoring Records (Origin: M12) | Opacity in terms of the following averaging periods: <ul style="list-style-type: none"> a) 6-minute averages b) 60-minute averages c) Daily block averages |
| Boiler 11 CO Monitoring Records (Origin: M13) | CO emissions in terms of the following units and averaging periods: <ul style="list-style-type: none"> a) 30-day rolling average concentrations in ppm dry at 3% O₂ b) 1-hour average emission rates in terms of lbs/MMBtu heat input c) 1-hour average pollutant mass rates in terms of lbs/hr |
| Boiler 11 NO _x Monitoring Records (Origin: M14) | NO _x emissions in terms of the following units and averaging periods: <ul style="list-style-type: none"> a) 24-hour average NO_x emission rates in lbs/MMBtu heat input b) 30-day rolling average NO_x emission rates in lbs/MMBtu heat input c) 12-month rolling average NO_x emission rates in lbs/MMBtu heat input d) 12-month rolling cumulative tons of NO_x |
| Boiler 11 Stack gas Flow Monitoring Records (Origin: M15) | Boiler 11 stack gas flow in terms of: <ul style="list-style-type: none"> a) Dry standard cubic feet per minute (dscfm) b) MMBtu/hr heat input |
| Boiler 11 Steam Production Monitoring Records (Origin: M16) | Steam production in terms of: <ul style="list-style-type: none"> a) The rate of steam produced in terms of lbs per hour (hourly ave.) b) 30-day average steam production rate in lbs/hr |
| Boiler 11 Pollution Control Equipment Monitoring (Origin: M17) | For the ESP: <ul style="list-style-type: none"> a) Secondary voltage across the ESP plates b) Current to the ESP plates For the Condensing Economizer: <ul style="list-style-type: none"> a) Pressure drop across the Condensing Economizer b) Fluid flow c) Effluent pH |
| Boiler 11 Stack Testing Records (Origin: M18- M19) | The following records are required for any stack testing conducted: <ul style="list-style-type: none"> a) The stack test protocol or plan b) Final stack test report c) Included with each final test report, the following CMS data averaged over each test run: <ul style="list-style-type: none"> i. Steam production ii. Stack flow |

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| | <ul style="list-style-type: none"> iii. Secondary voltage across the ESP plates iv. Current to the ESP plates v. Pressure drop across the Condensing Economizer vi. Condensing Economizer Fluid flow and Effluent pH vii. Opacity viii. Fuel sample composition, heat content and moisture content. |
| Boiler 11 RATA Records (Origin: M20) | Results (Final Reports) for all annual Relative Accuracy Test Audits (RATA) of the NO _x , CO and O ₂ CEMS. |
| Boiler 11 CMS Performance Evaluation Records (Origin: M21) | <p>Performance evaluation final reports for each CMS required under this permit including:</p> <ul style="list-style-type: none"> a) The condensing economizer pressure drop, water flow and pH monitoring systems. b) Steam CMS c) Flow CMS |
| Boiler 11 Operating Records (Origin: M22) | <p>The following Boiler 11 operating records:</p> <ul style="list-style-type: none"> a) Daily record of Boiler 11 operating status in terms of cumulative operating hours (fuel combusted and steam sent to the mill), warm standby hours (combusting fuel but not sending steam to the mill) and shut down hours (no fuel being combusted) b) The date and duration of each start-up and shut-down c) The amount of fossil fuel combusted in the boiler during each startup, shutdown and for transient flame stabilization in terms of MMBTU/hr per each fuel type d) The amount of sludge combusted in the boiler in terms of tons per day e) The annual capacity factor of each type of fuel combusted determined monthly and on a 12-continuous month basis f) The cumulative amount of fuel combusted over the previous 12-consecutive month period in terms of MMBtu on a gross heat input. |
| Paper Plant Production Records (Origin: M23) | <p>The following production records for the Paper Plant:</p> <ul style="list-style-type: none"> a) Pulp production in terms of oven-dry tons of pulp per day b) Paper production in terms of air-dried ton per day c) Steam production in terms of gross pounds per hour of saturated steam produced by Boiler 11 |
| Paper Machine Emissions Monitoring Records (Origin: M24) | <p>Monthly record of cumulative emissions in pounds per consecutive 12-month for the following pollutants:</p> <ul style="list-style-type: none"> a) Acetaldehyde b) Chloroform c) Formaldehyde d) Methylene Chloride e) Volatile Organic Compounds (VOC) |
| Recycled Pulp Plant Emissions Monitoring Records (Origin: M25) | <p>Monthly record of cumulative emissions from the Recycled Pulp Plant in pounds per consecutive 12-month for the following pollutants:</p> <ul style="list-style-type: none"> a) Acetaldehyde b) Chloroform c) Formaldehyde |

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| | d) Methylene Chloride e) Volatile Organic Compounds (VOC) |
| Record of Pulp Plant Chemical Additions <i>(Origin: M26)</i> | Safety Data Sheets (SDS) for all chemicals added to the feedstock and pulp in the Recycle Pulp Plant. |
| GHG Monitoring Records <i>(Origin: M27)</i> | a) The Permittee's written GHG monitoring plan. b) All records associated with monitoring GHG emissions from the facility in accordance with the Permittee's written GHG monitoring plan. |
| | |

[Origin: As indicated in Table]

[Authority: WAC 173-401-615(2)]

RK4. Record of Permit Deviations. The Permittee shall maintain a contemporaneous record of all permit deviations.

[Origin: WAC 173-401-615(3)(b)]

[Authority: WAC 173-401-615(2)]

RK5. Emissions Records. The Permittee shall maintain and make available upon request any records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards.

[Origin: WAC 173-400-105(1); ORCAA Rule 8.11(a) (local only)]

[Authority: WAC 173-401-615(2)]

RK6. Unlawful Reproduction or Alteration of Documents. No person shall reproduce or alter, or cause to be reproduced or altered, any order, registration certificate or other paper issued by ORCAA if the purpose of such reproduction or alteration is to evade or violate any applicable requirement.

[Origin: ORCAA Rule 7.3 (local only)]

[Authority: WAC 173-401-615(2)]

RK7. Display of Orders, Certificates and Other Notices. Any report, plan, order, certificate, or notice required by this permit or under ORCAA Regulations shall be retained and made available upon request. In the event ORCAA requires a notice to be displayed, it shall be posted.

[Origin: ORCAA Rule 7.4 (local only)]

[Authority: WAC 173-401-615(2)]

RK8. Record of Complaints. The Permittee shall keep a record of air quality related complaints received, the assessment of the validity of each complaint, and what, if any, corrective action was taken in response to the complaint. Records shall include, if available or provided, the following information:

- a) Description of the complaint;
- b) Date and time the alleged impact was first noticed;
- c) Date and time the alleged impact was last noticed;
- d) Location where the alleged impact was experienced;

- e) Name and phone number of caller;
- f) The Permittee's assessment of the complaint; and,
- g) Description of any investigation or corrective action taken.

[Origin: WAC 173-400-040(6) (state/local only); ORCAA Rule 8.5 (local only); ORCAA Rule 8.3(e) (local only); ORCAA Rule 7.6 (local only)]

[Authority: WAC 173-401-615(2)]

RK9. Record of Actions Taken to Maintain Air Pollution Control Equipment. The Permittee shall keep a record of any actions taken to maintain air pollution control equipment in good operating condition and repair including repairs or routine maintenance actions and actions involving only inspection of the equipment. Such records shall include:

- a) Date and time the action commenced;
- b) Description of the action;
- c) Description of outcome or findings;
- d) Date and time the action was completed;
- e) Name of person or company performing the maintenance; and,
- f) Duration of time the subject equipment was not operational.

[Origin: ORCAA Rule 8.8 (local only)]

[Authority: WAC 173-401-615(2)]

RK10. Additional Boiler MACT Records. In addition to the records specified in condition RK3, the Permittee must maintain the following records required under 40 CFR Part 63, Subpart DDDDD:

- a) Copies of up-to-date and representative Safety Data Sheets (SDS) of all HAP-containing materials used in quantities that result in more than 0.5 tons per year of any criteria air pollutant or precursor including Volatile Organic Compounds (VOC). *[Origin: 40 CFR 63.1(b)(3); 40 CFR 63.10(b)(3)]*
- b) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted. *[Origin: 40 CFR 63.7555(a)(1)]*
- c) If stack testing of Boiler 11 is less frequent than annually as allowed under condition M19(c), a record documenting that emissions during the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. *[Origin: 40 CFR 63.7555(d)(5)]*

[Origins: specified per sub-condition]

[Authority: WAC 173-401-615(2)]

RK10-RK11. MACT Applicability Records. For each relevant standard or other applicable requirement under 40 CFR Part 63, which the Permittee determines inapplicable, the Permittee shall keep record of the applicability determination on site for 5 years after the determination,

or until the source changes its operations to become an affected source, whichever comes first. For the purposes of this condition, a relevant standard is defined as any standard for which:

- a) The source emits or has the potential to emit (without considering controls) one or more hazardous air pollutants regulated by the standard; and,
- b) The source belongs to the source category regulated by the standard.

The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) demonstrating why the Permittee believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) shall be sufficiently detailed to allow ORCAA to make a finding about the source's applicability status regarding the relevant standard or other requirement. If required, the analysis shall be performed in accordance with requirements established in the relevant subpart for this purpose, and the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any.

[Origin: 40 CFR § 63.1(b)(3); 40 CFR § 63.10(b)(3)]

[Authority: WAC 173-401-615(2)]

~~RK11~~RK12. Records Required for Greenhouse Gas (GHG) Reporting. If the Permittee is required to prepare annual GHG reports to Ecology pursuant to Chapter 173-441 WAC, the Permittee shall maintain records in accordance with WAC 173-441-050, retaining, at a minimum, the following:

- a) A list of all units, operations, processes, and activities for which GHG emissions were calculated.
- b) The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include, but are not limited to, the following information:
 - i) The GHG emissions calculations and methods used, as required by WAC 173-441-120.
 - ii) Analytical results for the development of site-specific emissions factors.
 - iii) The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters.
 - iv) Any Facility operating data/process information used for the GHG emission calculations.
- c) Copies of the annual GHG reports.
- d) Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.
- e) The GHG Emissions Monitoring Plan required by condition M27a.
- f) The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.
- g) Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.

[Origin: WAC 173-441-050(6) (state only)]
[Authority: WAC 173-401-615(2)]

[END OF SECTION]

IX. REPORTING (R)

R1. Annual Compliance Certification. The Permittee shall submit an Annual Compliance Certification report to ORCAA and the U.S. Environmental Protection Agency (EPA) Administrator, in care of Region 10 of the EPA (EPA) certifying the status of compliance with respect to all permit conditions during the previous 12-month period. Annual Compliance Certification Reports shall be submitted to ORCAA and EPA on or before ~~July~~January 30th each year and shall cover the continuous 12-month period ending the previous ~~June 30th~~December 31st (January~~July~~ 1st through ~~June 30th~~December 31st). Annual Compliance Certification Reports shall certify the status of compliance continuously over the certification period, and the certification period shall not exceed 12 months from the end of the certification period covered in the previous certification. The reports shall be certified by a responsible official in accordance with condition G5. Annual Compliance Certification reports shall include:

- a) Identification of each term or condition of the permit that is the basis of the certification.
- b) Certification of the status of compliance with each term or condition of the permit and whether compliance was continuous or intermittent over the reporting period.
- c) Identification of the method(s) or other means used by the Permittee for determining the compliance status, and whether such methods or other means provide continuous or intermittent data.

[Origin: WAC 173-401-630(5)]

[Authority: WAC 173-401-615(3)]

R2. Confidential Information. Records or other information submitted to ORCAA, that are considered by the Permittee to be proprietary and confidential, shall be only for the confidential use of ORCAA provided:

- a) The information relates to processes or production unique to the Permittee or are likely to affect adversely the competitive position of the Permittee if released to the public or to a competitor;
- b) The Permittee follows ORCAA's policy for submitting confidential information; and,
- c) The Permittee certifies the proprietary and/or confidential nature of the records or information.

[Origin: ORCAA Rule 1.6 (local only)]

[Authority: WAC 173-401-615(3)]

R3. Semi-Annual Monitoring Reports. The Permittee shall submit a semi-annual monitoring report (SAMR) summarizing monitoring conducted during the previous continuous six-month period on or before January 30th and July 30th of each year. SAMRs submitted by January 30th shall include, at a minimum, monitoring conducted during July 1st through December 31st of the previous year. SAMRs submitted by July 30th shall cover, at a minimum, monitoring conducted during the previous January 1st through June 30th. SAMRs shall include a summary of results

from all monitoring required by this permit. SAMRs shall be certified by a responsible official in accordance with condition G5 and shall include the following information as applicable:

- a) A summary of results of all required monitoring for all emissions units over the reporting period;
- b) Identification and characterization of all instances of deviations from permit requirements;
- c) Summary description of any corrective actions taken to maintain air pollution controls in good operating condition;
- d) Summary information on the number, duration and cause (including unknown cause, if applicable) of downtime of any CMS required by this permit (other than downtime associated with zero and span or other daily calibration checks, if applicable).

[Origin: WAC 173-401-615(3)(a); [15NOC1125, condition 38\(d\)](#)]

[Authority: WAC 173-401-615(3)(a)]

R4. Reporting Deviations from Permit Conditions. The Permittee shall promptly report any deviations from permit conditions, including those attributable to upset conditions as defined in this permit. The following conditions shall apply:

- a) **Prompt Reporting.** For purposes of this permit, submitting a report “promptly” means the following:
 - i) **Potential Threat to Human Health or Safety:** If the deviation presents a potential threat to human health or safety, “promptly” means as soon as possible but no later than 12 hours after discovery of the deviation. This notification may be made by email, however, the Permittee shall also submit a written notice within 10 days of the occurrence;
 - ii) **Other Deviations:** For other deviations, “promptly” means as soon as possible but no later than 30 days after the end of the month during which the deviation was discovered;
 - iii) **Emergencies:** Except for potential threats to human health or safety, deviations due to an emergency (as defined in condition A12) must be reported within two working days of the time when emission limitations were exceeded to qualify for relief under condition A12.
- b) **Deviation Report Content.** Permit deviation reports shall describe the probable cause of such deviations, corrective actions taken or planned, and preventive measures taken.
- c) **Reporting Unavoidable Excess Emissions.** The deviation report may include demonstration that excess emissions were unavoidable due to start-up, shutdown, upset or malfunction, consistent with the requirements of either condition A13 or A14, as applicable.
- d) **Reporting Deviations due to Emergencies.** The deviation report may include demonstration that excess emissions were due to an emergency, consistent with the requirements of condition A12.

[Origin: WAC 173-401-615(3)(b); WAC 173-401-645(3)(d); [15NOC1125, condition 37](#)]

[Authority: WAC 173-401-615(3)]

R5. Notification of Complaint Received. The Permittee shall notify ORCAA of any complaint received as soon as possible, but no later than two business days from when the complaint is received. If requested by ORCAA, the Permittee shall submit a complaint investigation report which shall include a short description of the complaint, time it was received, actions taken, actions planned and preliminary assessment. Any complaint investigation report submitted shall be certified according to condition G5.

[Origin: WAC 173-400-040(6) (state/local only); ORCAA Rule 7.6 (local only); ORCAA Rule 8.3(e) (local only); ORCAA Rule 8.5 (local only);]

[Authority: WAC 173-401-615(3)]

R6. Annual Inventory Report. No later than March 1st of each year, the Permittee shall submit an inventory of the actual amount of pollutants emitted during the previous calendar year. The inventory shall be submitted to ORCAA on standard inventory reporting forms and be accompanied by associated calculations, data or other information used in calculating the reported emissions. A request for an extension may be considered if a request from the Responsible Official is received by ORCAA prior to February 25th. The request must include a statement of the unexpected circumstances that occurred, how this affected the Permittee's ability to submit the report on time, and the number of additional days needed.

[WAC 173-400-105(1); 15NOC1125, condition 36; ORCAA Rule 8.11 (local only)]

[Authority: WAC 173-401-615(3)]

R7. Reporting of Stack Tests (General): Whenever stack testing is required:

- a) The Permittee must notify ORCAA of the intent to perform a stack test at least 60 days before the scheduled date of a stack test.**
- b) The Permittee must deliver a stack test plan to ORCAA for review and approval at least 30 days before the scheduled date of a stack test.**
- c) The Permittee must submit a stack test report to ORCAA no later than 45 days after completion of the test. The stack test report must be confirmed as true and accurate by responsible officials from the testing contractor and the Permittee. At a minimum, the stack test must contain the following information:**
 - i) A description of the source and sampling location;**
 - ii) The date and time of each test;**
 - iii) A summary of test results reported in units and averaging periods appropriate to the applicable standard;**
 - iv) A description of the test methods and quality assurance procedures used;**
 - v) The types and amounts of fuels consumed and amount and quality of steam generated during each test;**
 - vi) Operating parameters of the cogeneration plant and control equipment during each test;**
 - vii) Raw field data and sample calculations; and**
 - viii) Deviations from approved test plans or the O&M Plan.**

[21NOR1544, condition 35]

[Authority: WAC 173-401-615(3)]

R8. Boiler MACT Notifications. The Permittee must submit the following notifications to the Administrator and ORCAA by the due dates specified:

a) Performance Test Notification:

- i)** The Permittee must notify the Administrator and ORCAA in writing of the intent to conduct a performance test of any boiler at least 60 calendar days before the performance test is initially scheduled to begin. [Origin: 40 CFR 63.7545(a); 40 CFR 63.7(b)(1); 40 CFR 63.9(c)]
- ii)** In the event the Permittee is unable to conduct a performance test on the date specified in a notification due to unforeseeable circumstances beyond the Permittee's control, the Permittee must notify the Administrator and ORCAA as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the Permittee of legal responsibility for compliance with any other applicable provisions of the effective AOP or with any other applicable Federal, State, or local requirement. [Origin: 40 CFR 63.7545(a); 40 CFR 63.7(b)(2)]

b) Test Plan. The Permittee must submit the site-specific Stack Test Plan required under condition M18(a) to ORCAA, and the Administrator upon the Administrator's request, at least 60 calendar days before a performance test of a boiler is scheduled to take place (simultaneously with the notification of intention to conduct a performance test). [Origin: 40 CFR 63.7545(a); 40 CFR 63.7(c)(2)(iv)]

c) CMS Performance Evaluation Notification. The Permittee shall notify the Administrator and ORCAA in writing of the date of any required CMS performance evaluation simultaneously with the notification of the performance test date or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required. [Origin: 40 CFR 63.7545(a); 40 CFR 63.8(e)(2); 40 CFR 63.9(g)(1)]

d) CMS Performance Evaluation Test Plan. Before conducting a required CMS performance evaluation, the Permittee shall submit the site-specific CMS Performance Evaluation Test Plan to ORCAA and to the Administrator (if requested) at 60 days before the performance test or performance evaluation is scheduled to begin. [Origin: 40 CFR 63.7545(a); 40 CFR 63.8(e)(3)(iii)]

e) Notice of any physical change or fuel switch to any boiler resulting in a different boiler subcategory under 40 CFR 63.7499 becoming applicable. The notice must be made within 30 days of the switch/change and must identify:

- i)** The name of the Permittee, the location of the source, the boiler(s) and process heater(s) that have switched fuels or were physically changed, and the date of the notice;
- ii)** The currently applicable subcategory under this subpart; and,
- iii)** The date upon which the fuel switch or physical change occurred. [Origin: 40 CFR 63.7545(h)]

f) The following notifications as applicable must be submitted:

- i)** Initial notifications. [Origin: 40 CFR 63.7545(a); 40 CFR 63.9(b)]
- ii)** Request for extension of compliance. [Origin: 40 CFR 63.7545(a); 40 CFR 63.9(c)]

- iii) Notification of opacity and visible emission observations, if such observations are required for the source by a relevant standard. [Origin: 40 CFR 63.7545(a); 40 CFR 63.9(f)]
- iv) Requests for adjustment to time periods or postmark deadlines for submittal and review of required communications. [Origin: 40 CFR 63.7545(a); 40 CFR 63.9(i)]
- g) Any change in the information already provided under this condition shall be provided to ORCAA and the Administrator in writing within 15 calendar days after the change. [Origin: 40 CFR 63.7545(a); 40 CFR 63.9(j)]

[Origin: listed by sub-condition]

[Authority: WAC 173-401-615(3)]

R9. Boiler MACT Reporting. The following additional reporting requirements apply to boilers subject to 40 CFR Part 63, Subpart DDDDD:

- a) Semi-Annual Compliance Reports for Boilers – According to the schedule, due dates and reporting periods required under condition R3 for the SAMR, the Permittee must submit Semi-Annual Compliance Reports electronically to the EPA Administrator via the EPA’s Compliance and Emissions Data Reporting Interface (CEDRI) per condition R10. Semi-Annual Compliance Reports must include the following information:
 - i) Company name and address. [Origin: 40 CFR 63.7550(c)(5)(i)]
 - ii) Process unit information, emissions limitations, and operating parameter limitations. [Origin: 40 CFR 63.7550(c)(5)(ii)]
 - iii) Date of report and beginning and ending dates of the reporting period. [Origin: 40 CFR 63.7550(c)(5)(iii)]
 - iv) The total operating time during the reporting period. [Origin: 40 CFR 63.7550(c)(5)(iii)]
 - v) Manufacturer name and model number, and the date of the last CMS certification or audit of the COMS required by condition M7, the CO CEMS and oxygen analyzer required by condition M8 and the steam production CPMS required by condition M10. [Origin: 40 CFR 63.7550(c)(5)(v)]
 - vi) The total fuel use each boiler within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the Administrator or ORCAA, or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [Origin: 40 CFR 63.7550(c)(5)(vi)]
 - vii) If conducting performance tests once every 3 years as provided by condition M11, the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. [Origin: 40 CFR 63.7550(c)(5)(vii)]
 - viii) A statement indicating that no new types of fuel were burned in any boiler, or a demonstration of compliance with HCl and mercury limits according to 40 CFR 63.7550(c)(5)(viii). [Origin: 40 CFR 63.7550(c)(5)(viii)]
 - ix) If the Permittee plans to burn a new type of fuel in any boiler, the compliance report

- must include a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel. [Origin: 40 CFR 63.7550(c)(5)(ix)]
- x)** If there were no deviations from any emission limits or operating limits in this permit, a statement that there were no deviations from the emission limits or operating limits during the reporting period. [Origin: 40 CFR 63.7550(c)(5)(xi)]
- xi)** If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control, a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period. [Origin: 40 CFR 63.7550(c)(5)(xii)]
- xii)** If a malfunction of a boiler or associated air pollution control device or CMS 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 during each malfunction to minimize emissions in accordance with condition AR210, including actions taken to correct the malfunction. [Origin: 40 CFR 63.7550(c)(5)(xiii)]
- xiii)** For CMS out of control periods:
- (1) Start and end dates and hours;
 - (2) Duration of each event; and,
 - (3) Descriptions of corrective actions taken. [Origin: 40 CFR 63.7550(e)(3) and 40 CFR 63.8(c)(8)]
- xiv)** Include the date of the most recent tune-up of each boiler. [Origin: 40 CFR 63.7550(c)(5)(xiv)]
- xv)** For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values for CO CEMS and oxygen analyzer, 10 day rolling average values for CO CEMS when the limit is expressed as a 10 day instead of 30 day rolling average, COMS data and steam production CPMS data. [Origin: 40 CFR 63.7550(c)(5)(xvi)]
- xvi)** Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [Origin: 40 CFR 63.7550(c)(5)(xvii)]
- xvii)** For each instance of startup or shutdown of any boiler, include the information required to be monitored, collected, or recorded according to the requirements of condition RK3. [Origin: 40 CFR 63.7550(c)(5)(xviii)]
- xviii)** For each deviation from an emission limit, operating limit or the work practice standard for periods if startup and shutdown, the report must additionally contain the following information:
- (1) A description of the deviation and which emission limit, operating limit, or work practice standard that was not met. [Origin: 40 CFR 63.7550(d)(1)]
 - (2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. [Origin: 40 CFR 63.7550(d)(2)]

- (3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed. [Origin: 40 CFR 63.7550(d)(3)]
 - (4) Description of the nature of the deviation (what was deviated from). [Origin: 40 CFR 63.7550(e)(1)]
 - (5) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. [Origin: 40 CFR 63.7550(e)(2)]
 - (6) The date and time that each deviation started and stopped. [Origin: 40 CFR 63.7550(e)(4)]
 - (7) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. [Origin: 40 CFR 63.7550(e)(5)]
 - (8) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. [Origin: 40 CFR 63.7550(e)(6)]
 - (9) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period. [Origin: 40 CFR 63.7550(e)(7)]
 - (10) A brief description of the source for which there was a deviation. [Origin: 40 CFR 63.7550(e)(8)]
 - (11) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation. [Origin: 40 CFR 63.7550(e)(9)]
- b) Performance Test Reports** – In addition to reporting to ORCAA per condition R8, performance test results for boilers must be submitted to the EPA Administrator as follows:
- i) For testing using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<http://www.epa.gov/ttn/chief/ert/index.html>), results of the performance test must be submitted to the Administrator via the Compliance and Emissions Data Reporting Interface (CEDRI) per condition R11. [Origin: WAC 173-401-615(3)(a)]
 - ii) For testing using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, submit the results of the performance test to the Administrator at the appropriate address listed in condition R11(b)(iv). [Origin: 40 CFR 63.7550(h)(1)(ii)]
 - iii) In addition to performance test results, the test report must also verify that the operating limits have not changed or provide documentation of revised operating limits established according to condition AR2.12. [Origin: 40 CFR 63.7515(f)]
- c) CEMS Performance Evaluations** - The Permittee must submit the results of each CEMS performance evaluation to the Administrator within 60 days after the date of completing each CEMS performance evaluation as follows:
- i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed

on the EPA's ERT Web site at the time of the evaluation, submit the results of the performance evaluation to the Administrator via the CEDRI per condition R11.

ii) For any performance evaluation of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the ERT Web site at the time of the evaluation, submit the results of the performance evaluation to the Administrator at the appropriate address listed in condition R11(b)(iv). [Origin: 40 CFR 63.7550(h)(2)(ii)]

d) CMS Performance Evaluations - The Permittee shall furnish ORCAA, and the Administrator if requested, a copy of a written report of the results of the performance evaluation simultaneously with the results of any boiler performance test required or within 60 days of completion of the performance evaluation if no test is required. [Origin: 40 CFR 63.8(e)(5)(i)]

e) COMS Performance Evaluations - The Permittee shall furnish ORCAA, and the Administrator if requested, two or, upon request, three copies of a written report of the results of the COMS performance evaluation at least 15 calendar days before the performance test required per conditions M11 and M12. [Origin: 40 CFR 63.8(e)(5)(ii)]

f) Monitoring Plans - Upon request, the Permittee must submit any required site-specific Monitoring Plan to the Administrator and ORCAA for approval [Origin: 40 CFR 63.7505(d)(1)]

[Origin: listed by sub-condition]

[Authority: WAC 173-401-615(3)]

R7-R10. Submitting Reports via CEDRI. Reports submitted electronically via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>), shall be submitted as follows:

- a)** If required to electronically submit a MACT notification or report via CEDRI, the Permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for the applicable subpart.
- b)** If the Permittee claims some of the information submitted via CEDRI is Confidential Business Information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website or an alternate electronic file consistent with the XML schema listed on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
- c)** If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (i) through (vii) below:

- i) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either EPA's CEDRI or CDX systems.
- ii) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.
- iii) The outage may be planned or unplanned.
- iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
- v) You must provide to the Administrator a written description identifying:
 - (1) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
 - (2) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
 - (3) Measures taken or to be taken to minimize the delay in reporting; and
 - (4) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
- vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
- vii) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

[Origin: 40 CFR Part 63, Subpart DDDDD]

[Authority: WAC 173-401-615(3)]

R8-R11. State Greenhouse Gas (GHG) Reporting. The Permittee shall be subject to the requirement to report greenhouse gas (GHG) emissions to Ecology in accordance with Chapter 173-441 WAC if annual, Facility-wide emissions of carbon dioxide equivalents (CO₂e) are 10,000 metric tons per year or more from all source categories listed in WAC 173-441-120. The following requirements shall apply:

- a) Once the Facility emits 10,000 metric tons of GHGs or more per calendar year, the Permittee shall report emissions of GHGs to Ecology annually thereafter unless the Permittee is allowed to discontinue reporting as allowed by WAC 173-441-030(5) and the specified notice is submitted to Ecology.
- b) To calculate GHG emissions, the Permittee shall include all GHGs listed in Table A-1 of WAC 173-441-040, including those emitted from the combustion of biomass, using equation A-1 from WAC 173-441-030(1)(b)(iii).
- c) Reports must meet the requirements of WAC 173-441-050, and include the annual emissions of the GHGs listed in WAC 173-441-040 from source categories listed in WAC 173-441-120.
- d) The annual GHG report shall be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology.
- e) GHG emissions reports are due to Ecology:

- i)** No later than March 31 of each calendar year for GHG emissions in the previous calendar year for facilities required to report GHG emissions to the EPA under 40 CFR Part 98;
 - ii)** No later than October 31st of each calendar year for GHG emissions in the previous calendar year for facilities not required to report GHG emissions to the EPA under 40 CFR Part 98.
- f)** All requests, notifications, and communications to Ecology pursuant to GHG emissions reporting, other than submittal of the annual GHG report, shall be submitted to the following address:
- Greenhouse Gas Report, Air Quality Program
 - Department of Ecology
 - P.O. Box 47600
 - Olympia, WA 98504-7600
- g)** The Permittee shall submit a revised annual GHG report within 45 days of discovering an annual GHG report previously submitted contains one or more substantive errors. A substantive error is an error that impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified. The revised report must correct all substantive errors.
- h)** Ecology may notify the Permittee in writing that an annual GHG report previously submitted contains one or more substantive errors. Such notification will identify each such error. The Permittee shall, within 45 days of receipt of the notification, either resubmit the report that, for each identified substantive error, corrects the identified substantive error (in accordance with the applicable requirements of this permit) or provide information demonstrating the previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error.

[Origin: Chapter 173-441 WAC (state only)]

[Authority: WAC 173-401-615(3)]

[END OF SECTION]

X. PERMIT SHIELD CONDITIONS (S)

S1. Permit Shield. 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 units or activity designated under WAC 173-401-530.

[Origin: WAC 173-401-640(1)]

[Authority: WAC 173-401-640(1)]

S2. Inapplicable or Exempt Requirements. The requirements shown in Table S.1, as of the date of permit issuance, have been determined not to apply to the corresponding emissions units indicated due to either inapplicability of the requirement or an exemption. Commencing the date of permit issuance, the AOP shield shall cover the requirements specified in Table S.1, as of the date of permit issuance, with respect to the specific emissions units indicated unless applicability of the requirement is triggered by a future action or emissions increase.

[Origin: WAC 173-401-640(2)]

[Authority: WAC 173-401-640(1)]

S3. Exclusions. Nothing in this permit shall alter or affect the following:

- a) The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section,
- b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance,
- c) The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA,
- d) The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA, or
- e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

[Origin: WAC 173-401-640(4)]

[Authority: WAC 173-401-640(1)]

[END OF SECTION]

TABLE S.1 RELEVANT REQUIREMENTS DETERMINED INAPPLICABLE OR EXEMPT

| Relevant Requirement | Exempt or Inapplicable | Brief Description of Requirement | Basis |
|---|------------------------|--|--|
| WAC 173-400-100 | Inapplicable | Registration required for listed sources, excluding sources subject to the operating permit program. | The Facility is subject to the operating permit program. |
| ORCAA Regulation 4 | Exempt | Requires registration of regulated air pollution sources. | Per Rule 4.1(a), sources required to obtain an air operating permit are exempt. |
| ORCAA 8.1 | Inapplicable | Residential wood heating standards. | The Facility does not include any residential wood heating devices. |
| WAC 173-400-040(3)(b) | Inapplicable | Emission unit identified as a significant contributor to non-attainment must use reasonable and available control methods to control emission of contaminants for which the area is designated non-attainment. | No emission units at the Facility have been identified as a significant contributor to non-attainment. |
| WAC 173-400-040(8)(b) | Inapplicable | Fugitive dust sources identified as significant contributors to PM ₁₀ non-attainment must apply RACT. | The Facility is not located in a PM ₁₀ non-attainment area. |
| Chapter 173-435 WAC | Inapplicable | Emergency episode plan requirements | The Facility has not been requested to prepare such a plan. |
| WAC 173-401-635 | Inapplicable | No "affected source" as defined in WAC 173-401-200(1) shall be permitted as a temporary source [WAC 173-401-635]. | WAC 173-401-635 provides that the permitting authority may issue a single AOP authorizing emissions from similar operations at multiple temporary locations, except for "affected sources." Since this permit is for a single location, this provision does not apply. |
| 40 CFR Part 98 Mandatory Greenhouse Gas (GHG) Reporting (Federal) | Inapplicable | Federal Mandatory Greenhouse Gas Reporting Rule established reporting requirements for effected sources. | These requirements are not pursuant to either the state or federal Clean Air Acts and, therefore, are not "Applicable Requirements" for purposes of Title V. |
| State GHG Reporting Rule - Chapter 173-441 WAC | | | |

Permit Attachments

Attachment 1 – Data Summary

Name: McKinley Paper Company

Physical address:

McKinley Paper Company
1815 Marine Drive
Port Angeles, WA 98362

County: Clallam

Primary Contact: Terry Nishimoto

Contact phone number: 260-565-7045

Air Operation Permit #: ~~18AOP130021RFC1549~~

EIS #: 4986011

FRS #: 110010680370

ICIS-AIR #: WACORC0005300900007

Type of ownership: Private

Operating status: Operating

NAICS code: 322121

SIC code(s): 2621

Air program(s): Title V

State Performance Standards:

- Chapter 173-400 WAC
- ORCAA ~~RA~~ules

Federal Regulations:

- 40CFR Part 60, Subpart A
- 40CFR Part 60, Subpart Db
- 40CFR Part 63, Subpart A
- 40CFR Part 63, Subpart DDDDD

Major for which pollutant(s)? NO_x, CO, SO₂, total HAP

Attachment 1 – Data Summary

Attachment 2 – Insignificant Emissions Units

| Insignificant Emission Unit ID# | Description | IEU Basis |
|---------------------------------|---|--|
| IEU1 | Loadout of wood residuals and ash (fugitive emissions only) | Fugitive Emissions Only WAC 173-401-530(1)(d) |
| IEU2 | Lubricating Oil Storage Tank | Categorically Exempt WAC 173-401-532(3) |
| IEU3 | Storage of pressurized gas | Categorically Exempt WAC 173-401-532(5) |
| IEU4 | Maintenance shops | Categorically Exempt WAC 173-401-532(7) |
| IEU5 | Vents from rooms, buildings and enclosures that contain permitted emissions units or activities from which local ventilation, controls and separate exhaust are provided. | Categorically Exempt WAC 173-401-532(9) |
| IEU6 | Vehicle internal combustion engines | Categorically Exempt WAC 173-401-532(10) |
| IEU7 | Welding operations | Categorically Exempt WAC 173-401-532(12) |
| IEU8 | Plant upkeep operations | Categorically Exempt WAC 173-401-532(33) |
| IEU9 | Pavement cleaning and sweeping | Categorically Exempt WAC 173-401-532(35) |
| IEU10 | Food preparation | Categorically Exempt WAC 173-401-532(41) |
| IEU11 | Portable drums and totes | Categorically Exempt WAC 173-401-532(42) |
| IEU12 | Landscaping activities | Categorically Exempt WAC 173-401-532(43) |
| IEU13 | General vehicle maintenance | Categorically Exempt WAC 173-401-532(45) |
| IEU14 | Comfort air conditioning | Categorically Exempt WAC 173-401-532(46) |
| IEU15 | Office activities | Categorically Exempt WAC 173-401-532(49) |
| IEU16 | Sampling connections | Categorically Exempt WAC 173-401-532(51) |
| IEU17 | Parking lot exhaust | Categorically Exempt WAC 173-401-532(54) |
| IEU18 | Indoor mechanical operations not resulting in emissions | Categorically Exempt WAC 173-401-532(55) |
| IEU19 | Repair and maintenance activities | Categorically Exempt WAC 173-401-532(74) |
| IEU20 | Totally closed conveyors | Categorically Exempt WAC 173-401-532(86) |

Attachment 2 – Insignificant Emissions Units

| | | |
|-------|--|--|
| IEU21 | Air compressors and pneumatically operated equipment | Categorically Exempt WAC 173-401-532(88) |
| IEU22 | Steam leaks | Categorically Exempt WAC 173-401-532(89) |
| IEU23 | Vacuum system exhaust | Categorically Exempt WAC 173-401-532(108) |
| | | |

Table Notes:

1. All IEUs identified in Table 10 are subject to only general applicable requirements in the AOP.
2. ORCAA has determined no additional monitoring, record keeping or reporting is required for any of the IEUs identified.
3. All IEUs identified in Table 10 were listed in McKinley’s AOP renewal application.

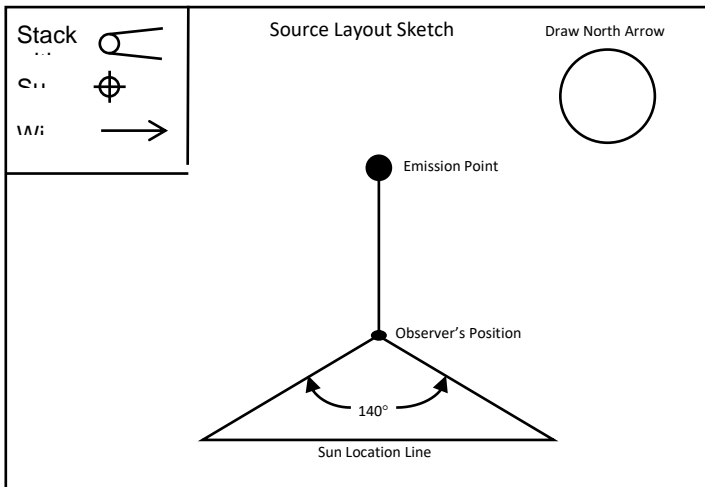
Attachment 3 – Opacity Form

| | | |
|-------------------|-------|----------------|
| Company Name | | |
| Location | | |
| City | State | Zip |
| Process Equipment | | Operating Mode |
| Control Equipment | | Operating Mode |

| | | | |
|-------------------------------|-----|-----------------------------|-----|
| Description of Emission Point | | | |
| Height above Ground Level | | Height Relative to Observer | |
| | | Start | End |
| Distance from Observer | | Direction from Observer | |
| Start | End | Start | End |
| Vertical Angle to Plume | | Horizontal Angle to Plume | |

| | | | |
|--|-----|-----------------------------------|-----------------------------------|
| Describe Emissions | | | |
| Start | | End | |
| Emission Color | | | |
| If Water Droplet Plume | | | |
| Start | End | Attached <input type="checkbox"/> | Detached <input type="checkbox"/> |
| | | NA <input type="checkbox"/> | |
| Point in the Plume at which Opacity was Determined | | | |
| Start | | End | |

| | | | |
|---------------------------|-----|----------------------|------------|
| Describe Plume Background | | | |
| Start | | End | |
| Background Color | | Sky Conditions | |
| Start | End | Start | End |
| Wind Speed | | Wind Direction | |
| Start | End | Start | End |
| Ambient Temperature | | Wet Bulb Temperature | RH Percent |
| Start | End | | |



| | | |
|------------------------|------------|----------|
| Additional Information | | |
| Observation Date | Start Time | End Time |

| Min | Sec | Sec | Sec | Sec | Comments |
|-----|-----|-----|-----|-----|----------|
| | 0 | 15 | 30 | 45 | |
| 1 | | | | | |
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|-------------------------|--|--|--|------|
| Observer's Name (print) | | | | |
| Observer's Signature | | | | Date |
| Organization | | | | |
| Certified By | | | | Date |
| Continued on VEO Form | | | | |

Attachment 3 – Opacity Form