SWCAA
Southwest Clean Air Agency

11815 NE 99th Street, Suite 1294
Vancouver, WA 98682
(360) 574-3058
www.swcleanair.org

May 17, 2017

David Like
Hampton Lumber Mills, Inc.
PO Box 8
Willamina, OR 97396

Re: Issuance of Final Title V Air Operating Permit SW97-5-R2 - Renewal

Dear Mr. Like:

The Southwest Clean Air Agency (SWCAA) is issuing a final renewal Title V permit to Hampton Lumber Mills, Inc – Morton Facility. The Title V permit is being revised to incorporate the permit modifications proposed in Air Discharge Permit 15-3151 and to include requirements from the Boiler MACT Subpart DDDDD.

Copies of the final renewal Air Operating Permit and Title V Basis Statement are accompanied with this letter. In addition, copies of the final permit will be available on SWCAA's website at www.swcleanair.org. If you have any questions or comments, please contact me at (360) 574-3058 ext. 129.

Sincerely,

Vannessa McClelland
Air Quality Engineer

Attachment

C: Part 70 Air Operating Permits
U.S. EPA Region X, AWT-150
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

**Hampton Lumber Mills - WA, Inc. - Morton Facility**

**Air Operating Permit**

**SW97-5-R2**

**Final Issued: May 17, 2017**

---

Southwest Clean Air Agency
11815 NE 99 St., Ste 1294
Vancouver, WA 98682
Telephone: (360) 574-3058

AIR OPERATING PERMIT #: SW97-5-R2

ISSUED TO: Hampton Lumber Mills - WA Inc.
10166 US Hwy 12
Randle, WA 98377

PLANT SITE: Hampton Lumber Mills - WA Inc., Morton Facility
302 Morton Road
Morton, WA 98377

Hampton Drying Company
247 Priest Road
Morton, WA 98356

| | |
|---|---|
| NATURE OF BUSINESS: | Sawmill |
| SIC/NAICS CODE: | 2421/321113 |
| AIRS NUMBER: | 53-041-00009 |
| EFFECTIVE DATE: | May 17, 2017 |
| EXPIRATION DATE: | May 17, 2022 |
| RENEWAL APPLICATION DUE: | November 17, 2021 |

PERMIT ENGINEER: Vannessa McClelland, Air Quality Engineer — Date: 5/17/17

REVIEWED BY: Paul T. Mairose, Chief Engineer — Date: 5/17/17

PAUL T. MAIROSE STATE OF WASHINGTON 21507 REGISTERED PROFESSIONAL ENGINEER

APPROVED BY: Uri Papish, Executive Director — Date: 5/18/17

**TABLE OF CONTENTS**

## I. ABBREVIATIONS

List of Common Abbreviations

| | |
|---|---|
| ADP | Air Discharge Permit (aka Order of Approval) |
| AOP | Air Operating Permit |
| BACT | Best available control technology |
| BF | Board feet |
| CAM | Compliance Assurance Monitoring |
| CMS | Continuous Monitoring Systems |
| CO | Carbon monoxide |
| CFR | Code of Federal Regulations |
| EPA | U.S. Environmental Protection Agency |
| EU | Emission unit |
| EU# | Refers to a specific emission unit numbered "#" |
| FCAA | Federal Clean Air Act |
| G# | Refers to a specific general term and condition numbered "#" |
| gr/dscf | Grains per dry standard cubic foot |
| HAP | Hazardous air pollutant |
| IEU | Insignificant emission unit |
| IEU# | Insignificant emission unit numbered "#" |
| M# | Refers to a specific monitoring requirement numbered "#" |
| MACT | Maximum Available Control Technology |
| NESHAPS | National Emission Standards for Hazardous Air Pollutants |
| NR# | Nonapplicable requirement numbered "#" |
| NSR | New source review |
| $NO_x$ | Oxides of nitrogen |
| $O_2$ | Oxygen |
| PM | Particulate matter |
| $PM_{10}$ | Particulate matter less than 10 microns in diameter |
| PTE | Potential to emit |
| R# | Refers to a specific reporting requirement numbered "#" |
| RACT | Reasonably available control technology |
| RCW | Revised Code of Washington |
| Region 10 | Region 10 of the U.S. Environmental Protection Agency |
| Req-# | Applicable requirement numbered "#" |
| SDS | Safety data sheet |
| SIP | State implementation plan |
| $SO_2$ | Sulfur dioxide |
| SWCAA | Southwest Clean Air Agency |
| TAP | Toxic air pollutant |
| tpy | Tons per year |
| TSM | Total Selected Metals |
| VOC | Volatile organic compound |
| WAC | Washington Administrative Code |

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations.

## II. REGULATORY BASIS

This Air Operating Permit (AOP), hereafter referred to as the "Permit", is authorized under the procedures established in Washington Administrative Code (WAC) 173-401 and Title V (US Code §7661 et seq) of the Federal Clean Air Act (FCAA). As used in this Permit, "term", "condition", "standard", and "requirement" have the same meaning as "applicable requirement" specified under 40 CFR 70.2 and WAC 173-401-200.

The Permit is intended to contain a comprehensive list of the local, state, and federal air pollution regulations and standards applicable to the Permittee's facility and to assure and provide for certification of compliance with those requirements. Sections V through IX describe the applicable requirements and cite the originating local, state, or federal regulation or requirement. Federal requirements may be direct (e.g. FCAA or CFR citation) or established under the Washington State Implementation Plan (SIP). Each citation in the table also includes one or two effective dates of the cited regulation. Where there are two dates for the same regulatory citation, the underlying requirement is substantially the same, but the date of the regulation used for enforcement purposes would be different (e.g. federally enforceable versus SWCAA enforceable).

SWCAA is the primary authority that can enforce all requirements – federal, state, and local requirements – listed in the Permit. However, EPA and private citizens may also take enforcement actions under the Permit for those requirements that are federally enforceable; federal regulations, regulations that have a SIP date, and terms of ADPs are federally enforceable. Rules, regulations, and permits that are not SIP approved or federally promulgated are not federally enforceable.

The following three tables list the applicable regulations and effective dates of the regulations applicable to the facility:

| ***Federal Regulations*** | **Federal Regulation Version (Federally Enforceable)** | **SWCAA Delegation Version** |
|---|---|---|
| 40 CFR 51 | July 1, 2015 | Not Delegated |
| 40 CFR 52 | July 1, 2015 | Not Delegated |
| 40 CFR 60 Subpart A [§60.1 et seq] | July 1, 2015 | July 1, 2009 |
| 40 CFR 60 Subpart O [§60.150 et seq] | July 1, 2015 | July 1, 2009 |
| 40 CFR 61 Subpart A [§61.01 et seq] | July 1, 2015 | July 1, 2009 |
| 40 CFR 61 Subpart E [§61.50 et seq] | July 1, 2015 | July 1, 2009 |
| 40 CFR 63 Subpart A [§63.1 et seq] | July 1, 2015 | July 1, 2009 |
| 40 CFR 63 Subpart ZZZZ [§63.6580 et seq] | July 1, 2015 | Not Delegated |
| 40 CFR 63 Subpart DDDDD [63.7480 et seq] | November 20, 2015 | Not Delegated |
| 40 CFR 68 | July 1, 2015 | Not Delegated |

For specific subparts of 40 CFR 60, 40 CFR 61, or 40 CFR 63 for which SWCAA has not been delegated implementation and enforcement authority by EPA, all monitoring, reporting, or recordkeeping that is required to be sent to the EPA Administrator must be sent to both SWCAA and EPA. Unless otherwise specified in the delegation agreement, once specific subparts of 40 CFR 60, 40 CFR 61, or 40 CFR 63 have been delegated to SWCAA by EPA, all monitoring, reporting, or recordkeeping required to be sent to EPA is only required to be sent to SWCAA.

| ***WA State Regulations*** | **SIP Regulation Version (Federally Enforceable)** | **WA State Regulation Version** |
|---|---|---|
| WAC 173-400-105(7) | December 29, 2012 | December 29, 2012 |
| WAC 173-400-117 | December 29, 2012 | December 29, 2012 |
| WAC 173-400-171 | December 29, 2012 | December 29, 2012 |
| WAC 173-400-700 | April 1, 2011 | December 29, 2012 |
| WAC 173-401 | — | March 5, 2016 |
| WAC 173-425 | October 18, 1990 | April 13, 2000 |
| WAC 173-441 | — | March 1, 2015 |
| WAC 173-476 | March 4, 2014 | November 21, 2013 |

| ***SWCAA Regulations*** | **SIP Regulation Version (Federally Enforceable)** | **SWCAA Regulation Version** |
|---|---|---|
| WAC 173-460 [1] | — | August 21, 1998 |
| SWCAA 400-030 | November 21, 1996 [2] | October 9, 2016 |
| SWCAA 400-040(1) | September 21, 1995 [3] | October 9, 2016 |
| SWCAA 400-040(2) | — | October 9, 2016 |
| SWCAA 400-040(3) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-040(4) | — | October 9, 2016 |
| SWCAA 400-040(5) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-040(6) | September 21, 1995 [4] | October 9, 2016 |
| SWCAA 400-040(7) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-040(8)(a) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-050(1) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-050(2) | September 21, 1995 | October 9, 2016 |
| SWCAA 400-050(3) | September 21, 1995 [5] | October 9, 2016 |
| SWCAA 400-052 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-060 | September 21, 1995 | October 9, 2016 |

[1] The citation is a local-only adopted version of the state rule WAC 173-460 as adopted on August 21, 1988.
[2] The citation does not include second sentence in SWCAA 400-030(14), the second sentence in SWCAA 400-030(49), or SWCAA 400-030(84).
[3] The citation does not include SWCAA 400-040(1)(c) or (1)(d).
[4] The citation does not include the exception provision of SWCAA 400-040(6)(a).
[5] The citation does not include the exception provision in SWCAA 400-050(3).

| *SWCAA Regulations* | **SIP Regulation Version (Federally Enforceable)** | **SWCAA Regulation Version** |
|---|---|---|
| SWCAA 400-070 | September 21, 1995 [6] | October 9, 2016 |
| SWCAA 400-075 | — | October 9, 2016 |
| SWCAA 400-081 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-091 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-100 | September 21, 1995 [7] | October 9, 2016 |
| SWCAA 400-101 | November 21, 1996 | October 9, 2016 |
| SWCAA 400-103 | — | October 9, 2016 |
| SWCAA 400-105 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-105(4)(a)(i) | — | October 9, 2016 |
| SWCAA 400-105(4)(e) | — | October 9, 2016 |
| SWCAA 400-105(5)(a)(i) | September 21, 1995 [8] | — |
| SWCAA 400-105(5)(e) | September 21, 1995 [8] | — |
| SWCAA 400-105(6) | — | October 9, 2016 |
| SWCAA 400-105(7) | — | October 9, 2016 |
| SWCAA 400-106(1)(a) | — | October 9, 2016 |
| SWCAA 400-107 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-109 | November 21, 1996 [9] | October 9, 2016 |
| SWCAA 400-110 | November 21, 1996 [10] | October 9, 2016 |
| SWCAA 400-113 | November 21, 1996 | October 9, 2016 |
| SWCAA 400-114 | November 21, 1996 | October 9, 2016 |
| SWCAA 400-115 | — | October 9, 2016 |
| SWCAA 400-116 | November 21, 1996 | October 9, 2016 |
| SWCAA 400-120 | — | October 9, 2016 |
| SWCAA 400-130 | — | October 9, 2016 |
| SWCAA 400-141 | — | October 9, 2016 |
| SWCAA 400-151 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-171 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-205 | September 21, 1995 | October 9, 2016 |
| SWCAA 400-270 | September 21, 1995 | October 9, 2016 |
| SWCAA 425 | — | August 1, 2002 |

[6] Note that the SIP approved version of SWCAA 400-070 does not include the sections currently numbered (5), (7), and (9)–(15). The SIP citation of SWCAA 400-070(7) for abrasive blasting has been renumbered as SWCAA 400-070(8) in the local only version.

[7] The citation does not include first sentence of (3)(a)(iv) and (4).

[8] Note that the SIP version of SWCAA 400-105(5)(a)(i) and SWCAA 400-105(5)(e) have been renumbered as SWCAA 400-105(4)(a)(i) and SWCAA 400-105(4)(e) in the current SWCAA regulation.

[9] The citation does not include (3)(b), (3)(c), (3)(g), (3)(h), and (3)(i).

[10] Note that the SIP citation of SWCAA 400-110(5) has been renumbered as SWCAA 400-110(6) in the current SWCAA regulation.

| *SWCAA Regulations* | **SIP Regulation Version (Federally Enforceable)** | **SWCAA Regulation Version** |
|---|---|---|
| SWCAA 476 | — | March 18, 2001 |

The following table lists the currently active Air Discharge Permits, issued by SWCAA under a federally-approved new source review program, that apply to the facility; the terms of the Air Discharge Permits are federally enforceable through the Title V Permit, unless the underlying regulatory authority does not have a federally enforceable date as specified in the tables above.

| ***Minor New Source Review Permit*** | **Effective Date** |
|---|---|
| SWCAA 15-3151 | August 27, 2015 |
| SWCAA 10-2948 | October 14, 2010 |

## III. EMISSION UNIT IDENTIFICATION

| **ID #** | **Generating Equipment/Activity** | **Emission Control** |
|---|---|---|
| EU-1 | Log Yard | Water truck |
| EU-2 | Sawmill - Planer, Bunkers, Hog | Building enclosures, Western Pneumatics baghouse<br>Plastic sheeting and wet suppression |
| EU-3 | Hog Fuel Boiler (ABCO Industries) | One multi-clone/Branch Environmental wet venturi scrubber combination<br>One settling pond |
| EU-4 | Dry Kilns | None |
| EU-5 | Office Emergency Propane Engine | Low sulfur fuel, limited hours |
| EU-6 | Fire Pump Emergency Diesel Engine | Low sulfur fuel, limited hours |
| EU-7 | Diesel Boiler (Hampton Drying Company) | Flue gas recirculation |
| EU-8 | Dry Kiln (Hampton Drying Company) | None |

For purposes of regulation under 40 CFR Part 63, Subpart DDDDD, the ABCO Industries hog fuel boiler is classified as an existing hybrid suspension grate boiler under the "Units designed to burn solid fuel" classification.

For purposes of regulation under 40 CFR Part 63, Subpart DDDDD, the Hampton Drying Company's Cleaver Brooks diesel boiler is classified as an existing light liquid boiler under the "Units designed to burn liquid fuel" classification.

## IV. PERMIT PROVISIONS

**P1. Credible Evidence** 40 CFR 51.212, 40 CFR 52.12, 40 CFR 52.33, 40 CFR 60.11

For the purposes of submitting compliance certifications or establishing whether a violation of any term or condition of this permit has occurred or is occurring, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether the Permittee would have been in compliance with a specific term or condition if the appropriate performance or compliance test or procedure would have been performed.

**P2. Confidentiality of Records and Information** WAC 173-401-500(5), WAC 173-401-620(2)(e), SWCAA 400-270

The Permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to SWCAA. Requests for proprietary and confidential information shall be released only after legal opinion by SWCAA's legal counsel, and notice to the Permittee of the intent to release or deny the release of information [SWCAA 400-270].

In the case where the Permittee has submitted information to SWCAA under a claim of confidentiality, SWCAA may also require the source to submit a copy of such information directly to EPA [WAC 173-401-500(5)].

Upon request, the Permittee shall also furnish to the permitting authority copies of records required to be kept by the Permittee or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205 [WAC 173-401-620(2)(e)].

**P3. Insignificant Emission Unit - Permit Revision** WAC 173-401-530(6)

Any emission unit or activity that qualifies as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) shall not exceed the emissions thresholds specified in WAC 173-401-530(4) until this permit is modified pursuant to WAC 173-401-725.

**P4. Permit Duration** WAC 173-401-610

This permit shall be valid for a fixed term of 5 years from the date of issuance.

**P5. Standard Provisions** WAC 173-401-620(2)
SWCAA 100-103

(a) *Duty to comply.* The Permittee must comply with all conditions of this Chapter 401 permit. Any permit noncompliance constitutes a violation of Revised Code of Washington (RCW) Chapter 70.94 and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) *Need to halt or reduce activity not a defense.* It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) *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 reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(d) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.

(e) *Duty to provide information.* The Permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the permitting authority copies of records required to be kept by the Permittee or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

(f) *Permit fees.* The Permittee shall pay fees in accordance with RCW 70.94.162 as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the Permittee to civil and criminal penalties as prescribed in RCW 70.94.430 and 70.94.431.

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

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

(i) *Permit appeals.* This permit or any conditions in it may be appealed only by filing an appeal with the Pollution Control Hearings Board and serving it on the permitting authority within thirty days of receipt of the permit pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under §505(b) of the FCAA.

(j) *Permit continuation.* This permit and all terms and conditions contained herein 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.

**P6. Federally Enforceable Requirements** WAC 173-401-625

(a) All terms and conditions in this air operating permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens under the FCAA.

(b) Notwithstanding the above, any terms and conditions included in this permit that are not required under the FCAA or under any of its applicable requirements are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to the EPA and affected states review requirements of WAC 173-401-700 through WAC 173-401-820. Terms that are SWCAA enforceable only are marked with "L".

**P7. Permit Shield** WAC 173-401-640

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements that are specifically identified in this permit as of the date of permit issuance. 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; and

(e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in RCW 70.94.

**P8. Permit Expiration – Application Shield** WAC 173-401-705(2) WAC 173-401-710(3)

Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with WAC 173-401-710(1) and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until SWCAA takes final action on the renewal application.

**P9. Permit Revocation** WAC 173-401-710(4)

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 Permittee 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.

**P10. Reopenings for Cause** WAC 173-401-730

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

(a) Additional applicable requirements become applicable to a major air operating permit source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);

(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) The permitting authority or Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

(d) The Administrator or the permitting authority 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 as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings under this section shall not be initiated before a notice of such intent is provided to the air operating permit source 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.

**P11. Changes not Requiring Permit Revision/Off Permit Changes** WAC 173-401-722 WAC 173-401-724

The Permittee may make changes described in WAC 173-401-722 and WAC 173-401-724 without revising this Permit, provided that the changes satisfy the criteria set forth in those sections, including the requirements to notify SWCAA and EPA, as applicable. Changes made by the Permittee under WAC 173-401-724 do not qualify for a permit shield.

**P12. Excess Emissions** SWCAA 400-107

The provisions of SWCAA 400-107 do not apply to federal standards, emission limits or standards contained in a PSD permit issued solely by EPA, or to any event that causes a monitored exceedance of any relevant ambient air quality standard.

Excess emissions which the owner or operator wishes to be considered as unavoidable, shall be reported to the Agency as soon as possible, but no later than 48 hours after discovery. The owner or operator of a "source" shall have the burden of proving to the Agency or decision-making authority in an enforcement action that excess emissions were unavoidable.

(a) **Startup or shutdown.** Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the "source" reports as required under section (1) of SWCAA 400-107 and adequately demonstrates that:
   (i) Excess emissions could not have been prevented through careful planning and design;
   (ii) Startup or shutdown was done as expeditiously as practicable;
   (iii) All emission monitoring systems were kept in operation unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;
   (iv) The emissions were minimized consistent with safety and good air pollution control practice during the startup or shutdown period;
   (v) If a bypass of control equipment occurs, that such bypass was necessary to prevent loss of life, personal injury, or severe property damage; and
   (vi) Excess emissions that occur due to upsets or malfunctions during routine startup or shutdown are treated as upsets or malfunctions under section (c) below.

(b) **Maintenance.** Excess emissions due to scheduled maintenance shall be considered unavoidable if the "source" reports as required under section (1) of SWCAA 400-107 and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

(c) **Upsets or malfunctions.** Excess emissions due to upsets or equipment malfunctions shall be considered unavoidable provided the "source" reports as required under section (1) of SWCAA 400-107 and adequately demonstrates that:
   (i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
   (ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
   (iii) The operator took immediate and appropriate corrective action in a manner consistent with safety and good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded;
   (iv) 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; and

(v) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible.

## V. GENERAL TERMS AND CONDITIONS

**G1. Asbestos** 40 CFR 61 Subpart M
SWCAA 400-075
SWCAA 476

The Permittee shall comply with the provisions of SWCAA 476 "Standards for Asbestos Control, Demolition and Renovation" when conducting any renovation, demolition, or asbestos storage activities at the facility.

**G2. Chemical Accident Prevention Program** 40 CFR 68

The Permittee shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR part 68 no later than the latest of the following dates:

(a) Three years after the date on which a regulated substance, present above the threshold quantity in a process, is first listed under 40 CFR §68.130; or

(b) The date on which a regulated substance is first present above a threshold quantity in a process.

**G3. Protection of Stratospheric Ozone** 40 CFR 82, Subparts B and F

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

**G4. Duty to Supplement or Correct Application** WAC 173-401-500(6)

The Permittee, upon becoming aware that relevant facts were omitted or incorrect information was submitted in a permit application, shall promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

**G5. Certification** 40 CFR 63.6650(c)(2)
WAC 173-401-520

All application forms, reports, and compliance certifications must be certified by a responsible official. Certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the submittal are true, accurate, and complete.

**G6. Inspection and Entry** WAC 173-401-630(2)
SWCAA 400-105(2 & 3)

The Permittee shall allow inspection and entry, upon presentation of credentials and other documents as may be required by law, by the permitting authority or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where an air operating permit source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by SWCAA 400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**G7. Schedule of Compliance** WAC 173-401-510(2)(h)(iii)
WAC 173-401-630(3)

The Permittee shall continue to comply with all applicable requirements with which the source is currently in compliance, and meet on a timely basis any applicable requirements that become effective during the permit term.

**G8. Permit Renewal Application** WAC 173-401-710(1)

The Permittee shall submit a complete permit renewal application to SWCAA no later than the date established in the permit. All terms and conditions of the permit shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until SWCAA takes final action on the renewal application.

This permit expires on **May 17, 2022**. A renewal application is due on **May 17, 2021**, one year prior to expiration, and a complete renewal application is due no later than **November 17, 2021**, 180 days prior to expiration.

**G9. Transfer of Ownership or Operational Control** WAC 173-401-720(1)(d)

A change in Permittee due to transfer of ownership or operational control of an affected source requires a request for administrative permit amendment as governed by WAC 173-401-720(1)(d).

**G10. Portable Sources**

SWCAA 400-110(5) – (SIP)
SWCAA 400-110(6) (Local)
SWCAA 400-036 (Local)

Portable sources which locate temporarily at the facility shall be allowed to operate at the temporary location without filing an air discharge permit application provided that:

(a) The source/emission units are registered with SWCAA;

(b) The source/emission units have an air discharge permit to operate as a portable source or have an approved permit that meets the requirements that meet 400-036;

(c) The owner(s) or operator(s) notifies SWCAA of the intent to operate at the new location at least ten business days prior to starting the operation; and

(d) The owner(s) or operator(s) supplies sufficient information including production quantities and hours of operation, to enable SWCAA to determine that the operation will comply with the emission standards for a new source, and will not cause a violation of applicable ambient air quality standards and, if in a nonattainment area, will not interfere with scheduled attainment of ambient standards.

(e) Portable sources that do not have a valid air discharge permit issued by SWCAA, but do have a valid approval issued by a Washington air pollution control authority after July 1, 2010, may operate within SWCAA jurisdiction without filing an air discharge permit application pursuant to SWCAA 400-109 or obtaining an air discharge permit pursuant to SWCAA 400-110 provided the requirements of SWCAA 400-036 are met.

**G11. Misrepresentation and Tampering**

SWCAA 400-105(5 & 6) (Local)

(a) The Permittee shall not make any false material statement, representation or certification in any form, notice, or report.

(b) The Permittee shall not render inaccurate any monitoring device or method required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

**G12. New Source Review**

WAC 173-460-040 (Local)
SWCAA 400-109
SWCAA 400-110

The Permittee shall not construct or modify a source which is required to be reviewed under WAC 173-400-700, WAC 173-460 (effective 8/21/98), or SWCAA 400-110 without first receiving an approval or permit under such provisions. Portable sources may be exempt from this requirement if they fulfill the criteria described in G10. This requirement is not applicable to emission units that comply with the provisions of SWCAA 400-072.

**G13. Replacement or Substantial Alteration of Emission Control Technology at an Existing Stationary Source** SWCAA 400-114

Prior to replacing or substantially altering emission control technology installed at an existing stationary source or emission unit, the Permittee shall file an air discharge permit application with SWCAA. Construction shall not commence on a project subject to review until SWCAA issues a Final air discharge permit or other regulatory order. However, any air discharge permit application filed under this section shall be deemed to be approved without conditions if the Agency takes no action within thirty days of receipt of a complete application.

**G14. Maintenance of Process Equipment** SWCAA 400-116(1)

Any process equipment, including features, machines, and devices constituting parts of or called for by plans, specifications, or other information submitted for approval or required as part of an approval shall be maintained and operate in good working order. The Agency reserves the right to take any and all appropriate action to maintain compliance with approval conditions, including directing the facility to cease operations of defective or malfunctioning equipment until corrective action can be completed.

**G15. Maintenance of Pollution Control Equipment** SWCAA 400-116(2)

Any equipment that serves as air contaminant control or capture equipment shall be maintained and operate in good working order at all times in accordance with good operations and maintenance practices and in accordance with Agency approval conditions. The Agency reserves the right to take any and all appropriate action to maintain compliance with approval conditions, including directing the facility to cease operations of defective or malfunctioning equipment until corrective action can be completed.

**G16. Outdoor Burning** WAC 173-425
SWCAA 425 (Local)

The Permittee is prohibited from conducting outdoor burning except as allowed by SWCAA 425.

**G17. Reporting of Emissions of Greenhouse Gases** WAC 173-441 (State)

WAC 173-441 requires owners and operators of affected facilities to quantify and report emissions of greenhouse gases from applicable source categories listed in WAC 173-441-120. This regulation applies to any facility located in Washington State with total greenhouse gas emissions of ten thousand metric tons of carbon dioxide equivalent ($CO_2e$) or more per calendar year. The Permittee shall prepare and submit greenhouse gas reports to Ecology in accordance with the provisions of WAC 173-441-050 for each affected facility.

## VI. OPERATING TERMS AND CONDITIONS

The following table lists all federal, state, and local requirements applicable to the Permittee. The effective date for each applicable requirement is listed in Section II, which also describes the enforceability of the term. Those specific ADP requirements that are SWCAA enforceable only are denoted with "L". The legal authority for each requirement is listed below each requirement. Any requirement listed specified as "Plantwide" in the Emission Unit column, applies universally to all emission units or activities, regardless of whether identified as an EU or an IEU per WAC 173-401-530(2)(a). Some of the requirements may have been fully or partially adopted into the Washington SIP, and are therefore federally enforceable. Requirements which are not required under the FCAA are State only or Local only requirements authorized under the WAC or SWCAA local regulations. Section II gives citations for the regulations and denotes whether they are federally, state, or locally enforceable. Monitoring requirements are used to provide a reasonable assurance of compliance with the applicable requirements and may or may not involve the use of a reference test method.

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-1 | Permittee shall not cause or permit any visible emissions which exceed 20% opacity for more than three minutes, in any one hour.<br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 400-040(1)(a)&(b) | Plantwide | M1 |
| Req-2 | Permittee shall not cause or permit fallout of particulate matter beyond the source's property boundary in sufficient quantity to interfere unreasonably with the use and enjoyment of the property on which the fallout occurs.<br><br>SWCAA 400-040(2) (L) | Plantwide | M2, M4 |
| Req-3 | Permittee shall take reasonable precautions to prevent the release of fugitive emissions from any emission unit which is a source of fugitive emissions.<br><br>SWCAA 400-040(3)(a) | Plantwide | M3, M4 |
| Req-4 | Permittee shall use recognized good practice and procedures to reduce odors to a reasonable minimum.<br><br>SWCAA 400-040(4) (L) | Plantwide | M4 |
| Req-5 | Permittee shall not cause or permit emissions detrimental to persons or property.<br><br>SWCAA 400-040(5) | Plantwide | M4 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-6 | Permittee shall not cause or permit any emission unit to emit a gas containing sulfur dioxide in excess of 1,000 ppm of sulfur dioxide on a dry basis, based on an average of sixty consecutive minutes.<br><br>Reference Test Method: 40 CFR 60, Appendix A - EPA Method 6<br><br>SWCAA 400-040(6)<br><br>Except the second paragraph of SWCAA 400-040(6)(a) | Plantwide | M6 |
| Req-7 | Permittee shall not cause or permit the installation or use of any means which conceals or masks an emission which would otherwise violate any provisions of SWCAA 400-040.<br><br>SWCAA 400-040(7) | Plantwide | M5 |
| Req-8 | Permittee shall take reasonable precautions to prevent emissions of fugitive dust and operate the source to minimize emissions.<br><br>SWCAA 400-040(8)(a) | Plantwide | M3, M4 |
| Req-9 | At all times (except startup and shutdown), the Permittee shall operate and maintain the ABCO hog fuel boiler, 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.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(3), §63.7500(f) | EU3 | M7, M22, M24 |
| Req-10 | At all times (except startup and shutdown), the Permittee shall operate and maintain Hampton Drying Company's Cleaver Brooks diesel boiler, 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.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(3), §63.7500(f) | EU7 | M7, M22, M24 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-11 | Permittee shall not cause or permit emissions of particulate matter from a combustion or incineration emission unit in excess of 0.1 gr/dscf of exhaust gas corrected to 7% oxygen. Permittee shall not cause or permit emissions of particulate matter from an emission unit combusting wood derived fuels in excess of 0.2 gr/dscf of exhaust gas corrected to 7% oxygen.<br><br>Reference Test Method: 40 CFR 60, Appendix A - EPA Method 5<br><br>SWCAA 400-050(1)&(3)<br><br>Oxygen level exclusion provision of SWCAA 400-050(3) | Plantwide | M2, M15, M16 |
| Req-12 | Permittee shall not cause or allow emissions of particulate matter from a general process unit (excludes combustion) in excess of 0.1 gr/dscf of exhaust gas.<br><br>Reference Test Method: 40 CFR 60, Appendix A - EPA Method 5<br><br>SWCAA 400-060 | Plantwide | M2, M14 |
| Req-13 | Permittee shall not cause or permit any visible emissions from operation of the ABCO Industries hog fuel boiler which exceeds fifteen percent (15%) opacity for more than 3 minutes in any one-hour period except during periods of cold-startups, soot blowing and/or grate cleaning.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 15-3151, Section 2.1.8 | EU3 | M1 |
| Req-14 | Permittee shall not cause or permit any visible emissions from operation of the dry kilns which exceeds five percent (5%) opacity for more than 3 minutes in any one-hour period.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 15-3151, Section 2.1.8 | EU4 | M1 |
| Req-15 | Permittee shall not cause or permit any visible emissions from operation of Hampton Drying Company's Cleaver Brooks diesel boiler which exceeds five percent (5%) opacity for more than 3 minutes in any one-hour period except during periods of cold-startups, soot blowing and/or grate cleaning.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 10-2948, Section 2.1.3 | EU7 | M1 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-16 | Permittee shall not cause or permit any visible emissions from operation of Hampton Drying Company's dry kilns which exceeds five percent (5%) opacity for more than 3 minutes in any one-hour period.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 10-2948, Section 2.1.3 | EU8 | M1 |
| Req-17 | Permittee shall not cause or permit any visible emissions from operation of the fire pump emergency diesel engine which exceeds five percent (5%) opacity for more than 3 minutes in any one-hour period.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 15-3151, Section 2.1.8 | EU6 | M1 |
| Req-18 | Permittee shall not cause or permit any visible emissions from operation of the hog which exceeds five percent (5%) opacity for more than 3 minutes in any one-hour period.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 15-3151, Section 2.1.8 | EU2 (hog) | M1 |
| Req-19 | Permittee shall not cause or permit any visible emissions from all other equipment at the facility which exceeds zero percent (0%) opacity for more than 3 minutes in any one-hour period.<br><br>Reference Test Method: SWCAA 400, Appendix A – SWCAA Method 9<br><br>SWCAA 15-3151, Section 2.1.8 | EU1, EU2 (except hog), EU5 | M1 |
| Req-20 | ABCO Hog Fuel Boiler Filterable PM Emission Limits (Part 63): The Permittee shall not cause or allow filterable PM emissions from the ABCO boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 4.4E-01 lb per MMBtu of heat input; or<br>b) 5.5E-01 lb per MMBtu of steam output.<br>As an alternative to these limits, the Permittee may choose to demonstrate compliance with the total selected metals (TSM) limits listed below.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD<br><br>Collect a minimum of 1 dscm per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU3 | M16, M17 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-21 | ABCO Hog Fuel Boiler TSM Emission Limits (Part 63): As an alternative to the filterable PM limits listed above, the Permittee shall not cause or allow TSM emissions from the ABCO boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 4.5E-04 lb per MMBtu of heat input; or<br>b) 5.7E-04 lb per MMBtu of steam output.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>Collect a minimum of 1 dscm per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU3 | M16, M17 |
| Req-22 | ABCO Hog Fuel Boiler CO Emission Limits (Part 63): The Permittee shall not cause or allow CO emissions from the ABCO boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-hr run average; or<br>b) 3.5 lb per MMBtu of steam output, 3-hr run average.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>One-hour minimum sampling time.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU3 | M16, M17 |
| Req-23 | ABCO Hog Fuel Boiler HCl Emission Limits (Part 63): The Permittee shall not cause or allow HCl emissions from the ABCO boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 2.2E-02 lb per MMBtu of heat input; or<br>b) 2.5E-02 lb per MMBtu of steam output.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>For Method 26A, collect a minimum of 1 dscm per run; for Method 26, collect a minimum of 120 liters per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU3 | M16, M17 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-24 | ABCO Hog Fuel Boiler Mercury Emission Limits (Part 63): The Permittee shall not cause or allow Mercury emissions from the ABCO boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 5.7E-06 lb per MMBtu of heat input; or<br>b) 6.4E-06 lb per MMBtu of steam output<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>For Method 29, collect a minimum of 3 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 3 dscm.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU3 | M16, M17 |
| Req-25 | Hampton Drying Company's Cleaver Brooks Diesel Boiler Filterable PM Emission Limits (Part 63): The Permittee shall not cause or allow filterable PM emissions from the Cleaver Brooks boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 7.9E-03 lb per MMBtu of heat input; or<br>b) 9.6E-03 lb per MMBtu of steam output.<br>As an alternative to these limits, the Permittee may choose to demonstrate compliance with the TSM limits listed below.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>Collect a minimum of 3 dscm per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU7 | M16, M17 |
| Req-26 | Hampton Drying Company's Cleaver Brooks Diesel Boiler TSM Emission Limits (Part 63): As an alternative to the filterable PM limits listed above, the Permittee shall not cause or allow TSM emissions from the Cleaver Brooks boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 6.2E-05 lb per MMBtu of heat input; or<br>b) 7.5E-05 lb per MMBtu of steam output.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>Collect a minimum of 3 dscm per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU7 | M16, M17 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-27 | Hampton Drying Company's Cleaver Brooks Diesel Boiler CO Emission Limits (Part 63): The Permittee shall not cause or allow CO emissions from the Cleaver Brooks boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 130 ppm by volume on a dry basis corrected to 3 percent oxygen; or<br>b) 0.13 lb per MMBtu of steam output.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>One-hour minimum sampling time.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU7 | M16, M17 |
| Req-28 | Hampton Drying Company's Cleaver Brooks Diesel Boiler HCl Emission Limits (Part 63): The Permittee shall not cause or allow HCl emissions from the Cleaver Brooks boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 1.1E-03 lb per MMBtu of heat input; or<br>b) 1.4E-03 lb per MMBtu of steam output.<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>For Method 26A, collect a minimum of 2 dscm per run; for Method 26, collect a minimum of 240 liters per run.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU7 | M16, M17 |
| Req-29 | Hampton Drying Company's Cleaver Brooks Diesel Boiler Mercury Emission Limits (Part 63): The Permittee shall not cause or allow Mercury emissions from the Cleaver Brooks boiler stack that exceed the following limits, except during periods of startup and shutdown:<br>a) 2.0E-06 lb per MMBtu of heat input; or<br>b) 2.5E-06 lb per MMBtu of steam output<br><br>Reference test methods as specified in Table 5 of Subpart DDDDD.<br><br>For Method 29, collect a minimum of 3 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 2 dscm.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); and, Table 2 to Subpart DDDDD of Part 63 | EU7 | M16, M17 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-30 | Emissions from the ABCO Industries hog fuel boiler operation shall not exceed the following corrected to 7% $O_2$:<br><br>Pollutant — Emission Limit<br>$NO_x$ — 125.0 tpy, 175 ppm, one-hour average<br>CO — 131.0 tpy, 300 ppm, one-hour average<br>$PM/PM_{10}$ — 43.0 tpy, 0.050 gr/dscf, one-hour average (filterable only for compliance)<br><br>The short-term emission limits identified above shall not apply during boiler start up and shutdown periods, and periods of soot blowing/grate cleaning, but emissions during those periods must be included in the annual totals.<br><br>SWCAA 15-3151, Section 2.1.1 | EU3 | M16, M17 |
| Req-31 | Emissions from lumber drying operations shall not exceed the following:<br><br>Pollutant — Emission Limit<br>VOC — 139.00 tpy<br>$PM/PM_{10}$ — 4.30 tpy<br>Acetaldehyde — 9.61 tpy (L)<br>Acrolein — 0.15 tpy (L)<br>Formaldehyde — 0.32 tpy (L)<br>Methanol — 9.27 tpy (L)<br><br>SWCAA 15-3151, Section 2.1.2 | EU4 | M10, M15 |
| Req-32 | Emissions from the Western Pneumatics baghouse shall not exceed the following:<br><br>Pollutant — Emission Limit<br>$PM/PM_{10}/PM_{2.5}$ — 10.51 tpy, 0.005 gr/dscf, one-hour average<br><br>SWCAA 15-3151, Section 2.1.3 | EU2 | M11, M14 |
| Req-33 | Emissions from all bin unloading shall not exceed the following:<br><br>Pollutant — Emission Limit<br>PM — 27.39 tpy<br>$PM_{10}$ — 16.34 tpy<br>$PM_{2.5}$ — 6.30 tpy<br><br>SWCAA 15-3151, Section 2.1.4 | EU2 | M11 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-34 | Emissions from the office emergency propane engine must not exceed the following:<br><br>Pollutant — Emission Limit<br>$NO_X$ — 2.97 lb/hr and 0.30 ton/yr<br>CO — 0.23 lb/hr and 0.02 ton/yr<br>$PM_{10}$ — 0.007 lb/hr and 0.001 ton/yr<br><br>SWCAA 15-3151, Section 2.1.5 | EU5 | M13 |
| Req-35 | Emissions from the fire pump diesel engine must not exceed the following:<br><br>Pollutant — Emission Limit<br>$NO_X$ — 6.98 lb/hr and 0.70 ton/yr<br>CO — 1.50 lb/hr and 0.15 ton/yr<br>$PM_{10}$ — 0.05 lb/hr and 0.05 ton/yr<br><br>SWCAA 15-3151, Section 2.1.6 | EU6 | M13 |
| Req-36 | Emissions from the hog must not exceed the following:<br><br>Pollutant — Emission Limit<br>$PM_{10}$ — 0.74 ton/yr<br><br>SWCAA 15-3151, Section 2.1.6 | EU2 | M12 |
| Req-37 | Emissions from the Hampton Drying Company's Cleaver Brooks diesel boiler operation shall not exceed the following corrected to 3% $O_2$:<br><br>Pollutant — Emission Limit<br>$NO_x$ — 19.5 tpy, 85 ppm, one-hour average<br>CO — 6.5 tpy, 100 ppm, one-hour average<br>VOC — 1.0 tpy<br>$SO_2$ — 9.0 tpy<br>$PM/PM_{10}$ — 2.5 tpy<br><br>The short-term emission limits identified above shall not apply during boiler start up and shutdown periods.<br><br>SWCAA 10-2948, Section 2.1.1 | EU7 | M16, M17 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-38 | Emissions from the Hampton Drying Company lumber drying operations shall not exceed the following:<br><br>Pollutant — Emission Limit<br>VOC — 39.31 tpy<br>$PM/PM_{10}$ — 1.97 tpy<br>Acetaldehyde — 4.41 tpy (L)<br>Acrolein — 0.07 tpy (L)<br>Formaldehyde — 0.09 tpy (L)<br>Methanol — 4.25 tpy (L)<br><br>SWCAA 10-2948, Section 2.1.2 | EU8 | M10, M15 |
| Req-39 | Operations that cause or contribute to a nuisance odor shall use recognized good practice and procedures to reduce these odors to a reasonable minimum.<br><br>SWCAA 15-3151, Section 2.2.10 (L)<br>SWCAA 10-2948, Section 2.1.5 (L) | Plantwide | M4 |
| Req-40 | Exhaust gases from the Western Pneumatics baghouse, ABCO Industries hog fuel boiler, and dry kilns shall be discharged vertically. Any device that obstructs or prevents vertical discharge while in operation is prohibited.<br><br>SWCAA 15-3151, Section 2.2.13 | EU2, EU3, EU4 | M3 |
| Req-41 | The Western Pneumatics baghouse shall be equipped with a differential pressure gauge to continuously measure the pressure differential ($\Delta P$) across the filtering media.<br><br>SWCAA 15-3151, Section 2.2.14 | EU2 | M5, M11 |
| Req-42 | Work Practice Standards for the ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The following work practice standards apply:<br>a. 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. The Permittee shall have the opportunity to take credit for implementing energy conservation measures identified in the energy assessment in accordance with §63.7533<br><br>40 CFR Part 63, Subpart DDDDD: §63.7510(e); §63.7533(a); and, Table 3 to Subpart DDDDD of Part 63 | EU3, EU7 | M18 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-43 | Compliance Demonstration for the ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The Permittee must demonstrate compliance with all applicable emission limits using:<br>a. Performance stack testing;<br>b. Fuel analysis for limits applicable to HCl, mercury or TSM; or<br>c. Continuous monitoring systems (CMS).<br><br>40 CFR Part 63, Subpart DDDDD: §63.7505(c) | EU3, EU7 | M16, M18, M19, M20, M22, M25, M26 |
| Req-44 | Startup and Shutdown Standards for the ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The following work practice standards apply:<br>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;<br>b. The Permittee must operate all continuous monitoring systems (CMS) during startup and shutdown;<br>c. One or a combination of the following clean fuels shall be used during startup: natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis;<br>d. The Permittee must follow one of two startup work practice standards:<br>1) If using definition (1) of "startup" in §63.7575, once the Permittee starts firing fuels that are not clean fuels, the Permittee must vent emissions to the main stack and engage all of the applicable control devices except limestone injection in fluidized bed combustion boilers, dry scrubber, fabric filter, and selective catalytic reduction. The Permittee must start the limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR systems as expeditiously as possible. Startup ends when any of the useful steam or heat is supplied for any purpose; or<br>2) If using definition (2) of "startup" in §63.7575, once the Permittee starts to feed fuels that are not clean fuels, the Permittee must vent emissions to the main stack and engage all of the applicable control devices so as to comply with the emission limits within 4 hours of start of supplying useful thermal energy for heating, cooling, process purposes, or generating energy. The Permittee must engage and operate PM control within one hour of first feeding fuels that are not clean fuels. The Permittee, as specified at §63.7555(d)(13), may | EU3, EU7 | M27 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| | submit a request for a variance from the PM controls requirement. If a variance is granted, the Permittee must operate in accordance with its terms, which shall replace and supersede any inconsistent requirements included in this condition or in this permit. The Permittee must start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than 40 CFR Part 63, Subpart DDDDD that require operation of the control devices. The Permittee must develop and implement a written startup and shutdown plan as per §63.7505(e) if it chooses to comply using definition (2) of startup.<br>e. Startup ends when steam or heat is supplied for any purpose; and,<br>f. The Permittee must collect all monitoring data during periods of startup and shutdown required by this permit.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(1); §63.7500(f); §63.7505(e); §63.7555(d)(13); and, Table 3 to Subpart DDDDD of Part 63 | | |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-45 | Operating Limits for the ABCO Hog Fuel Boiler (Part 63): Following the date on which the initial compliance demonstration is completed or is required to be completed under §63.7 and §63.7510, whichever comes first, the Permittee shall maintain the following operating limits except during periods of startup and shutdown of the ABCO Industries hog fuel boiler:<br>a. If the Permittee is demonstrating compliance by fuel analysis: maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) are less than the applicable emission limits. (Only if the Permittee is demonstrating compliance via Fuel Analysis.);<br>b. If the Permittee is demonstrating compliance by performance testing: maintain the 30-day rolling average operating load of the boiler such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test demonstrating compliance. (Only if the Permittee is demonstrating compliance via Performance Testing.);<br>c. Maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one-hour average liquid flow rate, respectively, measured during the performance test demonstrating compliance with the PM emission limitation; and<br>d. These standards apply at all times except for startup or shutdown periods.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(2); §63.7500(f); §63.7540; §63.7; and Table 4 to Subpart DDDDD of Part 63 | EU3 | M19, M21, M27 |
| Req-46 | Operating Limits for Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): For existing affected sources that have not operated between the effective date of the rule and the compliance date that is specified for the specific source in §63.7495, the Permittee must complete the initial compliance demonstration no later than 180 days after the re-start of the affected source.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7510(j) | EU7 | M18 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-47 | Operating Limits for Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63):<br>Following the date on which initial compliance demonstration is completed or is required to be completed under §63.7 and §63.7510, whichever comes first, the Permittee shall maintain the following operating limits except during periods of startup and shutdown of Hampton Drying Company's Cleaver Brooks diesel boiler:<br>a. If the Permittee is demonstrating compliance by fuel analysis: maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) are less than the applicable emission limits. (Only if the Permittee is demonstrating compliance via Fuel Analysis.);<br>b. If the Permittee is demonstrating compliance by performance testing: maintain the 30-day rolling average operating load of the boiler such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test demonstrating compliance. (Only if the Permittee is demonstrating compliance via Performance Testing.); and<br>c. These standards apply at all times except for startup or shutdown periods.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7500(a)(2); §63.7500(f); §63.7510(j); §63.7540; §63.7; and Table 4 to Subpart DDDDD of Part 63 | EU7 | M19, M21, M27 |
| Req-48 | Installation Requirements for ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The Permittee must install, operate and maintain an oxygen analyzer system or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs §63.7525(a)(1) through (6).<br><br>40 CFR Part 63, Subpart DDDDD: §63.7525(a) | EU3, EU7 | M22, M24 |
| Req-49 | Installation Requirements for ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The Permittee must install, operate and maintain CMS to measure the operating load or steam generation.<br><br>40 CFR Part 63, Subpart DDDDD: Table 7 | EU3, EU7 | M5, M7, M22 |
| Req-50 | Installation Requirements for ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler (Part 63): The Permittee must install, operate and maintain each CMS according to the procedures in §63.7525(d)(1) through (5).<br><br>40 CFR Part 63, Subpart DDDDD: §63.7525(d) | EU3, EU7 | M22 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-51 | Installation Requirements for ABCO Hog Fuel Boiler (Part 63): The Permittee must meet the requirements for the flow monitoring system, according to §63.7525(d) and (e)(1) through (4), as below:<br>a. Install the flow sensor and other necessary equipment in a position that provides a representative flow.<br>b. Use a flow sensor with a measurement sensitivity of no greater than 2 percent of the design flow rate.<br>c. Minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.<br>d. Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7525(e) | EU3 | M23 |
| Req-52 | Installation Requirements for ABCO Hog Fuel Boiler (Part 63): The Permittee must meet the requirements for the pressure monitoring system, according to §63.7525(d) and (f)(1) through (6), as below:<br>a. Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop).<br>b. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices.<br>c. Use a pressure sensor with 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.<br>d. Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily).<br>e. Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.<br>f. If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in you monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.<br><br>40 CFR Part 63, Subpart DDDDD: §63.7525(f) | EU3 | M23 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-53 | The scrubber shall be in operation at all times when the ABCO Industries hog fuel boiler is operating.<br><br>SWCAA 15-3151, Section 2.2.15 | EU3 | N/A |
| Req-54 | The scrubber water quality shall be visually evaluated on a daily basis in accordance with Appendix E of SWCAA 15-3151 [found in Appendix E of this permit]. Suspended solids testing shall be conducted on a quarterly basis.<br><br>SWCAA 15-3151, Section 2.2.16 | EU3 | M9 |
| Req-55 | The scrubber water flocculent shall be added to scrubber water on a daily basis as needed.<br><br>SWCAA 15-3151, Section 2.2.17 | EU3 | M9 |
| Req-56 | The wet venturi scrubber shall operate with a minimum differential pressure of 15" w.c. and a minimum process water circulation rate of 170 gpm. A differential pressure gauge must be installed and maintained to measure pressure drop across the throat of the wet scrubber. A flow meter must be installed and maintained to measure the wet scrubber water circulation flow rate. The scrubber settling pond shall have a minimum capacity of 3,000 $ft^3$ and the deep end of the settling pond shall have a water depth of at least 3 feet to assure proper operation of the scrubber system.<br><br>SWCAA 15-3151, Section 2.2.18-20 | EU3 | M7 |
| Req-57 | The ABCO Industries hog fuel boiler shall be equipped with an oxygen meter capable of continuously monitoring oxygen levels in the exhaust gas.<br><br>SWCAA 15-3151, Section 2.2.21 | EU3 | M7, M18 |
| Req-58 | Dry kilns are approved for use with Douglas fir, western hemlock, Sitka spruce, Engelmann spruce, lodgepole pine, alpine fir, grand fir, silver fir and noble fir. Lumber made of other wood species may be dried provided that the following information is furnished to SWCAA for review prior to the start of drying operations:<br>(a) Identification of the wood species to be dried;<br>(b) Emission factors for the proposed wood species; and<br>(c) Estimated amount of wood to be dried.<br><br>SWCAA 15-3151, Section 2.2.22<br>SWCAA 10-2948, Section 2.2.9 | EU4 | M10 |
| Req-59 | The dry kiln dry bulb set point temperature shall not exceed 200°F.<br><br>SWCAA 15-3151, Section 2.2.23<br>SWCAA 10-2948, Section 2.2.10 | EU4, EU8 | M5, M10 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-60 | Dry kiln doors shall be kept closed at all times during active drying operations.<br><br>SWCAA 15-3151, Section 2.2.24<br>SWCAA 10-2948, Section 2.2.11 | EU4, EU8 | M3 |
| Req-61 | A street sweeper shall be used weekly on paved roads and a watering truck shall be used daily on unpaved roads when significant rainfall has not occurred for 15 days or more, or more frequently as needed to minimize fugitive dust.<br><br>SWCAA 15-3151, Section 2.2.25-26 | EU2 | M3 |
| Req-62 | The Hampton Drying Company Cleaver Brooks boiler shall only be fired on low nitrogen fuel (approximately below 60 ppm nitrogen) or better if it is reasonably available. Regular nitrogen fuel usage is limited to 760 hr/yr. Use of regular nitrogen fuel shall be considered an upset and shall be reported to SWCAA for each occurrence. For each event when low nitrogen fuel is not available, documentation from the supplier shall be provided describing why low nitrogen fuel is not available and the expected time when low nitrogen fuel will again be available.<br><br>SWCAA 10-2948, Section 2.2.7 | EU7 | M8 |
| Req-63 | The Hampton Drying Company Cleaver Brooks boiler shall only be fired on #2 fuel oil or better. Any fuel other than #2 fuel oil shall be approved by SWCAA prior to use. Maximum fuel sulfur content of any fuel shall not exceed 0.05% by weight.<br><br>SWCAA 10-2948, Section 2.2.8 | EU7 | M8 |
| Req-64 | The office emergency propane engine and fire pump diesel engine must be operated only for maintenance checks, readiness testing, and as necessary to provide emergency power, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized.<br><br>SWCAA 15-3151, Section 2.2.27<br>40 CFR 63.6640(f)(2)(i) | EU5, EU6 | M13 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-65 | Operation of the office emergency propane engine and fire pump diesel engine for maintenance checks and readiness testing must not exceed 100 hr/yr. The units may operate up to 50 hours per year in non-emergency situations in addition to the time operated for maintenance checks and readiness testing. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. Emergency operation is not limited. A nonresettable hourmeter must be installed and maintained on the office emergency propane engine and fire pump diesel engine to measure hours of unit operation.<br><br>SWCAA 15-3151, Section 2.2.28<br>40 CFR 63.6640(f)(3) | EU5, EU6 | M13 |
| Req-66 | The fire pump diesel engine must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engine must not exceed 0.0015% by weight (15 ppmw). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.<br><br>SWCAA 15-3151, Section 2.2.29 | EU6 | M13 |
| Req-67 | The fire pump diesel engine and office emergency propane engine shall be operated and maintained in accordance with the manufacturer's emission-related operation and maintenance instructions or the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.<br><br>40 CFR 63.6625(e) & 40 CFR 63.6605(b) | EU5, EU6 | M13 |
| Req-68 | The Permittee shall conduct the following maintenance for the fire pump diesel engine:<br>a. Change oil and filter every 500 hours of operation or annually, whichever comes first except as provided in 40 CFR 63.6625(i);<br>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and<br>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.<br><br>40 CFR 63.6602 & Table 2c, Section 1<br>40 CFR 63.6625(e) | EU6 | M13 |

| Req. # | Requirement | Emission Point | Monitoring |
|---|---|---|---|
| Req-69 | The Permittee shall conduct the following maintenance for the office emergency propane engine:<br>a. Change oil and filter every 500 hours of operation or annually, whichever comes first except as provided in 40 CFR 63.6625(j);<br>b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and<br>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary;<br><br>40 CFR 63.6602 & Table 2c, Section 6<br>40 CFR 63.6625(e) | EU5 | M13 |
| Req-70 | The Permittee shall minimize the time the office emergency propane engine and fire pump diesel engine spends at idle and minimize the fire pump's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.<br><br>40 CFR 63.6625(h) | EU5, EU6 | M13 |

## VII. MONITORING TERMS AND CONDITIONS

To assure compliance with all applicable requirements, the Permittee shall perform the monitoring program specified below. Each monitoring requirement is indexed according to the underlying requirement(s). Pursuant to WAC 173-401-530(2)(c), the following monitoring requirements do not apply to IEUs.

**M1. Visible Emissions Monitoring** WAC 173-401-615(1)

This monitoring requirement applies to Requirements 1, 13, 14, 15, 16, 17, 18, and 19.

The Permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying potential visible emission violations. Whenever visible emissions are observed during the monthly inspection, or whenever visible emissions are indicated by a complaint, the Permittee shall verify the equipment causing the emissions. The Permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and determine if all pollution control equipment is operating properly. If the equipment has an opacity limit higher than 0%, assure the equipment is operating within permitted limits. Within 24 hours of initial discovery, Permittee shall resolve the visible emissions or excess emissions problem, or notify SWCAA by the next working day of progress made in resolving the operational problem. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M2. Particulate Matter Emissions Monitoring** WAC 173-401-615(1)
SWCAA 15-3151, Appendix C

This monitoring requirement applies to Requirements 2, 11, and 12.

The Permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying potential particulate matter emissions violations. Whenever particulate matter fallout is observed during the monthly inspection the Permittee shall verify the equipment causing the emissions. The Permittee shall within 60 minutes of observing the emissions confirm whether the equipment involved is experiencing a malfunction and whether all air pollution control equipment is operating properly. The Permittee shall resolve particulate matter fallout within 24 hours of initial discovery, or notify SWCAA by the next business day of the progress made in resolving the problem. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

Emission testing of the baghouse shall be conducted as specified in SWCAA 15-3151, Appendix C [found in Appendix C of this permit]. Records of test results shall be maintained in accordance with Section VIII of this permit.

**M3. Fugitive Emissions Monitoring** WAC 173-401-615(1)
SWCAA 15-3151 Section 2.2.13, 2.2.24-26, 2.3.38
SWCAA 10-2948 Section 2.2.11

This monitoring requirement applies to Requirements 3, 8, 59, and 60.

The Permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying excess fugitive emissions. Whenever fugitive emissions are observed during the monthly inspection, the Permittee shall determine the source of the emissions and perform a visible emission evaluation. The Permittee shall within 60 minutes of discovery confirm whether the equipment involved is experiencing a malfunction, and whether reasonable precautions and good work practices are being employed to minimize emissions. For purposes of this condition reasonable precautions shall include, but not be limited to, the following:

(a) The water truck shall be used daily on unpaved roads when significant rainfall has not occurred for 15 days or more, or more frequently as needed to prevent fugitive dust;
(b) The street sweeper (or similar device such as a water truck) shall be used weekly on paved roads when significant rainfall has not occurred for 15 days or more, or more frequently as needed to prevent fugitive dust;
(c) Exhaust gas from the sawmill baghouse (EU-2), ABCO Industries hog fuel boiler (EU-3) and dry kilns (EU-4) shall be discharged vertically into the ambient air. Any device that obstructs or prevents vertical discharge while in operation is prohibited; and
(d) Dry kiln doors shall be kept closed at all times during active drying operations.

Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M4. Complaint Monitoring** WAC 173-401-615(1)

This monitoring requirement applies to Requirements 2, 3, 4, 5, 8, and 39.

The Permittee shall record, and maintain record of, any air quality related complaints received by the Permittee or received by SWCAA and provided to the Permittee. All complaints shall be investigated no later than one work day after the Permittee has been notified. Investigation shall determine the validity of each complaint, the cause of emissions which prompted the complaint, and what, if any, corrective action was taken in response to the complaint. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M5. Compliance Certification** WAC 173-401-615(1)
SWCAA 15-3151 Section 2.2.14, 18, 19, 21, 23
SWCAA 10-2948 Section 2.3.15, 16

This monitoring requirement applies to Requirements 7, 40, and 48.

The Permittee shall certify the following in each semi-annual report:

(a) Installed equipment does not conceal or mask any emissions which are otherwise in violation of general standards;
(b) Equipment capable of monitoring the following parameters on a continuous basis is installed and maintained:
  (i) Dry kiln operating temperature for all kilns;
  (ii) Steam production and excess oxygen of ABCO Industries hog fuel boiler;
  (iii) Pressure drop across the throat of the wet scrubber; and
  (iv) Boiler pressure and steam production for Hampton Drying Company's Cleaver Brooks diesel boiler.
(c) Equipment capable of monitoring the scrubber water circulation rate is installed and maintained; and
(d) A differential pressure gauge which indicates the pressure differential across the filtering media of the Western Pneumatics baghouse is installed and maintained.

**M6. $SO_2$ Emission Standard** WAC 173-401-615(1)
SWCAA 10-2948 Section 2.2.8

This monitoring requirement applies to Requirement 6.

The Permittee shall certify in each semi-annual report that only hog fuel is used to fire the hog fuel boiler at Hampton Lumber - Morton.

The Permittee shall certify in each semi-annual report that only #2 fuel oil is used to fire the diesel boiler at Hampton Drying Company.

**M7. Monitoring of Hog Fuel Boiler Operations** SWCAA 15-3151 Section 2.3.34

This monitoring requirement applies to Requirements 9, 10, 48, 55, and 56.

The Permittee shall monitor boiler operations as follows:

(a) Pressure drop across the throat of the wet scrubber monitored continuously and recorded daily;
(b) Steam production flow rate for the ABCO Industries hog fuel boiler monitored continuously and recorded daily;
(c) Excess oxygen for the ABCO Industries hog fuel boiler's exhaust gas monitored continuously and recorded daily;

(d) Hog fuel consumption for the ABCO Industries hog fuel boiler recorded monthly;
(e) Hours of operation for the ABCO Industries hog fuel boiler recorded monthly;
(f) Scrubber water circulation rate monitored continuously and recorded daily; and
(g) Cold start-up periods for each occurrence for the ABCO Industries hog fuel boiler; and
(h) Maintenance and repair activities completed on the ABCO Industries hog fuel boiler and wet scrubber.

The Permittee shall perform daily inspections of affected operations to confirm that equipment operating parameters are in compliance with applicable requirements. Whenever noncompliant conditions are observed during the daily inspection or at any other time, the Permittee shall within 60 minutes of discovery confirm whether the equipment involved is experiencing a malfunction, and if all air pollution control equipment is operating properly. Within 24 hours of initial discovery, Permittee shall resolve the operational deficiency, or notify SWCAA by the next business day of progress made in resolving the operating problem. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M8. Monitoring of Diesel Boiler Operations** SWCAA 10-2948 Section 2.3.15

This monitoring requirement applies to Requirements 61 and 62.

The Permittee shall monitor boiler operations as follows:

(a) Boiler pressure and steam production flow rate for Hampton Drying Company's Cleaver Brooks diesel boiler monitored continuously;
(b) Fuel consumption and type recorded monthly for Hampton Drying Company's Cleaver Brooks diesel boiler;
(c) Fuel purchase receipts for Hampton Drying Company's Cleaver Brooks diesel boiler should be maintained for each fuel shipment; and
(d) Fuel sulfur content documented for each fuel shipment for Hampton Drying Company's Cleaver Brooks diesel boiler.

(e) Maintenance and repair activities completed on the Hampton Drying Company's Cleaver Brooks diesel boiler.

The Permittee shall perform daily inspections of affected operations to confirm that equipment operating parameters are in compliance with applicable requirements. Whenever noncompliant conditions are observed during the daily inspection or at any other time, the Permittee shall within 60 minutes of discovery confirm whether the equipment involved is experiencing a malfunction, and if all air pollution control equipment is operating properly. Within 24 hours of initial discovery, Permittee shall resolve the operational deficiency, or notify SWCAA by the next business day of progress made in resolving the operating problem. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M9. Monitoring of Settling Pond Water Quality** SWCAA 15-3151 Section 2.3.34

This monitoring requirement applies to Requirements 53 and 54.

The Permittee shall maintain and monitor settling pond water quality as follows:

(a) Wet scrubber settling pond water depth at the deep side of the pond recorded daily;

(b) The quantity of flocculent added shall be predetermined by the P. The flocculent delivery system shall be monitored on a daily basis for proper function and to assure flocculent is added to the scrubber pond. Facility personnel shall correct delivery system malfunctions as soon as possible. Flocculent shall be manually delivered as necessary to the scrubber pond if the delivery system can not be fixed within 8 hours;

(c) Scrubber water quality shall be visually evaluated on a daily basis using the standard procedure as described in Appendix E of this permit. Results of the visual evaluation shall be graded as excellent, normal, or poor. The Permittee shall take immediate corrective action whenever a poor result is encountered; and

(d) Samples of the scrubber water shall be tested for total suspended solids on a quarterly basis.

Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M10. Emissions from Lumber Drying** SWCAA 15-3151 Section 2.3.35
SWCAA 10-2948 Section 2.3.16

This monitoring requirement applies to Requirements 30, 37, 57, and 58.

The Permittee shall record, and maintain record of, the amount, species, and final moisture content of lumber dried in the facilities' dry kilns on a monthly basis. The daily average dry bulb temperature of the dry kiln shall be monitored continuously and averaged on a daily basis. Periods of non-operation should be recorded as such. Records shall be available for inspection no later than 30 days from the last day of the month. Compliance with specified emission limits is to be calculated based on lumber throughput and emission factors provided by the respective Permits. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M11. Material Handling Operations Monitoring** WAC 173-401-615(1)
SWCAA 15-3151 Section 2.3.33, 37

This monitoring requirement applies to Requirements 31, 32, and 40.

The Permittee shall record weekly the differential pressure across the Western Pneumatics baghouse filter media.

The Permittee shall record monthly the hours of operation for the Western Pneumatics baghouse.

The Permittee shall record for each occurrence the filter bag replacement and repair activities for the Western Pneumatics baghouse.

The Permittee shall record monthly tons of chips/shavings/sawdust unloaded from load-out bunkers.

The Permittee shall perform monthly inspections of affected operations for the purpose of identifying potential particulate matter emission violations. Whenever visible emissions are observed during the monthly inspection, or whenever visible emissions are indicated by a complaint, the Permittee shall verify the equipment causing the emissions. The Permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and whether air pollution control equipment is operating properly. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M12. Hog Operations Monitoring** WAC 173-401-615(1)
SWCAA 15-3151 Section 2.3.36

This monitoring requirement applies to Requirement 35.

The Permittee shall record monthly the tons of wood material/logs processed through the hog.

The Permittee shall perform monthly inspections of affected operations for the purpose of identifying potential particulate matter emission violations. Whenever visible emissions are observed during the monthly inspection, or whenever visible emissions are indicated by a complaint, the Permittee shall verify the equipment causing the emissions. The Permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and whether air pollution control equipment is operating properly. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

**M13. Emergency Equipment Operations Monitoring** WAC 173-401-615(1)
SWCAA 15-3151 Section 2.3.39
WAC 173-400-075
40 CFR 63.6655

This monitoring requirement applies to Requirements 33, 34, 63, 64, 65, 66, 67, 68, and 69.

The Permittee shall record annually the hours of operation of the emergency propane engine and the fire pump diesel engine using a non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours were spent for non-emergency operation.

The permitted shall record for each fuel delivery the sulfur content of the fuel burned in the fire pump diesel engine. A fuel supplier certification or receipt may be used in lieu of actual fuel testing.

The Permittee shall record for each occurrence any maintenance activities conducted on the engines. Activities that must be documented include, but are not limited to: oil and oil filter changes, air cleaner inspections, and inspection of hoses and belts.

The Permittee shall perform monthly inspections of affected operations for the purpose of identifying potential particulate matter emission violations. Whenever visible emissions are observed during the monthly inspection, or whenever visible emissions are indicated by a complaint, the Permittee shall verify the equipment causing the emissions. The Permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and whether air pollution control equipment is operating properly. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

[§63.6655(e), (f) to Subpart ZZZZ of 40 CFR part 63]

**M14. Particulate Matter Emission Testing** SWCAA 15-3151 Section 2.4.42

This monitoring requirement applies to Requirements 12 and 14.

The Permittee shall emission test particulate matter control equipment in accordance with the following schedule:

The Permittee shall emission test the Western Pneumatics baghouse by the end of March 2015 and every five years thereafter, no later than the end of March. Emission testing shall be conducted as specified in ADP 15-3151 Appendix C [found in Appendix C of this permit]. Records of test results shall be maintained in accordance with Section VIII of this permit.

**M15. Lumber Drying Emission Testing** SWCAA 15-3151 Section 2.4.41

This monitoring requirement applies to Requirements 11, 30, and 37.

The Permittee shall emission test lumber drying operations in accordance with the following schedule:

The Permittee shall emission test lumber drying for EU-4 by the end of February 2007 and every five years thereafter, no later than the end of February. Emission testing shall be conducted as specified in ADP 15-3151 Appendix B [found in Appendix B of this permit]. Records of test results shall be maintained in accordance with Section VIII of this permit.

**M16. Boiler Emission Testing** 40 CFR part 63 Section 7515, 7520, 7540
40 CFR part 63 Tables 1, 5, 10
SWCAA 15-3151 Section 2.4.40
SWCAA 10-2948 Section 2.4.17

This monitoring requirement applies to Requirements 11, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 37, and 42.

The Permittee shall emission test boiler operations in accordance with the following schedule:

(a) The ABCO Industries hog fuel boiler prior to October 2005 and every two years thereafter no later than the end of October. Emission testing shall be conducted as specified in ADP 15-3151 Appendix A [found in Appendix A of this permit]; and

(b) The Hampton Drying Company's Cleaver Brooks diesel boiler prior to February 2011 and every five years thereafter no later than the end of February. Emission testing shall be conducted as specified in ADP 10-2948 Appendix A [found in Appendix F of this permit].

For 40 CFR Part 63:

**Initial Performance Testing:** If the Permittee chooses to demonstrate compliance with applicable Subpart DDDDD emission limits through performance testing, then the Permittee shall conduct initial performance testing of the ABCO hog fuel boiler and

Hampton Drying Company's Cleaver Brooks diesel boiler for filterable PM or TSM, CO, HCl and mercury at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury in accordance with applicable provisions in §63.7 as specified in Table 10:

(a) The Permittee must develop a site-specific performance test plan according to 63.7(c). Performance testing shall be in accordance with requirements in §63.7(c), (d), (f), and (h), and in §63.7520 and Table 5 to Subpart DDDDD of 40 CFR Part 63;
(b) If the Permittee chooses to comply with the alternative TSM limit, TSM shall be tested for instead of filterable PM; and
(c) If the Permittee chooses to demonstrate compliance with the applicable CO limit using a CO CEMS, a performance evaluation of the CO CEMS shall be required instead of the initial CO performance testing and oxygen concentration operating limit requirements specified in §63.7510(a).

[§63.7; §63.7510(a)(1) and (c); §63.7515(i); §63.7520(a), (b), (c); Tables 2, 5, 7, and 10 to Subpart DDDDD of 40 CFR part 63]

**Ongoing Performance Testing:** Where ongoing performance testing is required pursuant to Subpart DDDDD, the Permittee shall conduct ongoing performance testing of the ABCO hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler for filterable PM or TSM, CO, HCl and mercury at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury in accordance with applicable provisions in §63.7 as specified in Table 10:

(a) The Permittee must develop a site-specific performance test plan according to 63.7(c). Ongoing performance testing shall be in accordance with methods and procedures in §63.7520, Table 5, and Table 7 to Subpart DDDDD of 40 CFR Part 63;
(b) Subsequent performance testing shall be conducted annually and no more than 13 months after the previous performance test, except as provided in §63.7515(b)-(c);
(c) The following provisions apply to boilers qualifying as a "unit designed to burn light liquid" subcategory, such as Hampton Drying Company's diesel fired boiler, under §63.7499, and that combust ultra-low sulfur liquid fuel:
    (i) Subsequent performance testing is not required if the pollutants measured during the initial compliance performance tests meet applicable emission limits for that boiler, providing the Permittee demonstrates ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis; and
    (ii) The Permittee must conduct new performance tests within 60 days of burning any fuel other than ultra-low sulfur liquid fuel.
(d) For Hampton Drying Company's diesel fired boiler, the Permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start

of the affected source and according to applicable provisions in 63.7(a)(2) as cited in Table 10.

[§63.7; §63.7515(a), (b), (c), (g), (h); §63.7520(a), (b), (c); §63.7540; Tables 5 and 10 to Subpart DDDDD of 40 CFR part 63]

Records of test results shall be maintained in accordance with Section VIII of this permit.

**M17. Boiler Emissions Monitoring**

40 CFR part 63 Section 7510, 7540
SWCAA 15-3151 Section 2.4.43
SWCAA 10-2948 Section 2.4.18

This monitoring requirement applies to Requirements 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30.

The Permittee shall emission monitor the following:

(a) The ABCO Industries hog fuel boiler on a 12-month cycle, no later than the end of October. All emission monitoring must be conducted in accordance with ADP 15-3151 Appendix D [found in Appendix D of this permit]. Emission monitoring is not required during any calendar year in which an emission test has been conducted in accordance with ADP 15-3151 or 40 CFR 63 Subpart DDDDD: Major Boiler MACT; and

(b) The Hampton Drying Company's Cleaver Brooks diesel boiler on a 12-month cycle, no later than the end of February. Emission testing shall be conducted as specified in ADP 10-2948 Appendix B [found in Appendix G of this permit]. Emission monitoring is not required during any calendar year in which an emission test has been conducted in accordance with ADP 10-2948.

For 40 CFR Part 63:

(a) The Permittee shall conduct a tune-up of the ABCO hog fuel boiler every five years as specified in §63.7540; and

(b) The Permittee shall conduct a tune-up of Hampton Drying Company's Cleaver Brooks diesel boiler annually as specified in §63.7540, no later than 30 days after the re-start.

[§63.7510(j); §63.7540(a)(10), (a)(12), (a)(13) to Subpart DDDDD of 40 CFR part 63]

Records of monitoring results shall be maintained in accordance with Section VIII of this permit.

**Boiler MACT Monitoring Requirements**

**M18. Initial Compliance Demonstration Requirements**

40 CFR part 63 Section 7510, 7520, 7525, 7530
40 CFR part 63 Table 5 and Table 7

This monitoring requirement applies to Requirements 41, 42, 45, and 56.

The Permittee must demonstrate initial compliance as required under §63.7530 and Tables 5 and 7 with filterable PM or TSM, CO, HCl and mercury emission limits for the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler by:

(a) If the Permittee chooses to demonstrate compliance through performance stack testing, then conduct the initial performance tests according to §63.7520 and Table 5 by July 29, 2016;
(b) If the boiler is subject to a PM limit, for the initial compliance demonstration the Permittee must conduct a performance test in accordance with § 63.7520 and Table 5;
(c) If the boiler is subject to a CO limit, the initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5, unless the Permittee has a CO CEMS;
(d) If the Permittee chooses to demonstrate compliance through fuel analysis, then conduct a fuel analysis for each type of fuel burned in the boiler, unless the boiler burns a single type of fuel, by July 29, 2016. For purposes of Subpart DDDDD, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as units that burn a single type of fuel;
(e) Establishing operating limits according to §63.7530 and Table 7;
(f) If compliance is demonstrated through performance stack testing, the Permittee must establish each site-specific operating limit in Table 4 that applies according to the requirements in §63.7520, Table 7 to Subpart DDDDD, and paragraph (b)(4) of §63.7530, as applicable;
(g) Conducting CMS performance evaluations according to §63.7525;
(h) For a particulate wet scrubber, for which the Permittee uses a PM CPMS, the Permittee must establish the PM CPMS operation limit and determine compliance according to §63.7525;
(i) If the Permittee conducts multiple performance tests, the Permittee must set the minimum oxygen level at the lower of the minimum values established during the performance tests;
(j) Installing, operating, and maintaining all applicable CMS (including CEMS, COMS, and CPMS) according to §63.7525;
(k) Completing an initial tune-up of the ABCO Industries hog fuel boiler according to §63.7540 by January 31, 2016 (completed 10-28-15);
(l) Completing the one-time energy assessment specified in Table 3 by January 31, 2016 (completed 2-19-2015); and
(m) For Hampton Drying Company's Cleaver Brooks diesel boiler, the initial compliance demonstration must be completed no later than 180 days after re-start. The Permittee must complete an initial tune-up no later than 30 days after the re-start, and the one-time energy assessment no later than January 31, 2016.

[§63.7510(a)(1), (a)(2), (a)(3), (a)(4), (b), (c), (d), (e), (j); §63.7520(c); §63.7525; §63.7530(a), (b)(4), (b)(4)(ii), (b)(4)(viii); Table 5 to Subpart DDDDD of 40 CFR part 63; §63.7]

**M19. Ongoing Compliance Demonstration Requirements**

40 CFR part 63 Section 7510, 7515, 7530, 7540

This monitoring requirement applies to Requirements 41, 43, and 45.

The Permittee shall demonstrate ongoing compliance with filterable PM or TSM, CO, HCl and mercury emission limits for the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler by:

(a) If compliance is chosen to be demonstrated through performance stack testing, then conduct annual performance testing according to §63.7520. If the performance tests for a given pollutant for at least 2 consecutive years show that the emissions are at or below 75% of the emission limit for the pollutant, and if there are no changes in the operation of the unit or control equipment, the Permittee may choose to conduct performance tests for the pollutant every third year;

(b) Conducting a 5-year performance tune-up of the ABCO Industries hog fuel boiler according to §63.7540. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up;

(c) Conducting an annual performance tune-up of Hampton Drying Company's Cleaver Brooks diesel boiler according to §63.7540. Each annual tune-up must be conducted no more than 13 months after the previous tune-up. The tune-up for Hampton Drying Company's Cleaver Brooks diesel boiler must be conducted within 30 calendar days of startup;

(d) If the Permittee elects to demonstrate compliance with the mercury, HCl, or TSM limits based on fuel analysis, conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned in the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler. The Permittee may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days; if multiple samples are taken per month, the 14-day restriction does not apply. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, the Permittee may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level, or a new type of fuel is burned, the frequency of the fuel analysis for that fuel must return to monthly;

(e) For affected sources that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the Permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected source and according to the provisions in 40 CFR part 63 Table 10;

(f) For Hampton Drying Company's Cleaver Brooks diesel boiler, as long as ultra-low sulfur liquid fueled is combusted, the Permittee does not need to conduct further performance tests if the pollutants measured during the initial compliance performance tests meet the emission limits in 40 CFR part 63 Table 2 providing

the Permittee demonstrates ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis;

(g) If a new fuel type is to be burned in Hampton Drying Company's Cleaver Brooks diesel boiler the Permittee must either:
  (i) Conduct a fuel analysis according to §63.7521 and 40 CFR part 63 Table 6 before burning the new type; or
  (ii) Conduct stack testing for HCl, mercury and, if applicable, TSM according to §63.7530 within 60 days of burning the new fuel type.

(h) The Permittee must meet the work practice standard according to 40 CFR part 63 Table 3. During startup and shutdown, the Permittee must only follow the work practice standards according to item 5 of Table 3 (for startup) and item 6 of Table 3 (for shutdown) of Subpart DDDDD;

(i) Ongoing compliance shall be demonstrated according to the methods specified in 40 CFR part 63 Table 8;

(j) If the Permittee operates a CO CEMS that meets the Performance Specifications outlined in §63.7525(a)(3) of Subpart DDDDD to demonstrate compliance with an applicable alternative CO CEMS emissions standard listed in 40 CFR part 63 Tables 1, 2 or 11 through 13, the Permittee is not required to conduct CO performance tests and is not subject to the oxygen concentration operating limit specified in §63.7510(a); and

(k) The Permittee must demonstrate continuous compliance with the Subpart DDDDD emission limits, work practice standards and operating limits in accordance with §63.7540, as applicable.

[§63.7510; §63.7515(a), (b), (c), (d), (e), (g), (h), (i); §63.7530(b), (h); §63.7540(a)(10), (a)(13) to Subpart DDDDD of 40 CFR part 63; §63.7]

**M20. Fuel Analyses for Chlorine, Mercury and Total Suspended Metals (TSM)**
40 CFR part 63 Section 7510, 7515, 7521, 7530, 7540

This monitoring requirement applies to Requirement 42.

If the Permittee chooses to demonstrate compliance with the mercury, HCl, or TSM emission limits based on fuel analysis, monthly fuel analysis must be conducted according to §63.7521 for each type of fuel burned that is subject to an emission limit unless and until such time as fuel analysis frequency may be decreased as specified in Ongoing Compliance Demonstration Requirements and §63.7515(e). The Permittee shall conduct fuel analyses for chlorine and mercury according to the procedures in paragraphs (b) through (e) of §63.7521 for all fuels consumed in boilers except supplemental fuels used only during startup and shutdown or for transient flame stability.

(a) The Permittee shall develop a site-specific fuel monitoring plan according to the procedures in §63.7521(b) and submit the plan to the Administrator for approval no later than 60 days before the date the Permittee intends to conduct an initial compliance demonstration;

(b) Fuel analyses shall be conducted in accordance with the Permittee's site-specific fuel monitoring plan and shall conform to the methods and procedures in §63.7521 and Table 6 to Subpart DDDDD of 40 CFR part 63;
(c) During the initial fuel analysis, the Permittee shall establish the fuel mixture that has the highest content of chlorine using the procedures in paragraphs (b)(1)(i)-(iii) of §63.7530;
(d) During the initial fuel analysis, the Permittee shall establish the fuel mixture that has the highest content of mercury using the procedures in paragraphs (b)(2)(i)-(iii) of §63.7530;
(e) During the initial fuel analysis, the Permittee shall establish the fuel mixture that has the highest content of TSM using the procedures in paragraphs (b)(3)(i)-(iii) of §63.7530;
(f) A fuel analysis may be used to demonstrate compliance with an emission limit for hydrogen chloride, mercury or TSM by following the procedures in §63.7521 and §63.7530 (c); and
(g) If the Permittee demonstrates compliance with an emission limit for hydrogen chloride or mercury through fuel analysis and a new type of fuel is planned to be burned, the emission rate shall be recalculated according to the procedures specified in §63.7530.

[§63.7510(a)(2)(i); §63.7515(e); §63.7521(a), (b); §63.7530(b)(1), (b)(2), (b)(3), (c); §63.7540 (a)(3), (a)(5); Table 6 to Subpart DDDDD of 40 CFR part 63]

**M21. Boiler Operating Limits** 40 CFR part 63 Section 7510, 7515, 7530

This monitoring requirement applies to Requirements 44 and 46.

The Permittee shall establish site-specific operating limits for the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler as follows:

(a) Site-specific operating limits shall be established for those parameters in Table 4 that apply to each boiler; and
(b) Subsequent performance test results must verify that the operating limits for each boiler have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7, as applicable.

[§63.7510(a)(3); §63.7515(f); §63.7530; Tables 4 and 7 to Subpart DDDDD of 40 CFR part 63]

**M22. General Operating Requirements for CMS** 40 CFR part 63 Section 7500, 7505, 7510, 7525, 7535

This monitoring requirement applies to Requirements 9, 10, 42, 47, 48, and 49.

The following requirements apply to CMS required for the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler as follows:

(a) The Permittee shall maintain and operate each CMS in a manner consistent with good air pollution control practices;

(b) The Permittee shall maintain and operate each CMS according to the procedures in paragraphs (d)(1) through (5) of §63.7525, as applicable;

(c) The Permittee must operate and maintain each COMS and CMS in continuous operation according to the site-specific monitoring plan and each COMS according to §63.7525(c);

(d) The Permittee must operate and maintain each CEMS used to comply with mercury or HCl limits according to §63.7525(l);

(e) 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 from the monitoring requirements;

(f) The 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;

(g) The CMS shall be operated and shall collect data at all required intervals at all times that each boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods as provided in §63.8(c)(7), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the Permittee's site-specific monitoring plan. 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;

(h) The Permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable;

(i) The Permittee may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. The Permittee must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system;

(j) The Permittee must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the Permittee's site-specific monitoring plan;

(k) Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the

monitoring requirements. Other situations that constitute a monitoring deviation are specified in §63.7535(d);

(l) The 30-day rolling average of all recorded readings shall be determined, except as provided in (e) above; and

(m) Results of each inspection, calibration, and validation check shall be recorded.

[§63.7500(a)(3); §63.7505(d)(4); §63.7510(a)(4); §63.7525(c)(5), (d)(1), (d)(2), (d)(3), (d)(4), (d)(5), (l); §63.7535(b), (c), (d)(3) to Subpart DDDDD of 40 CFR part 63; §63.8(1)(ii); §63.8(c)(3); §63.8(c)(4)(ii)]

**M23. CMS Performance Evaluations** 40 CFR part 63 Section 7510, 7525

This monitoring requirement applies to Requirements 51 and 52.

The Permittee shall conduct a performance evaluation of each required CMS in accordance with the site-specific CMS monitoring plan.

(a) CMS performance evaluations shall be conducted according to §63.7525;

(b) Initial performance evaluations shall be completed no later than July 29, 2016;

(c) Subsequent performance evaluations for flow monitoring systems shall be conducted at the time of each performance test but no less frequently than annually;

(d) Subsequent performance evaluations for pressure monitoring systems shall be conducted at the time of each performance test but no less frequently than annually; and

(e) Performance evaluations for CO CEMS shall be conducted according to the requirements in §63.7525, §63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR Part 60, Appendix B.

[§63.7510(a)(4); §63.7525(a)(2)(i), (a)(2)(v), (e)(4), (f)(5) to Subpart DDDDD of 40 CFR part 63; §63.8(e)]

**M24. CO and Oxygen Monitoring** 40 CFR part 63 Section 7525, 7575

This monitoring requirement applies to Requirements 9, 10, and 47.

The Permittee shall either install, operate, and maintain an oxygen analyzer system as defined in §63.7575, or install, certify, operate and maintain CEMS for CO and oxygen according to the following procedures:

(a) The Permittee must install, operate, and maintain an oxygen analyzer system in accordance with the manufacturer's recommendations, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide ($CO_2$)) according to the procedures in paragraphs (a)(1) through (6) of §63.7525;

(b) The CO and oxygen levels shall be monitored at the same location at the outlet of the boiler;

(d) To demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Table 2, the Permittee must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer according to the applicable procedures under §63.7525. Any boiler that has a CO CEMS that is compliant with Performance Specification 4, 4A, or 4B at 40 CFR part 60, Appendix B, a site-specific monitoring plan developed according to §63.7505(d), and the requirements in §63.7540(a)(8) and paragraph (a) of this section must use the CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to Subpart DDDDD:

(i) The Permittee must conduct a performance evaluation of each CO CEMS according to the requirements in §63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR part 60, Appendix B;

(ii) During each relative accuracy test run of the CO CEMS, the Permittee must be collect emission data for CO concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR part 60, appendix A-4. The relative accuracy testing must be at representative operating conditions;

(iii) 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 part 60. The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration;

(iv) Any CO CEMS that does not comply with §63.7525(a) cannot be used to meet any requirement in Subpart DDDDD to demonstrate compliance with a CO emission limit listed in Tables 1, 2, or 11 through 13 to Subpart DDDDD; and

(v) Complete the initial performance evaluation no later than July 29, 2016.

(e) 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;

(f) Reduce CO CEMS data as specified in §63.8(g)(2). It is to be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used;

(g) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentration. The one-hour arithmetic averages required shall be used to calculate the 30-day or 10-day rolling average emissions. Use Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7 for calculating the average CO concentration from the hourly values;

(h) For purposes of collecting CO data, operate the CO CEMS as specified in §63.7535(b). The Permittee must use all the data collected during all periods in calculating data averages and assessing compliance, except that the Permittee must exclude certain data as specified in §63.7535(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.7535(d); and

(i) Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to Subpart DDDDD.

[§63.7525(a), (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7); §63.7575 to Subpart DDDDD of 40 CFR part 63; §63.8(1)(ii); §63.8(c)(3); §63.8(c)(4)(ii); §63.8(g)(2)]

**M25. Site-specific Stack Test Plan** 40 CFR part 63 Section 7520

This monitoring requirement applies to Requirement 42.

The Permittee must also develop a site-specific stack test plan according to the requirements in §63.7(c). The site-specific test plan shall be in accordance with requirements in §63.7520(a) and §63.7(c)(2)(i), and shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program in accordance with §63.7(c).
[§63.7(c); §63.7520(a) to Subpart DDDDD of 40 CFR part 63]

**M26. Site-specific Monitoring Plan** 40 CFR part 63 Section 7505

This monitoring requirement applies to Requirement 42.

If the Permittee elects to demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS), or with a CEMS, or COMS, the Permittee must develop a site-specific monitoring plan according to §63.7505(d). The site-specific monitoring plan must be developed at least 60 days prior to initial evaluation of any CMS. If requested, the site-specific monitoring plan shall be submitted to SWCAA and the Administrator. This requirement to maintain a site-specific monitoring plan would also apply for any alternative monitoring parameters approved for the Permittee under §63.8(f).
[§63.8(f); §63.7505(d) to Subpart DDDDD of 40 CFR part 63]

**M27. Monitoring Compliance with Operating Limits**
40 CFR part 63 Section 7515, 7555, Table 4

This monitoring requirement applies to Requirements 43, 44, and 46.

The Permittee shall continuously monitor the following operating conditions of the ABCO Industries hog fuel boiler and Hampton Drying Company's Cleaver Brooks diesel boiler as follows:

(a) Any operating conditions for which an operating limit from Table 4 to Subpart DDDDD of 40 CFR Part 63 applies, such as the wet scrubber pressure drop and liquid flow rate;
(b) The operational status of each boiler;
(c) Times and durations of startup, shutdown, standby and transient flame stabilization operation of the boiler;
(d) The rate and type of fuels combusted;
(e) For each startup period, for units selecting paragraph (2) of the definition of "startup" in §63.7575 the Permittee must maintain records of the time that clean fuel combustion begins; the time when the Permittee starts feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged; and
(f) Both the hourly and 24-hour average overall heat rate to the boiler in terms of MMBtu/hr.

[WAC 173-401-615(1)(b); §63.7515(h); §63.7555(d)(6), (d)(11) to Subpart DDDDD of 40 CFR part 63]

## VIII. RECORDKEEPING TERMS AND CONDITIONS

All monitoring records shall be maintained in a readily accessible form for a minimum period of five years. Pursuant to WAC 173-401-530(2)(c), none of the recordkeeping requirements apply to IEUs. The Permittee shall maintain records of required monitoring per M1 through M27 as follows if applicable:

**K1. General Recordkeeping** WAC 173-401-615(2)
SWCAA 15-3151 Section 2.3.30-32, 2.4.40-43, Appendices A-D
SWCAA 10-2948 Section 2.3.12-14, 2.4.17-18 Appendices A-B

Permittee is required to keep the following records:

(a) Inspections and Certifications
- (i) The date, place, and time of activity;
- (ii) Who conducted the inspection or certification;
- (iii) The operating conditions existing at the time of the activity;
- (iv) Compliance status of each monitored requirement as described in Section V and VII of this permit; and
- (v) Corrective action taken in response to permit deviations and when action was initiated.

(b) Complaints
- (i) The date and time of complaint;
- (ii) Name of the complainant;
- (iii) The nature of the complaint;
- (iv) Date and time follow-up inspection was conducted; and
- (v) Corrective action taken in response to complaints and when action initiated.

(c) Upset Conditions/Excess Emissions
- (i) The date and time of upset or excess emission;
- (ii) Identification of the emissions unit involved;
- (iii) A brief description of the event;
- (iv) Duration of the event; and
- (v) Anticipated corrective action to prevent or minimize excess emissions.

(d) Sampling and Emissions Testing
- (i) The date sampling was performed;
- (ii) The entity that performed the sampling;
- (iii) The description of the source including manufacturer, model number and design capacity, and the location of the sample ports or test locations;
- (iv) The analytical techniques used to take the sample or perform the observation including laboratory data, QA/QC procedures and documentation;
- (v) The test methods or procedures used, including all field data, QA/QC procedures and documentation;
- (vi) The operating conditions existing at the time of sampling or measurement;
- (vii) Summary of production related parameters;

(viii) The date analyses were performed;
(ix) The entity that performed the analyses;
(x) Chain of custody information;
(xi) The analytical techniques or methods used to perform the analyses;
(xii) The results of such analyses;
(xiii) Compliance status of each monitored requirement;
(xiv) Calibration documentation;
(xv) Analyzer response check documentation; and
(xvi) Corrective action taken in response to permit deviations and when such action was initiated.

(e) Maintenance and Repair Activities
(i) The date, place, and time of activity;
(ii) Who made a record of the maintenance or repair;
(iii) If a control device or process was not operating during a specific time period, a record must be made to that effect; and
(iv) Shall be recorded for each occurrence.

**K2. Boiler Recordkeeping** 40 CFR part 63 Section 7555, 7560

Required boiler records must be in a form suitable and readily available for expeditious review and must be retained for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. These records include those required in Table 8 to Subpart DDDDD required to show continuous compliance. Boiler records must be kept on-site, or they must be accessible from on-site, for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. The following compliance records are required for boilers at the facility as specified:

(a) **Record of Notifications:** A copy of each notification and report submitted to comply with subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report.

(b) **Record of Performance Tests:** Record of each performance test, fuel analyses, or other compliance demonstrations and performance evaluations. If the Permittee chooses to performance test less frequently than annually, records documenting that the previous performance test(s) were less than 75% of the applicable limit and documenting that there was no change in source operations including fuel composition and operation of air pollution control equipment must be kept.

(c) **CMS Records:** For each CEMS, COMS, and continuous monitoring system, records for the following:

(i) All required measurements needed to demonstrate compliance with the relevant standard including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report;

(ii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(iii) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(iv) All CMS calibration checks;

(v) All adjustments and maintenance performed on CMS;

(vi) Each period during which a required CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) Additional records for required CMS specified in §63.10(c), except that §63.10(c)(2)-(4) and (9) are reserved;

(viii) Previous (*i.e.,* superseded) versions of any CMS performance evaluation plan. If a CMS performance evaluation plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan;

(ix) Any request for alternatives to relative accuracy test for CEMS as provided for in §63.8(f)(6)(i); and

(x) If the Permittee chooses to rely on paragraph (2) of the definition of "startup" in §63.7575, for each startup period, records must be maintained of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (*e.g.,* CEMS, PM CPMS, COMS, ESP total secondary electric power input, scrubber pressure drop, scrubber liquid flow rate) collected during each startup period. In addition, if compliance with the PM emission limit is demonstrated using a PM control device, maintain records as specified in §63.7575(d)(12)(i) through (iii).

(d) **Permit Deviation Records:** Record of the date and time that each deviation from Subpart DDDDD requirements started and stopped.

(e) **Operating Records for the ABCO Hog Fuel Boiler and Hampton Drying Company's Cleaver Brooks Diesel Boiler**:

(i) Records of monthly fuel, type and amount, use by each boiler;

(ii) If fuel analysis is used for demonstrating compliance with any limit, 12-month rolling average chloride and mercury content of the fuels used;

(iii) Percent oxygen content of flue gas reduced to 30-day rolling averages. This requirement does not apply to units that install an oxygen trim system; or

(iv) If an oxygen trim system is used, record of the percent oxygen level set point programmed in the trim system;

(v) Record of the occurrence and duration of each malfunction of any boiler, or of the associated air pollution control and monitoring equipment;

(vi) Record of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions including corrective actions to restore a malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation;

(vii) Records of all required maintenance performed on the air pollution control and monitoring equipment;

(viii) Record of the calendar date, time, occurrence and duration of each startup and shutdown; and

(ix) Record of the type(s) and amount(s) of fuels used during each startup and shutdown.

(f) **Additional Operating Records for the ABCO Industries Hog Fuel Boiler:**

(i) Scrubber pressure drop and liquid flow rate shall be recorded during each hour of startup. The pressure drop and liquid flow rate data shall be reduced to 30-day rolling averages.

(g) **Record of Fuel Input:**

(i) For sources that demonstrate compliance through performance testing, a copy of all calculations and supporting documentation of maximum chlorine, mercury and TSM fuel input using the specific equations listed in §63.7530, that were done to demonstrate continuous compliance with the emission limits; and

(ii) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl, mercury, and TSM emission rates, using specific equations listed in §63.7530, that were done to demonstrate compliance with the emission limits.

(h) **Record of Efficiency Credit Usage:** If the Permittee elects to use efficiency credits from energy conservation measures to demonstrate compliance according to §63.7533, the Permittee shall maintain the records specified in §63.7555(f).

[WAC 173-401-615(1)(a); §63.10(b)(2)(vii)-(xi); §63.6(h)(7)(i) and (ii); §63.6(h)(7)(i); §63.8(d)(3); §63.8(f)(6)(i); §63.10(b)(1), (b)(2)(vii)-(xi); §63.7533; §63.7555(a)(1), (a)(2), (b), (b)(3), (b)(4), (b)(5), (d)(1), (d)(3), (d)(4), (d)(5), (d)(6), (d)(7), (d)(8), (d)(9), (d)(10), (d)(12), (f); §63.7560; Table 7 and Table 8 to Subpart DDDDD of 40 CFR part 63]

## IX. REPORTING TERMS AND CONDITIONS

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

Addresses of regulatory agencies are the following, unless otherwise instructed:

Southwest Clean Air Agency
11815 NE 99 St., Ste 1294
Vancouver, WA 98682

Part 70 Air Operating Permits
U.S. EPA Region X, AWT-150
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

**R1. Deviations from Permit Conditions** WAC 173-401-615(3)(b)
WAC 173-400-107
SWCAA 400-107

Deviations from permit requirements shall be reported no later than thirty days after the end of the month during which the deviation is discovered. Deviations that represent a potential threat to human health or safety shall be reported as soon as possible but no later than twelve hours after the deviation is discovered. Reports of deviations shall include:

(a) Identification of the emission unit(s) involved;
(b) The duration of the event including the beginning and end times; and
(c) A brief description of the event, including:
  (i) Whether or not the deviation was due to an upset condition;
  (ii) The probable cause of the deviations; and
  (iii) The corrective action taken and when the corrective action was initiated.

Excess emissions shall be reported as soon as possible. In accordance with SWCAA 400-107(1), excess emissions that the Permittee wishes to be considered unavoidable must be reported as soon as possible, but no later than 48 hours after discovery. The Permittee shall report the upset condition by telephone, e-mail or facsimile as initial notification to SWCAA; a message may be left on the answering machine for conditions outside of normal business hours.

**R2. Complaint Reports** WAC 173-401-615(3)

The Permittee shall report all air quality related complaints to SWCAA within three business days of receipt. Complaint reports shall include the date and time of the complaint, the name of the complainant, and the nature of the complaint.

**R3. Semi-annual Reports** WAC 173-401-615(3)
SWCAA 15-3151 Section 2.5.48-53

The Permittee shall submit to SWCAA by September 15th and March 15th for the previous six month periods January through June and July through December, respectively, the following information:

(a) Records of all required monitoring, and any deviation from permit requirements shall be clearly identified;
(b) For all EPA Method 9 or SWCAA Method 9 monitoring conducted during the semi-annual period, a copy of the relevant opacity certification(s) shall be submitted with the semi-annual report;
(c) For the ABCO Industries hog fuel boiler wet scrubber, malfunctions in flocculent delivery system, results of scrubber water quality evaluations, corrective action taken to improve scrubber water quality, pressure drop across the throat of the wet scrubber, wet scrubber water flow rate, and results of total suspended solids testing;
(d) Hours of operation, fuel consumption, excess oxygen, and steam production of the ABCO Industries hog fuel boiler;
(e) Cold start-up periods and hours of all start-ups for the ABCO Industries hog fuel boiler;
(f) Board feet of lumber dried, average daily temperature set point, moisture content of wood dried, and type of wood dried in the dry kilns for Hampton Lumber Mills, Morton;
(g) Bone dry tons of chips, sawdust, shavings and hog fuel loaded out from bunkers;
(h) Hours of operation of the Western Pneumatics baghouse;
(i) Tons of wood material/logs processed through the hog;
(j) Hours of operation for the office emergency propane engine and fire pump diesel engine;
(k) Summary of annual emissions;
(l) Upset conditions; and
(m) All required reports must be certified by a responsible official consistent with WAC 173-401-520. The reports shall be either certified at initial submittal or each shall be delineated and certified in the subsequent semi-annual report.

**R4. Annual Reports** WAC 173-401-630(5)
SWCAA 15-3151 Section 2.5.54
SWCAA 03-2454 Section 2.5.22

(a) Annual Compliance Certification:
The Permittee shall submit to SWCAA and EPA a certification of compliance with all terms and conditions of this permit in accordance with WAC 173-401-630(5)(d). The Permittee shall report the following to SWCAA annually by March 15th for the previous calendar year:

(i) Identification of each term or condition of the permit that is the basis of the certification;
(ii) Statement of compliance status;

(iii) Whether compliance was continuous or intermittent;
(iv) Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
(v) Such other facts as SWCAA may require to determine the compliance status of the source; and
(vi) Such additional requirements as may be specified pursuant to Sections 114(a)(3) and 504(b) of the FCAA.

(b) Annual Reports:
The Permittee shall report the following to SWCAA annually by March 15th for the previous calendar year:

(i) Hours of operation, fuel consumption and type for Hampton Drying Company's Cleaver Brooks diesel boiler;
(ii) Board feet of lumber dried, moisture content of wood dried, and type of wood dried in the dry kilns for Hampton Drying Company; and
(iii) Summary of annual emissions.

The Permittee shall report the following to SWCAA annually by December 31st.

(i) The annual grate cleaning schedule for the ABCO Industries hog fuel boiler for the upcoming year.

**R5. Emission Inventory Reports**

SWCAA 400-105
SWCAA 15-3151 Section 2.5.44
SWCAA 03-2454 Section 2.5.19

The Permittee shall submit an inventory of annual emissions from the source to SWCAA by March 15th for previous calendar year in accordance with SWCAA 400-105. The inventory shall include stack and fugitive emissions of $NO_X$, $SO_2$, CO, VOC, PM, and toxic air pollutants identified in WAC 173-460.

**R6. Source Test Reports**

WAC 173-401-615(3)
SWCAA 400-106
SWCAA 15-3151 Section 2.5.55, Appendices A, B, C
SWCAA 03-2454 Section 2.5.23, Appendix A

Reports of all required source or emissions testing shall be submitted to the Agency within 45 days of test completion. Each report must be provided in an electronic format acceptable to SWCAA and as a hard (paper) copy. Each report shall include:

(a) A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
(b) Time and date of the test and identification and qualifications of the personnel involved;
(c) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit with correction to the appropriate $O_2$ standard;

(d) A summary of control system or equipment operating conditions;
(e) A summary of production related parameters;
(f) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
(g) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
(h) Copies of field data and example calculations;
(i) Chain of custody information;
(j) Calibration documentation;
(k) Discussion of any abnormalities associated with the results; and
(l) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

**R7. Emission Tuning Reports** WAC 173-401-615(3)
SWCAA 400-106
SWCAA 15-3151 Section 2.5.56, Appendix D
SWCAA 03-2454 Section 2.5.24, Appendix B

Reports of all required emission tuning or monitoring shall be submitted to the Agency within 15 days of tune-up completion. Each report shall include:

(a) Time and date of the performance monitoring;
(b) Identification of the personnel involved;
(c) A summary of results, reported in units consistent with the applicable emission standard or limit;
(d) A summary of equipment operating conditions;
(e) A description of the evaluation methods or procedures used, including all field data, quality assurance/quality control procedures and documentation; and
(f) Analyzer response check documentation.

**R8. MACT Records – Plywood MACT (Subpart DDDD)** 40 CFR 63.46011

The Permittee shall submit an initial notification of applicability as required by 40 CFR 63.9. This notification was submitted July 15, 2009.

**R9. MACT Records – Engine MACT (Subpart ZZZZ)** 40 CFR 63.6650

For each year in which the Permittee owns or operates a stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), the Permittee shall submit an annual report containing the annual hours of operation and under what purposes, as required by 40 CFR §63.6650(h). This notification is due no later than March 31st of the following calendar year.

**R10. MACT Records – Boiler MACT (Subpart DDDDD)** 40 CFR 63.7545

The Permittee shall submit an initial notification of applicability as required by 40 CFR 63.9. This notification was submitted July 15, 2009.

A. **Notifications:** The following notifications must be submitted to the Administrator and SWCAA by the dates specified:

(a) **Initial Notifications:** The Permittee must submit to the Administrator and SWCAA an initial notification when a boiler becomes subject to Subpart DDDDD of 40 CFR Part 63 in accordance with §63.9(b), postmarked or delivered within 15 calendar days from the date of actual startup of the boiler;

(b) **Notification of Compliance Status.** The Permittee must submit to the Administrator and SWCAA a Notification of Compliance Status for each boiler in accordance with §63.9(h)(2)(ii) and §63.7545(e), including all performance test results and fuel analyses. The Initial Compliance Status Report shall be submitted before the close of business on the 60th day following the completion of all performance tests and/or other initial compliance demonstrations for each boiler. The Permittee must include with the Notification of Compliance Status the information specified at §63.7545(e), as applicable, and a signed certification that the energy assessment was completed according to Table 3 to Subpart DDDDD and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended;

(c) **Washington State Assessment and Reporting Requirements:** By January 31, 2018, the Permittee must submit nonproprietary information reported in the energy assessment electronically to SWCAA and must also submit a report to the Washington State University extension energy program that identifies, if applicable, the economic, technical and other barriers to implementing thermal efficiency opportunities identified in the energy assessment. In accordance with RCW 70.94.992;

(d) **Submission of a CMS site-specific monitoring plan.** If requested, the Permittee must submit to the Administrator and SWCAA for approval any CMS site-specific monitoring plan at least 60 calendar days before the initial CMS performance evaluation is scheduled to begin, or on a mutually agreed upon date;

(e) **Notification of fuel changes and modifications.** The Permittee must provide notice of the date of any fuel change or physical changes in any boiler that results in the applicability of a different subcategory under Subpart DDDDD to the boiler within 30 days of the switch/change. The notification must identify the owner or operator and location of the source, the boiler that switched fuels or was physically changed, the date of the notice, the currently applicable subcategory and the date upon which the fuel switch or physical change occurred; and

(f) **Notification of intent to conduct a performance test.** The Permittee must submit a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

[RCW 70.94.992; WAC 173-401-615(1)(a); §64.7(d); §63.7505(d)(1); §63.7530(e); §63.7530(f); §63.7545(a), (b), (d), (e), (h) to Subpart DDDDD of 40 CFR part 63]

B. **Compliance Reports.** The Permittee must submit compliance reports for the boilers, including each report in Table 9, as follows:

(a) The initial semi-annual compliance report must be postmarked or submitted no later than January 31, 2017 and must cover the period beginning on January 31, 2016 and ending July 31, 2016;

(b) Each subsequent semi-annual compliance report must cover the reporting period from January 1 through June 30 or the reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31;

(c) Each subsequent semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31;

(d) Compliance reports must contain the following information depending on how the Permittee chooses to comply:

(i) Company and Facility name and address;

(ii) Boiler identification, emissions limitations, and operating parameter limitations;

(iii) Date of report and beginning and ending dates of the reporting period;

(iv) The total operating time during the reporting period;

(v) If a CMS is used for compliance monitoring, including CEMS, COMS, or CPMS, include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit;

(vi) The total fuel use by each individual 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 EPA or the Permittee's basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure;

(vii) If the Permittee is conducting performance tests once every 3 years consistent with §63.7515(b) or (c), 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; and

(viii) A statement indicating that no new types of fuel were burned, or if a new type of fuel was burned since the last performance test for any boiler, the following must be included:

a) Submit the calculation of chlorine input, using Equation 7 of §63.7530 demonstrating that the boiler is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or submit the calculation of HCl emission rate using Equation 12 of §63.7530 demonstrating that the boiler is still meeting the emission limit for HCl emissions (for boilers that demonstrate compliance through fuel analysis).

b) Submit the calculation of mercury input, using Equation 8 of §63.7530 demonstrating that the boiler is still within its maximum mercury input level established during the previous performance

testing (for sources that demonstrate compliance through performance testing), or submit the calculation of mercury emission rate using Equation 13 of §63.7530 demonstrating that the boiler is still meeting the emission limit for mercury emissions (for boilers that demonstrate compliance through fuel analysis).

c) If complying with the TSM emission limit, submit the calculation of TSM input, using Equation 9 of §63.7530 demonstrating the boiler is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or submit the calculation of TSM emission rate, using Equation 14 of §63.7530 demonstrating that the boiler is still meeting the emission limit for TSM emissions (for boilers that demonstrate compliance through fuel analysis).

(e) If the Permittee plans to burn a new type of fuel in an individual boiler and cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530, include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel;

(f) A summary of any monthly fuel analyses or fuel specification analyses conducted to demonstrate compliance;

(g) If there were no deviations from any applicable emission limits or operating limits for the boiler, a statement that there were no deviations from the applicable emission limits or operating limits during the reporting period;

(h) 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 as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period;

(i) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction and whether the malfunction caused or may have caused any applicable emission limitation to be exceeded;

(j) A description of actions taken during a malfunction of a boiler or associated air pollution control device or CMS to minimize emissions, including actions taken to correct the malfunction;

(k) The date of the most recent tune-up for each boiler;

(l) The date of the most recent burner inspection;

(m) For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values based on the daily CEMS (10 day rolling average values for CO CEMS when the limit is expressed as a 10 day instead of 30 day rolling average) and CPMS data;

(n) 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;

(o) For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d);

(p) For each deviation from an emission limit or operating limit that occurs at an individual boiler not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods if startup and shutdown, the compliance report must additionally contain:
  (i) A description of the deviation and which emission limit or operating limit or work practice standard from which was deviated;
  (ii) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and
  (iii) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

(q) For each deviation from an emission limit, operating limit, and monitoring requirement by an individual boiler using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain:
  (i) The date and time that each deviation started and stopped and description of the nature of the deviation;
  (ii) The date and time each CMS was inoperative, except for zero (low-level) and high-level checks;
  (iii) The date, time, and duration each CMS was out of control, including the information in §63.8(c)(8);
  (iv) The date and time that each deviation started and stopped.
  (v) 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;
  (vi) 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;
  (vii) A summary of the total duration of downtime for each CMS during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;
  (viii) A brief description of the source for which there was a deviation; and
  (ix) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

[WAC 173-401-615(1)(a); §63.7540(b); §63.7550(a)-(e) to Subpart DDDDD of 40 CFR part 63]

C. **Electronic Reporting.** All reports required by Table 9 of Subpart DDDDD must be submitted electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The appropriate electronic report in CEDRI for Subpart DDDDD must be used. Instead of using the electronic report in CEDRI for Subpart DDDDD, the Permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to Subpart DDDDD is not available in CEDRI at the time that the report is due, the Permittee must submit the report to the Administrator at the appropriate address listed in §63.13. The Permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

(a) **Test Reports.** The Permittee must electronically submit the results of the performance tests, including any associated fuel analyses, 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)* within 60 days after the date of completing each performance test. Performance test data must be submitted in a file format generated through the use of EPA's ERT or an electronic file format consistent with the XML schema listed on the EPA's ERT Web site. If the Permittee claims that some of the performance test data being submitted is confidential business information (CBI), the Permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPS/CORE CBI Office, Attention: Group Leader, Measurement Policy, Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described above. Also, for data collected 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, the Permittee must submit the results of the performance tests at the appropriate address listed in §63.13;

(b) **Relative Accuracy Test Audit (RATA) Data.** The Permittee must electronically submit the results of the performance evaluations for the continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT, to the EPA via the CEDRI within 60 days after the date of completing each CEMS performance evaluation. (CEDRI can be accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT Web site. If the Permittee claims that some of the performance evaluation information being transmitted is CBI, the Permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described above. Also, for any performance evaluations 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, you must submit the results of the performance evaluation at the appropriate address listed in §63.13; and

(c) **Compliance Reports.** The Permittee must submit Compliance Reports required by Table 9 electronically using CEDRI. However, if a specific reporting form is not available in CEDRI at the time that the report is due the report the Permittee must submit the report to the Administrator at the appropriate address listed in §63.13. At the discretion of the Administrator, the Permittee must also submit these reports, to the Administrator in the format specified by the Administrator.

[WAC 173-401-615(1)(a); §63.7515(f); §63.7550(h) to Subpart DDDDD of 40 CFR part 63]

## X. NON-APPLICABLE REQUIREMENTS

The following lists all federal, state, and/or local requirements that might reasonably apply to the Permittee, but are deemed nonapplicable after review by SWCAA. In accordance with WAC 173-401-640, the Permittee is provided a permit shield for not complying with the requirements listed below where they have been identified to be non-applicable to specific emission units.

**1. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (Subpart Dc)** 40 CFR 60.40c et seq.

Subpart Dc applies to all steam generation units for which construction, modification, or reconstruction is commenced after June 9, 1989, and that have a maximum design heat input between 10 million and 100 million Btu per hour. The hog fuel boiler at this source has a design heat input between 10 million and 100 million Btu per hour, but was last modified prior to June 9, 1989. Therefore, this requirement is not applicable.

**2. Standards of Performance for Incinerators (Subpart E)** 40 CFR 60.50 et seq.

Subpart E applies to all incinerators with charging rates greater than 50 tons per day which commenced construction or modification after August 17, 1971. Pursuant to 40 CFR 60.51(a), an incinerator is defined as any "...furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter." The hog fuel boiler at this source has a charging rate greater than 50 tons per day, but its primary purpose is the production of process steam not the reduction of waste volume. Therefore, this requirement is not applicable.

**3. Compliance Assurance Monitoring** 40 CFR Part 64

Part 64 applies to certain pollutant-specific emissions units at major sources. In general, Part 64 applies to emission units that utilize a control device to achieve compliance with an emission limit for a pollutant that otherwise could be emitted at a rate exceeding the applicable major source threshold (e.g. 100 tpy criteria pollutants and VOCs, 10 tpy individual HAP). Particulate matter from the hog fuel boiler could exceed 100 tpy without the additional control of the wet scrubber, therefore, only particulate matter from this boiler is potentially subject to CAM. However, 40 CFR 64.2(b)(1)(i) exempts these emission limitations from the requirements of Part 64 because the facility is subject to a post-1990 NESHAPs (Boiler MACT)... [that establishes PM limits and monitoring.] It is expected that the standards in the Boiler MACT will provide a reasonable assurance of compliance.

**4. Emission Standards for Combustion and Incineration Units** SWCAA 400-050(2)

SWCAA 400-050(2) prohibits emissions of carbonyls from any incinerator in excess of 100 ppm total carbonyls as measured by applicable sampling methods. Pursuant to

SWCAA 400-030(34), an incinerator is defined as "...a furnace used primarily for the thermal destruction of waste." The primary purpose of the hog fuel boiler at this source is the production of process steam not the destruction of waste so this requirement is not applicable.

5. **Registration Program** WAC 173-400-099 - [6/8/07 State Only], SWCAA 400-100(2)

The Permittee is an air operating permit source. Pursuant to WAC 173-400-101(7), air operating permit sources are exempt from the registration program established under WAC 173-400-099, and implemented in accordance with WAC 173-400-100 through WAC 173-400-104. Pursuant to SWCAA 400-100(3)(a)(iv) air operating permit sources are exempt from the registration requirements of SWCAA 400-100(2).

6 **Solid Waste Incinerator Facilities** WAC 173-434

WAC 174-434 applies to all solid waste or solid waste derived fuel incinerator facilities constructed after January 1, 1985 with a design capacity greater than twelve tons per day or constructed prior to January 1, 1985, which begin to burn twelve tons or more per day after January 1, 1985. Pursuant to WAC 173-434-030(3), the fuel used in the hog fuel boiler is not included in the definition of solid waste. Therefore, this requirement is not applicable.

6. **Portions of the Boiler MACT** CFR 40 Part 63 Subpart DDDDD

The facility is not required to perform a fuel analyses because the facility burns a single type of fuel under §63.7510 paragraphs (a)(2)(i).

7. **National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines** 40 CFR Part 63.6580 et seq., Subpart ZZZZ

Subpart ZZZZ is applicable to the office emergency propane engine and the fire pump diesel engine. All applicable requirements of this regulation have been included as conditions of this Air Operating Permit. The following discussion was included here because there is a reporting requirement of Subpart ZZZZ that might appear to be applicable to the emergency engines, but which SWCAA has determined is not applicable.

40 CFR 63.6650 infers that semiannual compliance reports are required for existing emergency CI engines with a site rating of less than 500 horsepower. However, all such reporting was removed from Table 7 (which summarized the requirements of this section) in an update of the rule on August 20, 2010 and 63.6650(a) directs that compliance reports must be submitted as indicated in Table 7 (which does not include reporting for existing emergency engines unless those engines operate or are contractually obligated to be available more than 15 hour per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or for the purposes specified in §63.6640(f)(4)(ii)). It would seem inappropriate to require emergency engines subject to no numeric emission or operating limit (and which do not operate and are not contractually obligated to be available for more than 15 hours per year for any of the specific purposes giving rise to a compliance report per

Table 7) to submit semi-annual compliance status reports. Further evidence that EPA did not intend to impose semi-annual compliance reporting on these engines can be found in EPA's response to comments on the proposed rule. In a memorandum dated February 17, 2010 from Melanie King to EPA Docket EPA-HQ-OAR-2008-0708, EPA wrote:

*"EPA agrees with the commenter that semiannual compliance reporting, and other types of reporting required under the General Provisions of 40 CFR part 63 are not appropriate for area sources that are not subject to numerical emission standards. EPA believes that recording information and maintaining records will provide EPA with assurance that facilities are meeting the work/management practices and other requirements applicable to their existing stationary engines. Further, EPA believes it is appropriate [to] extend the same approach to any sources that are not subject to numerical emission standards, including existing stationary CI engines less than 100 HP and existing stationary emergency CI engines..."*

For the reasons described above, SWCAA had determined that the semiannual compliance reporting described in 63.6650 is not applicable to the emergency engines.

8. **Standards of Performance for Stationary Compression Ignition Internal Combustion Engines** 40 CFR Part 60.4200 et seq., Subpart IIII

Subpart IIII applies to each compression ignition (CI) internal combustion engine (ICE) that is manufactured after 2007 with displacements less than 30 L/cylinder, commenced construction after July 11, 2005 and is manufactured after April 1, 2006, or is modified or reconstructed after July 11, 2005. This subpart does not apply the fire pump engine because the engine was manufactured prior to the applicability date.

9. **Standards of Performance for Stationary Spark Ignition Internal Combustion Engines** 40 CFR 60.4230 et seq., Subpart JJJJ

Subpart JJJJ requires that new spark ignition (SI) internal combustion engines (ICE) meet specific emission standards at the point of manufacture and during the operating life of the engine. In addition, this subpart imposes operating and recordkeeping requirements on owners and operators. This subpart applies to emergency engines with a maximum engine power greater than 25 horsepower manufactured after January 1, 2009. This subpart does not apply to the office emergency generator engine because the engine was manufactured prior to the applicability date.

## APPENDIX A

## Emission Testing Requirements – ABCO Boiler

1. **Introduction:**
The purpose of this testing is to quantify emissions from the ABCO hog fuel boiler and wet scrubber, and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

2. **Testing Requirements:**
   a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.

   b. **Testing schedule.** An emission test must be conducted at the exhaust stack of the wet venturi scrubber for the boiler no later than the end of October 2005. Subsequent emission testing must be conducted every two (2) years by the end of October.

   c. **Test runs/Reference test methods.** A minimum of three test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods and schedules must be used unless alternate methods or test schedules are approved in writing by SWCAA in advance of the emission testing.

| Constituent | Reference Test Method | Minimum Test Run Duration |
|---|---|---|
| Flow rate, temperature | EPA Methods 1 and 2 | N/A |
| $O_2$, $CO_2$ content | EPA Method 3 or 3A | 60 minutes |
| Moisture content | EPA Method 4 | 60 minutes |
| PM (filterable) | EPA Method 5 | 60 minutes |
| PM (condensable) | EPA Method 202 | 60 minutes |
| $NO_x$ | EPA Method 7E | 60 minutes |
| CO | EPA Method 10 | 60 minutes |
| Opacity | SWCAA Method 9 | 6 minutes |

3. **Source Operation:**
   a. **Source operations.** Source operations during the emission test must be representative of maximum intended operating conditions.

   b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emission testing to correlate operating conditions with emissions. Recorded parameters shall, at a minimum, include:

## APPENDIX A

### Emission Testing Requirements – ABCO Boiler

**3. Source Operation: (cont.)**

(1) Boiler steam production rate,
(2) Fuel type/mixture description,
(3) Wet scrubber pressure drop,
(4) Wet scrubber flow rate,
(5) Boiler meter oxygen percent,
(6) Process start ups and shutdowns, and
(7) Plant adjustments.

**4. Reporting Requirements:**

a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Each report must be provided in an electronic format acceptable to SWCAA and as a hard (paper) copy. Each report shall include:
   (1) Description of the source including manufacturer, model number and design capacity of the equipment, the location of the sample ports or test locations, and stack parameters,
   (2) Time and date of the test and identification and qualifications of the personnel involved,
   (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit including but not limited to: ppmv, lb/hr, lb/1,000 lb steam, and lb/MMBtu.
   (4) Summary of control system or equipment operating conditions,
   (5) Summary of production related parameters,
   (6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation,
   (7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation,
   (8) Copies of field data and example calculations,
   (9) Chain of custody information,
   (10) Calibration documentation,
   (11) Discussion of any abnormalities associated with the results, and
   (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

b. All test results must be corrected to 7% oxygen and 3% oxygen.

# APPENDIX B

## Emission Testing Requirements – Lumber Drying

### 1. Introduction:

The purpose of this testing is to quantify emissions from lumber drying operations described in this Permit.

### 2. Testing Requirements:

a. **Testing schedule.** Emission testing of the lumber drying process must be conducted no later than February 2007. Subsequent emission testing must be conducted on a 5-year cycle, no later than the end of February. If there is no test company capable of performing this test, SWCAA must be notified of the Permittee's attempt to locate a capable test facility. If no test firm can be located, the test is excused until the next 5-year interval. Unless otherwise directed by SWCAA, the testing must be conducted on the dominant species dried at the facility.

b. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least ten business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.

c. **Test runs/Reference test methods.** The sampling methods identified below must be used unless alternate methods or test schedule are approved in writing by SWCAA in advance of the emission testing.

| Constituent | Reference Test Method | Minimum Test[1] Run Duration |
|---|---|---|
| Exhaust Flow | EPA Methods 1-4 | See footnote 1 |
| Volatile organic compounds[2] | EPA Method 25A / 18 or 320 | |
| Methanol | NCASI Method 105 or EPA Method 320 | |
| Ethanol | NCASI Method 105 or EPA Method 320 | |
| Formaldehyde | NCASI Method 105 or EPA Method 320 | |
| Acetaldehyde | NCASI Method 105 or EPA Method 320 | |
| Acrolein | NCASI Method 105 or EPA Method 320 | |
| Propionaldehyde | NCASI Method 105 or EPA Method 320 | |
| Acetic Acid | NCASI Method 105[3] or EPA Method 320 | |
| Monoterpenes | EPA Method 18 | |

[1] Test duration will be as necessary to yield representative results. In some cases, multiple test runs will be conducted over the drying cycle.

[2] The purpose of the testing is to quantify actual VOC emissions. This might involve developing an appropriate scaling factor for Method 25A results, or quantifying the individual components of the kiln exhaust without performing Method 25A.

[3] Acetic acid may be collected in the NCASI Method 105 impinger train and analyzed by HPLC.

## APPENDIX B

## Emission Testing Requirements – Lumber Drying

### 3. Kiln Operation:

a. **Quality assurance.** The following quality assurance measures must be met unless otherwise approved by SWCAA in advance of the testing:
   (1) The lumber used for the source test must be preserved in a manner to assure the freshness of the lumber. The lumber must be wrapped in plastic wrap or some other material to prevent off-gassing and contamination during storage and shipment;
   (2) The log(s) from which lumber is taken should be newly arrived at the lumber yard;
   (3) The lumber must be maintained below 45°F if the lumber is stored for more than two but less than seven days prior to the commencement of testing;
   (4) The lumber must be maintained below 10°F if stored for seven or more days prior to testing.
   (5) The ends of each test board must be trimmed prior to testing;
   (6) The kiln must be operated as close as practical to the dominant drying schedule (dry bulb and wet bulb temperatures) at the subject facility for the wood species being tested; and
   (7) The wood samples must be dried to a moisture content at or below the moisture content targeted by the subject facility.

b. **Record of testing parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must include the following if reasonably attainable:
   (1) Testing kiln details including: kiln dimensions, kiln air velocity, and heating method;
   (2) Sample size (board feet), sample weight, and lumber size (2" x 4", 4" x 8", etc.);
   (3) Drying time;
   (4) Wood moisture content (initial and final);
   (5) Temperature (continuously monitored and recorded wet bulb and dry bulb temperatures);
   (6) Lumber information including: percentage of heartwood vs. sapwood, ring count, percentage of face area that consists of knots, etc.;
   (7) Tree information: coastal or inland tree, tree age, approximate date harvested, if log was stored in fresh or salt water, etc.; and
   (8) Any interruptions in kiln operation.

   All recorded production parameters must be documented in the test results report.

### 4. Reporting Requirements:

a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Each report must be provided in an electronic format acceptable to SWCAA and as a hard (paper) copy. Each report shall include:
   (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
   (2) Time and date of the test and identification and qualifications of the personnel involved;

## APPENDIX B

## Emission Testing Requirements – Lumber Drying

**4. Reporting Requirements: (cont.)**

(3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit including but not limited to: lb/Mbf.
(4) Summary of control system or equipment operating conditions;
(5) Summary of production related parameters;
(6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
(7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
(8) Copies of field data and example calculations;
(9) Chain of custody information;
(10) Calibration documentation;
(11) Discussion of any abnormalities associated with the results; and
(12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

b. VOC emissions must be reported in pounds per thousand board feet (lb/Mbf) as VOC. Emissions of each VOC species quantified during the test must be reported in units of lb/Mbf as the individual species. For the purposes of reporting total VOC emissions, the unspeciated fraction of the VOC emissions must be assumed to be monoterpenes ($C_{10}H_{16}$).

# APPENDIX C

## Emission Testing Requirements – Western Pneumatics Baghouse

1. **Introduction:**
   The purpose of this testing is to quantify emissions from this baghouse and to demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

2. **Testing Requirements:**
   a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.

   b. **Testing schedule.** Testing must be performed by March 2015. Subsequent emission testing must be conducted once every five years thereafter, no later than the end of March.

   c. **Test runs/Reference test methods.** A minimum of three (3) test runs at maximum intended operating conditions for a minimum of one hour must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods and schedules must be used unless alternate methods or test schedules are approved in writing by SWCAA in advance of the emission testing.

| Constituent | Reference Test Method | Minimum Test Run Duration |
|---|---|---|
| PM (filterable) | EPA Method 5 or ODEQ Method 8 | 60 minutes |
| Opacity | SWCAA Method 9 | 6 minutes |

3. **Source Operation:**
   a. **Source operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.

   b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include process start ups and shutdowns, baghouse pressure drop and plant adjustments. All recorded production parameters must be documented in the test results report.

4. **Reporting Requirements:**
   a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Each report must be provided in an electronic format acceptable to SWCAA and as a hard (paper) copy. Each report shall include:
      (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
      (2) Time and date of the test and identification and qualifications of the personnel involved,

## APPENDIX C

### Emission Testing Requirements – Western Pneumatics Baghouse

**4. Reporting Requirements: (cont.)**

(3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit including but not limited to: gr/dscf and lb/hr,
(4) Summary of control system or equipment operating conditions,
(5) Summary of production related parameters,
(6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation,
(7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation,
(8) Copies of field data and example calculations,
(9) Chain of custody information,
(10) Calibration documentation,
(11) Discussion of any abnormalities associated with the results,
(12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

b. Results must be reported as measured with no $O_2$ correction.

# APPENDIX D

## Emission Monitoring Requirements – ABCO Boiler

### 1. Introduction:

a. The purpose of periodically monitoring the boiler exhaust is to minimize emissions and provide a reasonable assurance that the boiler and wet venturi scrubber are operating properly.

b. Periodic monitoring may be conducted with an electrochemical cell combustion analyzer, analyzers used for reference method testing, or other analyzers pre-approved by SWCAA.

### 2. Monitoring Procedure:

a. Monitoring to determine emission concentrations of the following constituents must be conducted no later than the end of October 2004. Subsequent emission monitoring must be conducted on a 12-month cycle, no later than the end of October. Monitoring is not required during any calendar year in which an emission test has been conducted in accordance with Appendix A of this Permit or 40 CFR 63 Subpart DDDDD: Major Boiler MACT.

Constituents to be Measured:
Carbon Monoxide (CO)
Nitrogen Oxides ($NO_X$)
Oxygen ($O_2$)

b. Source operation during testing must be representative of maximum intended operating conditions during that year.

c. Alternative testing methodologies or test schedule must be pre-approved by SWCAA.

### 3. Minimum Quality Assurance/Quality Control Measures:

a. The analyzer(s) response to span gas of a known concentration must be determined before and after testing. No more than 12 hours may elapse between span gas response checks. The results of the analyzer response must not be valid if the pre and post response check results vary by more than 10% of the know span gas value.

b. The CO and $NO_X$ span gas concentrations must be no less than 50% and no more than 200% of the emission concentration corresponding to the permitted emission limit. Ambient air may be used to zero the CO and $NO_X$ cells/analyzer(s) and span the oxygen cell/analyzer.

## APPENDIX C

### Emission Monitoring Requirements – ABCO Boiler

**3. Minimum Quality Assurance/Quality Control Measures (cont.):**

c. Sampling must consist of at least 1 test consisting of at least 5 minutes of data collection following a "ramp-up phase." The "ramp-up phase" ends when analyzer readings have stabilized (less than 5% per minute change in emission concentration). Emission concentrations must be recorded at least once every 30 seconds during the data collection phase. All test data collected following the ramp-up phase(s) must be reported to SWCAA.

If the monitoring results from any monitoring event indicate that emission concentrations exceed the permitted emission limits, the permittee must either perform 60 minutes of additional monitoring to more accurately quantify CO and $NO_X$ emissions, or initiate corrective action. Additional monitoring or corrective action must be initiated as soon as practical but no later than three days after the exceedance is identified. Corrective action includes tuning, maintenance by service personnel, limitation of boiler load, or other action taken to maintain compliance with permitted limits. Monitoring of boiler emissions must be conducted within three days following completion of any corrective action to confirm that the corrective action has been effective. Initiation of corrective action does not shield the permittee from enforcement.

**4. Reporting:**

a. All monitoring results must be recorded at the facility and reported to SWCAA in writing within 15 calendar days of completion. The following information must be included in the report:

(1) Time and date of the performance monitoring;
(2) Identification of the personnel involved;
(3) A summary of results, reported in units consistent with the applicable emission standard or limit;
(4) A summary of equipment operating conditions;
(5) A description of the evaluation methods or procedures used, including all field data, quality assurance/quality control procedures and documentation; and
(6) Analyzer response check documentation.

b. Reported monitoring results must be corrected to 7% $O_2$ in the exhaust gas and corrected for the analyzer response to zero and span gas.

A spreadsheet version of the SWCAA Combustion Equipment Monitoring Data Sheet is available at *http://www.swcleanair.org/forms/misc.asp*.

# APPENDIX E

## Scrubber Water Visual Evaluation Method

JUN 26 '97 11:18 STEAM ENGINEERING IN P.1/1

Steam Engineering
INCORPORATED

June 26, 1997

Heinz Dettinger
202 S.W. 16th Court
Troutdale, OR 97060

Dear Heinz:

The flocculents Steam Engineering is using at the Cowlitz Stud plants in Morton and Randal are #4910 and #4950 respectively. They are used at the scrubbers to facilitate solids separation and settling from the water to aid in clarification of the water.

A test for performance of the flocculent is performed by collecting approximately a liter (or quart) of the surface water in the scrubber pond and then noting the following:

* If 80% settles in 30 seconds, the flocculent performance is excellent.
* If 80% settles in 60 seconds, the flocculent performance is good.
* If 80% settles in 5 minutes, the flocculent performance is poor.

If you have any further questions, please feel free to call me.

Sincerely,

Dave

Dave Volpe

DV/mlw

RECEIVED
JUN 30 1997
SOUTHWEST AIR POLLUTION
CONTROL AUTHORITY

9725 S.W. Beaverton-Hillsdale Hwy. /# 310/Beaverton, OR 97005-3364
800-346-6152 or (503) 644-8655

# APPENDIX F

## Emission Testing Requirements – HDC Diesel Boiler

1. **Introduction:**
The purpose of this testing is to quantify emissions from the Cleaver Brooks diesel boiler, and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

2. **Testing Requirements:**
   a. **Test plan.** A comprehensive test plan shall be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel shall be informed at least five business days prior to testing so that a representative may be present during testing.

   b. **Testing schedule.** An emission test shall be conducted at the exhaust stack of the boiler no later than the end of February 2011. Subsequent emission testing shall be conducted every five (5) years by the end of February.

   c. **Test runs/Reference test methods.** A minimum of three test runs shall be performed for each constituent listed below to ensure the data are representative. Compliance shall be demonstrated by averaging the results of the individual sampling runs. The sampling methods and schedules shall be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

| Constituent | Reference Test Method | Minimum Test Run Duration |
|---|---|---|
| Flow rate, temperature | EPA Methods 1 and 2 | N/A |
| $O_2$, $CO_2$ content | EPA Method 3 or 3A | 60 minutes |
| Moisture content | EPA Method 4 | 60 minutes |
| PM (filterable) | EPA Method 5 | 60 minutes |
| PM (condensable) | EPA Method 202 | 60 minutes |
| $NO_x$ | EPA Method 7E | 60 minutes |
| CO | EPA Method 10 | 60 minutes |
| Liquid fuel test (sulfur) | ASTM Method D129, D1266, D1552, or D2622 | |
| Opacity | SWCAA Method 9 | 6 minutes |

3. **Source Operation:**
   a. **Source operations.** Source operations during the emission test must be representative of maximum intended operating conditions.

## APPENDIX F

## Emission Testing Requirements – HDC Diesel Boiler

**3. Source Operation: (cont.)**

b. **Record of production parameters.** Production related parameters and equipment operating conditions shall be recorded during emission testing to correlate operating conditions with emissions. Recorded parameters shall, at a minimum, include:
(1) Boiler steam production rate,
(2) Fuel consumption,
(3) Process start ups and shutdowns, and
(4) Plant adjustments.

**4. Reporting Requirements:**

a. A final emission test report shall be prepared and submitted to SWCAA within 45 calendar days of test completion and, at a minimum, shall contain the following information:

(1) Description of the source including manufacturer, model number and design capacity of the equipment, the location of the sample ports or test locations, and stack parameters,
(2) Time and date of the test and identification and qualifications of the personnel involved,
(3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
(4) Summary of control system or equipment operating conditions,
(5) Summary of production related parameters,
(6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation,
(7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation,
(8) Copies of field data and example calculations,
(9) Chain of custody information,
(10) Calibration documentation,
(11) Discussion of any abnormalities associated with the results,
(12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report, and
(13) An electronic copy of the test report shall be provided to SWCAA.

b. All test results shall be corrected to 3% oxygen.

## APPENDIX G

## Emission Monitoring Requirements – HDC Diesel Boiler

### 1. Introduction:

a. The purpose of periodically monitoring the boiler exhaust is to minimize emissions and provide a reasonable assurance that the boiler and wet scrubber are operating properly.

b. Periodic monitoring may be conducted with an electrochemical cell combustion analyzer, analyzers used for reference method testing, or other analyzers pre-approved by SWCAA.

### 2. Monitoring Procedure:

a. Monitoring to determine emission concentrations of the following constituents shall be conducted no later than the end of February 2012. Subsequent emission monitoring shall be conducted on a 12-month cycle, no later than the end of February. Monitoring is not required during any calendar year in which an emission test has been conducted in accordance with Appendix A of this Permit.

Constituents to be Measured
Carbon Monoxide (CO)
Nitrogen Oxides ($NO_X$)
Oxygen ($O_2$)

b. Source operation during testing must be representative of maximum intended operating conditions during that year.

c. Alternative testing methodologies must be pre-approved by SWCAA.

### 3. Minimum Quality Assurance/Quality Control Measures:

a. The analyzer(s) response to span gas of a known concentration shall be determined before and after testing. No more than 12 hours may elapse between span gas response checks. The results of the analyzer response shall not be valid if the pre and post response check results vary by more than 10% of the know span gas value.

b. The CO and $NO_X$ span gas concentrations shall be no less than 50% and no more than 200% of the emission concentration corresponding to the permitted emission limit. Ambient air may be used to zero the CO and $NO_X$ cells/analyzer(s) and span the oxygen cell/analyzer.

c. Sampling shall consist of at least 1 test consisting of at least 5 minutes of data collection following a "ramp-up phase." The "ramp-up phase" ends when analyzer readings have stabilized (less than 5% per minute change in emission concentration). Emission concentrations shall be recorded at least once every 30 seconds during the data collection phase. All test data collected following the ramp-up phase(s) shall be reported to SWCAA. A sample data sheet is attached for reference.

## APPENDIX G

## Emission Monitoring Requirements – HDC Diesel Boiler

**3. Minimum Quality Assurance/Quality Control Measures (cont.):**

If the monitoring results from any monitoring event indicate that emission concentrations exceed the permitted emission limits, the permittee shall either perform 60 minutes of additional monitoring to more accurately quantify CO and $NO_X$ emissions, or initiate corrective action. Additional monitoring or corrective action shall be initiated as soon as practical but no later than three days after the exceedance is identified. Corrective action includes tuning, maintenance by service personnel, limitation of boiler load, or other action taken to maintain compliance with permitted limits. Monitoring of boiler emissions must be conducted within three days following completion of any corrective action to confirm that the corrective action has been effective. Initiation of corrective action does not shield the permittee from enforcement.

**4. Reporting:**

a. All monitoring results shall be recorded at the facility and reported to SWCAA in writing within 15 calendar days of completion. The following information shall be included in the report:

(1) Time and date of the performance monitoring;
(2) Identification of the personnel involved;
(3) A summary of results, reported in units consistent with the applicable emission standard or limit;
(4) A summary of equipment operating conditions;
(5) A description of the evaluation methods or procedures used, including all field data, quality assurance/quality control procedures and documentation; and
(6) Analyzer response check documentation.

b. Reported monitoring results shall be corrected to 3% $O_2$ in the exhaust gas and corrected for the analyzer response to zero and span gas.