

**WASHINGTON STATE DEPARTMENT OF ECOLOGY
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|---|---|---------------------------------------|
| IN THE MATTER OF: |] | |
| |] | |
| Sierra Pacific Industries |] | NO. PSD 05-04, First Amendment |
| Skagit Lumber Manufacturing Facility |] | |
| Burlington, Washington |] | DRAFT APPROVAL |
| Sierra Pacific Industries |] | OF PSD APPLICATION |
| P.O. Box 496028 |] | |
| Redding, California 96049 |] | |

Pursuant to the United States Environmental Protection Agency (EPA) regulations for the Prevention of Significant Deterioration (PSD) set forth in Title 40, Code of Federal Regulations, Part 52, regulations set forth in the Washington Administrative Code 173-400-700, based upon the complete application for amendment of Prevention of Significant Deterioration (PSD) Permit No. PSD 05-04 submitted by Sierra Pacific Industries, Skagit Lumber Manufacturing Facility (SPI-Burlington) on December 1, 2008, and the technical analysis performed by the Washington State Department of Ecology (Ecology), Ecology now finds the following:

FINDINGS

1. SPI-Burlington started operation of a lumber manufacturing facility and a steam turbine in the Fredonia Business Park in Skagit County, Washington in January 2007.
2. The original permit (No. PSD 05-04) limited plant-wide volatile organic compound (VOC) emissions to 98.8 tons per year (TPY). The sources of VOC emissions are the wood-fired boiler, the drying kiln, and the anti-mold spray system. SPI-Burlington proposed this restriction in order to avoid a delay in the permitting process to perform ozone impact modeling that would otherwise have been required.
3. SPI-Burlington proposes this amendment to raise the VOC and particulate matter (PM)¹ emissions limits on the drying kiln to allow full use of the existing capacity. The proposed increase in allowable VOC emissions is 66 TPY. The proposed increase in allowable PM₁₀ emissions is 1.86 TPY.
4. SPI-Burlington proposes increasing the annual nitrogen oxide (NO_x) emissions allowed in the permit for the wood-fired boiler by 57 TPY. The increase will give SPI-Burlington greater operational flexibility to control visible emissions. At the proposed 245 TPY NO_x emission level, the impact on attainment of National Ambient Air Quality Standards (NAAQS) is not significant. This amendment does not increase the allowed daily average NO_x emissions. Consequently, impacts on Class I area air quality standards and related values are unchanged by this permit amendment.

¹ All PM assumed to be under 10 microns in aerodynamic diameter (PM₁₀).

5. Pursuant to SPI-Burlington's request to raise the permit limits on VOC emissions, SPI-Burlington analyzed the ozone impact of the total VOC and NO_x emissions proposed in this permit amendment (i.e., the originally permitted plus the proposed increases). The analysis indicated that SPI-Burlington's impact would be less than a one percent increase in maximum 8-hour average ozone concentrations, localized in the center of Snohomish County.
6. SPI-Burlington is bordered on the west by the Fredonia Grange and several industrial facilities, to the east and northeast by farm and forest land, on the north by Ovenell Road, a Puget Sound Energy generating station and a metal fabrication company, and on the south by State Road 2 and Burlington Northern Santa Fe railroad tracks. The United States Geographical Survey coordinates are North 48° 26' 56", West 122° 25' 59". The Universal Transverse Mercator (NAD 27) coordinates are 5,366,150 meters northing, 541,950 meters easting, Zone 10.
7. SPI-Burlington is located within a Class II area that is currently designated in attainment or unclassified for all NAAQS.
8. SPI-Burlington is within 100 kilometers (km) of three Class I Areas: North Cascades National Park (66 km), Glacier Peak Wilderness (72 km), and Olympic National Park (75 km). It is beyond 100 km, but within 200 km of three other Class I areas: Alpine Lakes Wilderness Area (105 km), Pasayten Wilderness Area (108 km), and Mt. Rainier National Park (159 km). It is 42 km from the Mt. Baker Wilderness Area (a Class II protected area).
9. SPI-Burlington is 55 km from the U.S.–Canadian border (specifically, the international demarcation in the Strait of Juan deFuca, directly east of Victoria, BC).
10. As a result of this amendment, SPI-Burlington will have:
 - 10.1 400 million board feet per year lumber manufacturing capacity.
 - 10.2 Three 1,100 foot long log decks, a sawmill, a planer mill, and six steam-heated drying kilns.
 - 10.3 400 million board feet per year drying kiln capacity.
 - 10.4 One wood-fired boiler with a capacity of about 430 million British thermal units per hour (MMBtu/hr) heat input. The boiler may be used to provide steam to the lumber mill or to a steam-driven, electricity-generating turbine with an output capacity of 30 megawatt (MW).
11. The cogeneration unit is subject to New Source Performance Standards (NSPS): 40 CFR Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units).

12. The emissions of all air pollutants from SPI-Burlington are subject to review under Chapter 173-400 WAC, Chapter 173-460 WAC and the regulations of the Northwest Clean Air Agency (NWCAA, 1600 South Second Street, Mount Vernon, Washington 98273-5202). Chapter 173-400 WAC includes provision for PSD review (WAC 173-400-700). This permit considers only PSD applicable issues. All other air quality related Notice of Construction approval issues are subject to the authority of the Northwest Clean Air Agency.
13. SPI-Burlington will have the potential to emit more than 250 tons per year (TPY) of a pollutant that is subject to the federal Clean Air Act. This qualifies SPI-Burlington as a major stationary source as defined in federal regulations 40 CFR Part 52.21(b)(1)(i)(b).
14. Ecology determined that SPI's request in this amendment to raise the emission limits for PM₁₀ and VOCs constituted a trigger of the provisions of 40 CFR 52.21(r)(4). PM_{2.5} was included in the original permit as a sub-species of PM₁₀. Consequently, plant-wide emissions levels of these pollutants must be considered for the purposes of Best Available Control Technology (BACT) and ambient air quality impact analyses.
15. SPI-Burlington's potential to emit (PTE) of and increases in pollutants subject to PSD review resulting from this amendment will be:

| Pollutant | PTE After Amendment TPY | Increase by Amendment TPY | PSD Significant Emissions Rate (SER) TPY |
|--|------------------------------------|--------------------------------------|---|
| NO _x | 245 | 57 | 40 |
| Carbon monoxide (CO) | 659 | 0 | 100 |
| PM ₁₀ | 58 ² | 58 | 15 |
| PM _{2.5} | 54.2 | 54.2 | 10 |
| Oxides of sulfur measured as sulfur dioxide (SO ₂) | 47 | 0 | 40 |
| VOCs | 165 | 66 | 40 |

16. SPI-Burlington will have net emissions increases resulting from this amendment for NO_x, PM₁₀, PM_{2.5}, and VOCs in excess of each respective PSD SER.

² Includes one TPY PM₁₀ from the cooling tower, permitted under the NWCAA notice of construction approval OAC #938a and 2.2 TPY fugitive PM₁₀ emissions not specifically limited in this permit. Both PM₁₀ sources were considered in the PM₁₀ impact analysis.

- 16.1 The PM₁₀, PM_{2.5}, and VOC emissions increases result from an increased production rate through the drying kilns. This amendment raises permitted PM₁₀, PM_{2.5}, and VOCs emissions above the original permit limits. Consequently, as described in 40 CFR 52.21(b)(2)(iii)(f), the major modification exemption for production increases on existing emissions units does not apply.
- 16.2 The NO_x emissions increase is a consequence of using less ammonia in selective noncatalytic reduction to avoid visible emissions from the wood-fired boiler stack. This is a change in the method of operation.
- 16.3 The NO_x, PM₁₀, PM_{2.5}, and VOC permit limit changes in this amendment qualify as major modifications under federal regulations [40 CFR 52.21(a)(2)(iv)(a), 40 CFR 52.21(b)(2), 40 CFR 52.21(b)(3)(i)(a), and 40 CFR 52.21(b)(23)(i)], and the project is subject to PSD review for NO_x, PM₁₀, PM_{2.5}, and VOC emissions increases.
17. Other than NO_x, PM₁₀, PM_{2.5}, and VOCs, SPI-Burlington's net emissions increases of all pollutants subject to regulation under the federal Clean Air Act are below the significance levels specified in 40 CFR 52.21(b)(23)(i). As a result, they are not subject to PSD review for this amendment.
18. SPI-Burlington submitted the PSD permit application on June 10, 2008. On December 29, 2008, Ecology notified SPI-Burlington that the permit application was complete.
19. Best Available Control Technology (BACT) determinations for this amendment:
 - 19.1 For NO_x emissions from the wood-fired cogeneration unit:
 - 19.1.1 Use of a spreader stoker boiler design.
 - 19.1.2 Selective noncatalytic reduction (SNCR).
 - 19.1.3 A short-term (24-hour average) limit of 0.13 pounds NO_x per million British thermal units (lb NO_x/MMBtu) of heat input.
 - 19.2 For VOC emissions: Best operating practice of a computerized steam management system for the drying kilns.
20. The NO_x, PM₁₀, and PM_{2.5} emissions increases allowed in this amendment will not cause or contribute to air pollution in violation of any NAAQS.

| Pollutant | Modeling Results, micrograms per cubic meter ($\mu\text{grams}/\text{m}^3$) | | Modeling Significance Level $\mu\text{grams}/\text{m}^3$ | | Class I Area Allowable Increment Consumption $\mu\text{grams}/\text{m}^3$ | Class II Area Allowable Increment Consumption $\mu\text{grams}/\text{m}^3$ | Monitoring Requirement Threshold $\mu\text{grams}/\text{m}^3$ | NAAQS $\mu\text{grams}/\text{m}^3$ |
|--|--|---|--|------------------|---|--|--|---------------------------------------|
| | Class I Area | Class II Area | Class I Area | Class II Area | | | | |
| NO ₂ , annual average | 0.003 | 0.871 | 0.1 | 1.0 | 2.5 | 25 | 14 | 100 |
| PM ₁₀ , 24-hour average, new property line | 0.079 | 28 SPI- Burlington alone 71.8 Including background | 0.3 | 5 | 10 | 30 | 10 | 150 |
| PM ₁₀ , annual average, new property line | 0.003 | 9.8 SPI- Burlington alone 23.2 Including background | 0.2 | 1 | 5 | 17 | None | 50 |
| PM _{2.5} , 3-year average, 98 th percentile, 24-hr average, original property line | N/A | 28.2 Including background | N/A | 5 | N/A | N/A | None | 35 |
| PM _{2.5} , 3-year average, 98 th percentile, annual average, original property line | N/A | 10.1 Including background | N/A | 1 | N/A | N/A | None | 15 |

21. Allowable emissions will not cause a significant visibility impact in:

21.1 The surrounding Class I areas: The highest modeled impact was 4.8 percent degradation in the North Cascades National Park in early summer. Federal land manager guidance considers this to be below the "concern" threshold.

21.2 Nearby Class II wilderness and scenic areas: The highest modeled impact was 3.4 percent degradation in the Mt. Baker Wilderness Area in early summer. Federal land manager guidance considers this to be below the "concern" threshold.

22. Ambient impact analysis indicates that there will be no significant pollutant deposition on soils and vegetation in the Class I or Class II areas.

- 22.1 Modeled emissions ambient impact levels are substantially below all secondary NAAQS. This indicates a low likelihood of negative impact on Class II area flora and fauna. No sensitive species have been identified.
- 22.2 The highest modeled deposition in the surrounding Class I areas is 0.0027 kilograms nitrogen and 0.0014 kilograms sulfur per hectare per year. This is expected to occur in the North Cascades National Park. The nitrogen deposition levels are a little over 50 percent of the "concern" threshold in federal land manager guidance. The sulfur deposition level is 28 percent of the federal land manager "concern" level.
23. No significant effect on industrial, commercial, or residential growth in the Skagit County, Washington area is anticipated as a result of this amendment.
24. The Washington State Environmental Policy Act lead agency for the project, Skagit County Planning and Development Services, determined that the proposed project does not have a probable adverse impact on the environment, and that an environmental impact statement is not required under RCW 43.21C.030(2)(C). Skagit County issued a Mitigated Determination of Nonsignificance on October 25, 2005.
25. No written or verbal comments in opposition to the terms of this permit were submitted during the public review and comment period or during the public hearing held on December 8, 2005 at the offices of the NWCAA.
26. Ecology finds that all requirements for PSD have been satisfied. Approval of the PSD application is granted subject to the following conditions.

APPROVAL CONDITIONS

1. Requirements specified in the following approval conditions for SPI-Burlington to notify or report to or acquire approval or agreement from "Ecology and the Northwest Clean Air Agency" may be satisfied by providing such notification, reporting, or approval request to the Northwest Clean Air Agency if the approval conditions of this PSD permit have been incorporated in SPI-Burlington's Title V permit (40 CFR Part 70).
2. SPI shall maintain exclusive control over property whereon SPI's emissions contribute to exceedances of allowable increment consumption standards in effect at the time of issuance of this PSD permit amendment and attainment of National Ambient Air Quality Standards.
3. SPI-Burlington shall use only wood preservatives that have been approved by the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act.
4. Startup and shutdown defined:
 - 4.1 Cold startups and shutdowns:

4.1.1 A cold startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is 150 degrees Fahrenheit (°F) or lower. A cold startup ends upon the earlier of:

4.1.1.1 Four hours after starting wood fuel feed to the boiler,

4.1.1.2 Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11 percent and less than or equal to 13 percent for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppm_{dv},

4.1.1.3 Steam flow exceeded 150,000 pounds over the previous hour, or

4.1.1.4 Twenty-four hours after starting or resuming feeding fuel of any type.

4.1.2 A cold shutdown is one wherein wood fuel feed stops, and the furnace is allowed to cool to 150°F or lower. A cold shutdown ends when:

4.1.2.1 No fuel of any type is being feed, and the furnace temperature is 150°F or lower and the FD fan is off-line, or

4.1.2.2 Twenty-four hours after wood fuel feed was stopped, whichever comes first.

4.2 Warm startups and shutdown:

4.2.1 A warm startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is higher than 150°F. A warm startup ends upon the earlier of:

4.2.1.1 Four hours after starting wood fuel feed to the boiler,

4.2.1.2 Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11 percent and less than or equal to 13 percent for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppm_{dv},

4.2.1.3 Steam flow exceeded 150,000 pounds over the previous hour, or

4.2.1.4 Eight hours after starting or resuming feeding fuel of any type.

4.2.2 A warm shutdown is one wherein wood fuel feed stops, but the furnace temperature does not cool to 150°F or lower before wood fuel feed is resumed. A warm shutdown ends when:

- 4.2.2.1 Wood fuel feed is resumed,
 - 4.2.2.2 No fuel of any type is being feed, and the furnace temperature is 150°F or lower (at which point the shutdown becomes a "cold shutdown"), or
 - 4.2.2.3 Twenty-four hours after wood fuel feed was stopped, whichever comes first.
5. The wood-fired cogeneration unit may burn natural gas in the wood-fired cogeneration unit only:
- 5.1 To ignite the wood fuel, or
 - 5.2 To maintain good combustion.

Emission Limits

6. Wood-fired cogeneration unit exhaust stack:
- 6.1 NO_x emissions shall not exceed the following limits on a calendar day average:
 - 6.1.1 Fifty-six pounds NO_x per hour.
 - 6.1.2 0.13 lb NO_x/MMBtu based on heat input value of the fuel.
 - 6.2 CO emissions:
 - 6.2.1 Shall not exceed the following limits:
 - 6.2.1.1 0.35 lb CO/MMBtu (1-hour average) based on heat input value of the fuel except during startup or shutdown.
 - 6.2.1.2 659 tons CO in any consecutive 12-month period including startups and shutdowns.
 - 6.2.1.3 400 lb CO/hr (1-hour average) during cold startups and shutdowns.
 - 6.2.1.4 300 lb CO/hr (1-hour average) during warm startups and shutdowns.
 - 6.2.2 CO emissions measurement is to continue at all times the wood-fired cogeneration unit furnace temperature is above 150°F.
 - 6.3 PM/PM₁₀/PM_{2.5} emissions:
 - 6.3.1 All particulate matter (PM/PM₁₀/PM_{2.5}) emissions shall be expressed as PM₁₀.

6.3.2 The sum of filterable and condensable PM/PM₁₀/PM_{2.5} emissions shall not exceed the following limits:

6.3.2.1 0.02 lb PM₁₀/MMBtu (24-hour average) based on heat input value of the fuel.

6.3.2.2 37.7 tons PM₁₀ in any consecutive 12-month period.

6.4 SO₂ emissions shall not exceed the following limits:

6.4.1 0.025 lb SO₂/MMBtu (3-hour average) based on heat input value of the fuel.

6.4.2 47.1 tons in any consecutive 12-month period.

6.5 VOC emissions:

6.5.1 VOCs shall be calculated as propane (three carbons per molecule, molecular weight: 44).

6.5.2 VOC emissions shall not exceed the following limits:

6.5.2.1 0.019 lb VOC/MMBtu (1-hour average) based on heat input value of the fuel.

6.5.2.2 35.8 tons in any consecutive 12 months.

7. Planer mill bag house exhaust stack:

7.1 All particulate matter (PM/PM₁₀/PM_{2.5}) emissions shall be expressed as PM₁₀.

7.2 PM/PM₁₀/PM_{2.5} emissions shall not exceed the following limits:

7.2.1 0.005 gr PM₁₀/dscft (1-hour average).

7.2.2 9.4 tons PM₁₀ in any consecutive 12-month period.

8. Drying kilns:

8.1 PM/PM₁₀/PM_{2.5} emissions:

8.1.1 All particulate matter (PM/PM₁₀/PM_{2.5}) emissions shall be expressed as PM₁₀.

8.1.2 Prior to satisfaction of Approval Condition 10 or if SPI cannot demonstrate satisfaction of Approval Condition 17, PM/PM₁₀/PM_{2.5} emissions from the dry kilns shall not exceed four tons in any consecutive 12-month period.

8.1.3 After satisfaction of Approval Condition 10, the following shall apply:

8.1.3.1 PM/PM₁₀/PM_{2.5} emissions from the dry kilns shall not exceed 5.86 tons in any consecutive 12-month period.

8.1.3.2 Daily kiln loading limits:

8.1.3.2.1 If only hemlock is loaded on any given day, not more than 804 thousand board feet (MBf).

8.1.3.2.2 If hemlock and other wood species are loaded on any given day, the amount of hemlock loaded shall be limited by the following equation:
$$\text{MBf (hemlock)} = 1,608 - \text{MBf (total day's load)}$$

8.1.3.2.3 The quantity of each kiln loading shall be recorded no later than when the kiln reaches 120°F.

8.2 VOC emissions:

8.2.1 VOCs shall be calculated as pinene (10 carbons per molecule, molecular weight: 136).

8.2.2 SPI-Burlington will operate the computerized steam management system for the drying kilns to minimize steam demand in accordance with the manufacturer's specifications.

8.2.3 VOC emissions shall not exceed 120 tons in any consecutive 12-month period.

9. Anti-mold spray system:

9.1 Anti-mold spray chamber shall be a "drip-free" design.

9.2 SPI-Burlington will operate and maintain the spray chamber mist eliminator and condensate recycle system in accordance with the manufacturer's specifications.

9.3 VOC emissions shall not exceed nine tons in any consecutive 12-month period.

Initial Compliance Demonstration

10. Initial compliance with Approval Condition 2:

10.1 Providing Ecology and the NWCAA with documentation that Ecology and the NWCAA deem adequate as demonstration of exclusive control over the necessary property.

- 10.2 With respect to property acquired to satisfy Approval Condition 2 relative to dry kiln emissions, constructing a fence to the extent of prohibiting public access.
11. Compliance demonstration data conversions to "per MMBtu" basis shall either be determined by:
 - 11.1 The method outlined in the paragraph in Appendix A, Method 19 of 40 CFR Part 60 titles "Determined F Factors" (in the 2004 version of 40 CFR Part 60: Paragraph 12.3.2), or
 - 11.2 Factors from table in Appendix A, Method 19 of 40 CFR Part 60 titles, "F Factors for Various Fuels" (in the 2004 version of 40 CFR Part 60: Table 19-2). The factor shall reflect the proportions of wood, bark, and natural gas in the fuel by either:
 - 11.2.1 Determining the wood and bark proportions of the fuel used during the test based on randomized fuel sampling following procedure outlined in the corresponding test plan approved by Ecology and NWCAA, or
 - 11.2.2 A default assumption of equal proportions of wood and bark. Example: a 50:50 wood/bark mixture with no natural gas will have an F_d - factor of 9,420 dscf/MMBtu.
12. NO_x emissions from the wood-fired cogeneration unit exhaust stack: SPI-Burlington will demonstrate initial compliance with Condition 6.1.
 - 12.1 SPI-Burlington will conduct a compliance test within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.
 - 12.2 The compliance test will use a continuous emission monitoring system (CEMS) that measures and records NO_x emissions from the wood-fired cogeneration unit exhaust stack.
 - 12.3 The CEMS will meet the requirements of Condition 26.1.
 - 12.4 For the compliance test, NO_x emissions from the wood-fired cogeneration unit are continuously monitored.
 - 12.4.1 For not less than 24 consecutive cogeneration unit operating hours.
 - 12.4.2 At an average firing rate of not less than 90 percent of rated capacity.
 - 12.5 Compliance will be determined from the arithmetic mean of the NO_x emissions data in lb NO_x /MMBtu monitored pursuant to Condition 12.4, using a continuous 24-hour period of the compliance test.

- 12.6 SPI-Burlington will submit a test plan to Ecology and the NWCAA for approval at least 30 days prior to initial performance testing.
13. CO emissions from the wood-fired cogeneration unit exhaust stack: SPI-Burlington will demonstrate initial compliance with Condition 6.2.1.1.
 - 13.1 SPI-Burlington will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.
 - 13.2 The compliance test shall be performed after each installed CEMS has satisfied all performance demonstration requirements under 40 CFR 60.13(c).
 - 13.3 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.
 - 13.4 Compliance will be determined by EPA Reference Method 10.
 - 13.4.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.
 - 13.4.2 The non-dispersive infrared analyzer must have performance specifications allowing a minimum detectable sensitivity appropriate to the CO concentration limits specified in this condition.
 - 13.4.3 The span and linearity calibration gas concentrations in Method 10 will be appropriate to the CO concentration limits specified in this condition.
 - 13.4.4 Equivalent concentration test methods may be used if approved in advance by Ecology and the NWCAA.
 - 13.4.5 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR part 60 Appendix A Method 19 with indicated calculations modified to be applicable to CO.
 - 13.4.6 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and the NWCAA.
 - 13.5 SPI-Burlington will submit a test plan to Ecology and the NWCAA for approval at least 30 days prior to initial performance testing.
14. PM/PM₁₀/PM_{2.5}:
 - 14.1 Emission limits for the wood-fired cogeneration unit exhaust stack: SPI-Burlington will demonstrate initial compliance with Condition 6.3.2.1.

- 14.1.1 SPI-Burlington will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.
- 14.1.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).
- 14.1.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 15 (SO₂) and in Condition 16 (VOCs).
- 14.1.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.
- 14.1.5 Compliance will be determined by EPA Reference Methods 5 and 202.
 - 14.1.5.1 EPA Reference Method 5 will be conducted in the manner prescribed in 40 CFR 60.46b(d).
 - 14.1.5.2 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.
 - 14.1.5.3 The emission rate expressed in lb PM₁₀/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6).
 - 14.1.5.4 Equivalent concentration test methods may be used if approved in advance by Ecology and the NWCAA.
- 14.1.6 SPI-Burlington will submit a test plan to Ecology and the NWCAA for approval at least 30 days prior to initial performance testing.
- 14.2 Emission limits for the planer mill bag house exhaust stack: SPI-Burlington will demonstrate initial compliance with Condition 7.2.1.
 - 14.2.1 SPI-Burlington will have a compliance test conducted by an independent testing vendor Within 60 days of achieving the maximum rate at which the planer mill will be operated, but not later than 180 days after initial startup.
 - 14.2.2 The planer mill is to be operated at not less than 50,000 board feet per hour during the compliance test.
 - 14.2.3 Compliance will be determined by EPA Reference Methods 5 and 202.
 - 14.2.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

- 14.2.3.2 Equivalent concentration test methods may be used if approved in advance by Ecology and the NWCAA.
- 14.2.4 Compliance with Condition 7.2.1 will be deemed demonstrated if the result of the test pursuant to Condition 14.2.1 is not greater than the limit specified in Condition 7.2.1 and not greater than 0.045 pounds PM₁₀ per thousand board feet planer throughput.
- 14.3 Emissions limits from the drying kilns: SPI-Burlington will demonstrate initial compliance with Condition 8.1 by incorporating the manufacturer's operating specifications for the drying kilns in the facility operating manual.
15. SO₂ emissions from the wood-fired cogeneration unit exhaust stack: SPI-Burlington will demonstrate initial compliance with Conditions 6.4.1.
- 15.1 SPI-Burlington will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.
- 15.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).
- 15.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 14.1 (PM/PM₁₀) and Condition 16 (VOCs).
- 15.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.
- 15.5 Compliance with Conditions 6.4.1 will be determined by EPA Reference Method 6, 6A, or 6C.
- 15.5.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.
- 15.5.2 An equivalent concentration test method may be used if approved in advance by Ecology and the NWCAA.
- 15.5.3 SO₂ mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.
- 15.5.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 15.5.3 if approved in advance by Ecology and the NWCAA.

15.6 SPI-Burlington will submit a test plan to Ecology and the NWCAA for approval at least 30 days prior to initial performance testing.

16. VOCs:

16.1 Emission limits for the wood-fired cogeneration unit exhaust stack: SPI-Burlington will demonstrate initial compliance with Condition 6.5.2.1

16.1.1 SPI-Burlington will have a performance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

16.1.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).

16.1.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 14.1 (PM/PM₁₀) and in Condition 15 (SO₂).

16.1.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.

16.1.5 Compliance will be determined by the arithmetic mean of not fewer than three test samples using EPA Reference Method 25, 25A, or 25B.

16.1.5.1 An equivalent concentration test method may be used if approved in advance by Ecology.

16.1.5.2 VOC mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.

16.1.5.3 An equivalent mass emission rate calculation method may be used as an alternative to Condition 16.1.5.2 if approved in advance by Ecology.

16.1.6 SPI-Burlington will submit a test plan to Ecology and the NWCAA for approval at least 30 days prior to initial performance testing.

16.2 Drying kilns: SPI-Burlington will demonstrate initial compliance with Condition 8.2.2 by incorporating the manufacturer's operating specifications for the computerized steam management system for the drying kilns in the facility operating manual.

16.3 Anti-mold spray system: SPI-Burlington will demonstrate initial compliance with Condition 9.1 by incorporating the manufacturer's operating specifications for the spray

chamber mist eliminator and condensate recycle system in the facility operating manual.

Compliance Monitoring

17. Continuous compliance with Approval Condition 2 shall be monitored by:

17.1 Documentation that Ecology and the NWCAA deem adequate as demonstration of exclusive control over the necessary property.

17.2 With respect to property acquired to satisfy Approval Condition 2 relative to dry kiln emissions, said property shall be fenced to the extent of prohibiting public access.

18. Ambient PM_{2.5} monitoring:

18.1 Within 180 days after the final and effective date of this permit amendment, SPI shall have installed and begin operation of a PM_{2.5} monitoring at a location and of a design approved in writing by Ecology and the NWCAA.

18.2 Monitoring shall continue until there are not less than ten days sampled in each of the months of October through March with a cumulative average dry kiln PM₁₀ emission level greater than 27.5 lbs/day. Data may include days from any month of October through March in any year that follows the effective date of this amendment.

18.3 Notwithstanding Condition 18.2, SPI may terminate ambient PM_{2.5} monitoring with the written approval of Ecology and the NWCAA.

19. Compliance monitoring data conversions to "per MMBtu" basis shall be determined by the same procedure outlined for compliance demonstration in Condition 11.

20. NO_x emissions from the wood-fired cogeneration unit exhaust stack:

20.1 SPI-Burlington will monitor continuing compliance with Condition 6.1:

20.1.1 Following the date the initial performance test in Condition 12 is completed, or is required to be complete, whichever date comes first.

20.1.2 Continuous compliance will be monitored by a CEMS that measures and records NO_x emissions from the wood-fired cogeneration unit exhaust stack.

20.1.3 The CEMS will meet the requirements of Condition 26.1.

20.1.4 Compliance will be determined from the arithmetic mean of the hours of valid NO_x emissions data in lb NO_x/MMBtu monitored pursuant to Condition 20.1.2.

20.1.4.1 Data that is "valid" shall be as defined in 40 CFR 60.13(h).

20.1.4.2 A calendar day used for compliance monitoring shall have at least 18 hours of valid data.

20.1.4.3 Valid data from any calendar day having fewer than 18 hours of valid data shall be included in either the following or preceding day's data, whichever is contiguous, and the 24-hour average calculated using the cumulative hours of the conjoined periods.

21. CO emissions from the wood-fired cogeneration unit exhaust stack:

21.1 SPI-Burlington will monitor continuing compliance with Condition 6.2.1.1.

21.1.1 Following the date the initial performance test in Condition 13.1 is completed, or is required to be complete, whichever date comes first.

21.1.2 Continuous compliance will be determined by a CEMS that measures and records CO emissions from the wood-fired cogeneration unit exhaust stack.

21.1.3 The CEMS will meet the requirements of Condition 26.2.

21.2 SPI-Burlington will monitor continuing compliance with Condition 6.2.1.2, 6.2.1.3, and 6.2.1.4 from the arithmetic mean of the emissions data for each corresponding operating scenario and averaging period.

22. PM/PM₁₀/PM_{2.5}

22.1 Emission limits from the wood-fired cogeneration unit exhaust stack:

22.1.1 SPI-Burlington will monitor continuing compliance with Condition 6.3.2.1.

22.1.1.1 SPI-Burlington will have periodic compliance tests conducted by an independent testing vendor:

22.1.1.1.1 At least once every 12 months, beginning from the date the initial performance test in Condition 14.1.1, is completed, or is required to be complete, whichever date comes first.

22.1.1.1.2 If all source tests conducted during a consecutive thirty month period (not less than three separate tests) demonstrate emissions are less than 75 percent of the limit in Condition 6.3.2.1, the testing interval shall be changed to not less frequently than once every 24 months.

22.1.1.1.3 If the test frequency described in Condition 22.1.1.1.2 has been enacted, any subsequent source test result greater than 75 percent of the limit in Condition 6.3.2.1 shall require reversion to Condition 22.1.1.1 until such time as the provision recurs described in Condition 22.1.1.1.2 and allows its reinstatement.

22.1.1.2 Compliance will be determined by EPA Reference Methods 5 and 202.

22.1.1.2.1 EPA Reference Method 5 will be conducted in the manner prescribed in 40 CFR 60.46b(d).

22.1.1.2.2 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

22.1.1.2.3 The emission rate expressed in lb PM₁₀/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6).

22.1.2 SPI-Burlington will monitor continuing compliance with Condition 6.3.2.2.

22.1.2.1 Beginning from the date the initial performance test in Condition 14.1.1 is completed, or is required to be complete, whichever date comes first.

22.1.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 22.1.1 in TPY PM₁₀ based on monthly average firing rates.

22.2 Emission limits from the planer mill exhaust stack:

22.2.1 SPI-Burlington will monitor continuing compliance with Condition 7.2.1.

22.2.1.1 SPI-Burlington will have periodic compliance tests:

22.2.1.1.1 Conducted by an independent testing vendor.

22.2.1.1.2 Test frequency.

22.2.1.1.2.1 Beginning from the required or actual completion date of the initial performance test in Condition 14.2.1 whichever date comes first.

22.2.1.1.2.2 At least once every 12 months unless the provision described in Condition 22.2.1.1.2.3 occurs.

22.2.1.1.2.3 If all source tests conducted during a consecutive 30-month period (not less than three separate tests) show PM/PM₁₀/PM_{2.5} emissions less than or equal to 0.0025 gr/dscft, test frequency may be reduced to once every 36 months.

22.2.1.1.2.4 If the test frequency described in Condition 22.2.1.1.2.3 has been enacted, any subsequent source test result greater than 0.0025 gr/dscft shall require reversion to Condition 22.2.1.1.2.1 until such time as the provision recurs described in Condition 22.2.1.1.2.3 and allows its reinstatement.

22.2.1.2 Compliance will be determined by EPA Reference Methods 5 and 202.

22.2.1.2.1 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

22.2.1.2.2 Equivalent concentration test methods may be used if approved in advance by Ecology and the NWCAA.

22.2.2 SPI-Burlington will monitor continuing compliance with Condition 7.2.2:

22.2.2.1 Beginning from the date the initial performance test in Condition 14.2.1 is completed, or is required to be complete, whichever date comes first.

22.2.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 22.2.1 and monthly production rates.

22.2.2.2.1 SPI-Burlington will determine an emission factor based on the test results from Condition 22.2.1 and the planer mill production rate maintained during the corresponding tests.

22.2.2.2.2 SPI-Burlington will update the emission factor as soon as the results are available from each compliance monitoring test.

22.2.2.2.3 SPI-Burlington will use the updated emission factor until the next compliance monitoring test results are available.

23. Emission limits from the drying kilns: SPI-Burlington will monitor continuing compliance with Conditions 8.1.2 or 8.1.3, as applicable.

23.1 Beginning with the date of initial startup of the drying kilns.

23.2 For each wood species processed, SPI-Burlington will separately determine drying kiln loading in board feet each day.

23.3 Each month's drying kiln PM/PM₁₀ emissions shall be determined based on each specie's emission factor:

23.3.1 Douglas Fir: 0.02 pounds PM/PM₁₀/PM_{2.5}/thousand board feet (lb PM/PM₁₀/PM_{2.5}/Mbf).

23.3.2 Western Hemlock: 0.04 lb PM/PM₁₀/PM_{2.5}/Mbf.

23.3.3 All other wood species:

23.3.3.1 If the proportion of "other wood species" used during the month is less than or equal to 10 percent of the total month's production, SPI-Burlington shall use either 0.04 lb PM/PM₁₀/PM_{2.5}/Mbf or a species-specific emission factor approved in writing by Ecology and the NWCAA.

23.3.3.2 If the proportion of "other wood species" used during the month is greater than 10 percent of the total month's production, SPI-Burlington shall use a species-specific emission factor approved in writing by Ecology and the NWCAA.

24. SO₂ emissions from the wood-fired cogeneration unit exhaust stack:

24.1 SPI-Burlington will monitor continuing compliance with Condition 6.4.1:

24.1.1 SPI-Burlington will have periodic compliance tests conducted by an independent testing vendor:

24.1.1.1 At least once every 12 months, beginning from the date the initial performance test in Condition 15.1 is completed, or is required to be complete, whichever date comes first.

24.1.1.2 If three consecutive tests demonstrate emissions are less than 75 percent of the limits in Condition 6.4.1, the testing interval shall be changed to not less frequently than once every 24 months.

24.1.1.3 If the test frequency described in Condition 24.1.1.2 has been enacted, any subsequent source test result greater than 75 percent of the limit in Condition 6.4.1 shall require reversion to Condition 24.1.1.1 until such time as the provision recurs described in Condition 24.1.1.2 and allows its reinstatement.

24.1.2 At least one source test within any relevant test frequency period is to coincide with the Relative Accuracy Test Audit required for each installed CEMS.

24.1.3 Compliance will be determined by EPA Reference Method 6, 6A, or 6C.

24.1.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.

24.1.3.2 An equivalent concentration test method may be used if approved in advance by Ecology.

24.1.3.3 SO₂ mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.

24.1.3.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 24.1.3.3 if approved in advance by Ecology and the NWCAA.

24.1.4 SPI-Burlington will notify Ecology and the NWCAA at least 30 days prior to the scheduled performance testing.

24.2 SPI-Burlington will monitor continuing compliance with Condition 6.4.2.

24.2.1 Beginning from the date the initial performance test in Condition 15.1 is completed, or is required to be complete, whichever date comes first.

24.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 24.1 and monthly average firing rates.

24.2.2.1 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19.

24.2.2.2 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and the NWCAA.

25. VOCs:

25.1 Emission limits from the wood-fired cogeneration unit exhaust stack:

25.1.1 SPI-Burlington will monitor continuing compliance with Condition 6.5.2.1.

25.1.1.1 SPI-Burlington will have periodic compliance tests conducted by an independent testing vendor:

- 25.1.1.1.1 At least once every 12 months, beginning from the date the initial performance test in Condition 16.1.1 is completed, or is required to be complete, whichever date comes first.
 - 25.1.1.1.2 If three consecutive tests demonstrate emissions are less than 75 percent of the limits in Condition 6.5.2.1, the testing interval shall be changed to not less frequently than once every 24 months.
 - 25.1.1.1.3 If the test frequency described in Condition 25.1.1.1.2 has been enacted, any subsequent source test result greater than 75 percent of the limit in Condition 6.5.2.1 shall require reversion to Condition 25.1.1.1.1 until such time as the provision recurs described in Condition 25.1.1.1.2 and allows its reinstatement.
- 25.1.1.2 At least one source test within any 12-month period is to coincide with the Relative Accuracy Test Audit required for each installed CEMS.
- 25.1.1.3 Compliance will be determined by EPA Reference Method 25, 25A, or 25B.
- 25.1.1.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.
 - 25.1.1.3.2 An equivalent concentration test method may be used if approved in advance by Ecology.
 - 25.1.1.3.3 VOC mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19 with indicated calculations modified to be applicable to VOCs measured as propane, and based on the total heat value of fuel consumed over each operating hour.
 - 25.1.1.3.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 25.1.1.3.3 if approved in advance by Ecology and the NWCAA.
- 25.1.1.4 SPI-Burlington will notify Ecology and Northwest Clean Air Agency at least 30 days prior to the scheduled performance testing.
- 25.1.2 SPI-Burlington will monitor continuing compliance with Condition 6.5.2.2.
- 25.1.2.1 Beginning from the date the initial performance test in Condition 16.1.1 is completed, or is required to be complete, whichever date comes first.

25.1.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 25.1 and monthly average firing rates.

25.1.2.2.1 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19 with indicated calculations modified to be applicable to VOCs measured as propane.

25.1.2.2.2 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and the NWCAA.

25.2 Emission limits from the drying kilns: SPI-Burlington will monitor continuing compliance with Condition 8.2.3.

25.2.1 Beginning with the date of initial startup of the drying kilns.

25.2.2 For each wood species processed, SPI-Burlington will separately record monthly drying kiln production in board feet.

25.2.3 Each month's drying kiln VOC emissions shall be determined based on each specie's emission factor:

25.2.3.1 Douglas Fir: 0.6 pounds VOC/thousand board feet (lb VOC/Mbf).

25.2.3.2 Western Hemlock: 0.33 lb VOC/Mbf.

25.2.3.3 All other wood species:

25.2.3.3.1 If the proportion of "other wood species" used during the month is less than or equal to 10 percent of the total month's production, SPI-Burlington shall use either 0.6 pounds lb VOC/Mbf or a species-specific emission factor approved in writing by Ecology and the NWCAA.

25.2.3.3.2 If the proportion of "other wood species" used during the month is greater than 10 percent of the total month's production, SPI-Burlington shall use a species-specific emission factor approved in writing by Ecology and the NWCAA.

25.3 Emission limits from the anti-mold spray system: SPI-Burlington will monitor continuing compliance with Condition 9.3.

25.3.1 Beginning with the date of initial startup of the drying kilns.

25.3.2 SPI-Burlington will quantify its consumption of wood treatment materials in the anti-mold spray system each month.

25.3.3 VOCs shall be calculated monthly as the proportion VOC identified in the wood treatment Material Safety Data (MSD) sheets.

Example: The MSD sheet for NP-1® Plus (Sapstain Control) indicates it is 25 percent VOC by weight. The MSD sheet for Alpha™-700 (Wood Brightener) indicates it is 95 percent VOC by weight.

26. Continuous Emission Monitoring Systems:

26.1 Installation, calibration, maintenance and operation of the CEMS for NO_x compliance will satisfy the requirements contained in 40 CFR 60.48b(b) through 40 CFR 60.48b(f).

26.2 CEMS for CO will satisfy the requirements contained in 40 CFR, Part 60, Appendix B, Performance Specification 4 and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

26.3 Required Relative Accuracy Test Audit for the NO_x and CO CEMS will be performed during the same test periods.

Recordkeeping, Notification and Reporting

27. SPI-Burlington will notify and report to Ecology and the NWCAA, and maintain related records as follows:

27.1 Notifications and reports will be in written format unless otherwise approved by Ecology.

27.2 The following notifications shall be submitted to Ecology and the NWCAA:

27.2.1 Commencement of construction of the mill and of the wood-fired cogeneration unit: No later than 30 calendar days after such date.

27.2.2 Initial startup of the mill and of the wood-fired cogeneration unit: No later than 15 calendar days after such date.

27.2.3 Completion of the entry into the operation and maintenance manual of the items specified in Condition 29, within 15 days after such entries were completed.

27.2.4 At the time of submittal of the notification required in Condition 27.2.3, certification by the responsible party for the facility that the relevant equipment was installed consistent with the parameters developed pursuant to Condition 29.

27.2.5 The date on which the NO_x CEMS first demonstrated satisfactory performance pursuant to Condition 26.1, no later than 30 calendar days after such date.

27.2.6 The date on which the CO CEMS first demonstrated satisfactory performance pursuant to Condition 26.2, no later than 30 calendar days after such date.

27.3 The following reports shall be submitted to Ecology and the NWCAA:

27.3.1 Report results of all initial compliance demonstration source tests, no later than 45 calendar days after completion of each respective source test.

27.3.2 Continuing performance monitoring reports required under Condition 27.3.3 shall be submitted for each calendar quarter:

27.3.2.1 Beginning with the quarter that includes the initial startup of the wood-fired cogeneration unit.

27.3.2.2 Postmarked no later than one calendar month after the close of each respective calendar quarter.

27.3.2.3 In the report format approved by Ecology and the NWCAA.

27.3.2.4 Another reporting schedule may be used if approved by Ecology and the NWCAA.

27.3.3 Continuing performance monitoring reports will include, but not necessarily be limited to, the following:

27.3.3.1 Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the operational parameters and practices developed pursuant to Condition 29.

27.3.3.2 Emissions from the wood-fired cogeneration unit exhaust stack:

27.3.3.2.1 Pursuant to compliance under Condition 6.1, NO_x emissions (lb/MMBtu) since the last report.

27.3.3.2.2 Pursuant to compliance under Condition 6.2.1.1, CO emission (lb/MMBtu) since the last report.

27.3.3.2.3 Pursuant to compliance under Condition 6.2.1.2, for each month since the last report, show the 12-month CO mass emissions ending with that month.

- 27.3.3.2.4 Pursuant to compliance under Conditions 6.2.1.3 and 6.2.1.4, the times, durations, and average hourly CO mass emissions for any cold or warm startups and shutdowns.
 - 27.3.3.2.5 Pursuant to compliance under Condition 6.3.2.1, results of any required source tests for PM₁₀ since the last report.
 - 27.3.3.2.6 Pursuant to compliance under Condition 6.3.2.2, for each month since the last report, show the 12-month PM₁₀ mass emissions ending with that month.
 - 27.3.3.2.7 Pursuant to compliance under Conditions 6.4.1 results of any required source tests for SO₂ since the last report.
 - 27.3.3.2.8 Pursuant to compliance under Condition 6.4.2, for each month since the last report, show the 12-month SO₂ mass emissions ending with that month.
 - 27.3.3.2.9 Pursuant to compliance under Condition 6.5.2.1 results of any required source tests for VOCs since the last report.
 - 27.3.3.2.10 Pursuant to compliance under Condition 6.5.2.2, for each month since the last report, show the 12-month VOC mass emissions ending with that month.
- 27.3.3.3 Emissions from the planer mill bag house exhaust stack:
- 27.3.3.3.1 Pursuant to compliance under Condition 7.2.1, PM/PM₁₀ emissions (gr PM/PM₁₀/dscft) since the last report.
 - 27.3.3.3.2 Pursuant to compliance under Condition 7.2.2, for each month since the last report, show the 12-month total PM/PM₁₀ mass emissions ending with that month.
- 27.3.3.4 Emissions from the drying kilns:
- 27.3.3.4.1 Pursuant to compliance under Conditions 8.1.2 and 8.1.3.1, for each month since the last report, show the 12-month total PM/PM₁₀ mass emissions ending with that month.
 - 27.3.3.4.2 Pursuant to compliance with Condition 8.1.3.2, separately show drying kiln loading for each wood species in board feet each day.

- 27.3.3.4.3 Pursuant to compliance under Condition 8.2.3, for each month since the last report, show the 12-month total VOC mass emissions ending with that month.
- 27.3.3.5 Emissions from the anti-mold spray system: Pursuant to compliance under Condition 9.3, for each month since the last report, show the 12-month total VOC mass emissions ending with that month.
- 27.3.3.6 The duration and nature of any CEMS down-time excluding zero and span checks.
- 27.3.3.7 Results of any CEMS audits or accuracy checks.
- 27.3.4 Each occurrence of monitored emissions measured in excess of the limits shall be reported in writing to Ecology and the NWCAA after the respective exceedance in accordance with WAC 173-400-107(3). Such reports shall, as a minimum, include:
 - 27.3.4.1 The time of the occurrence.
 - 27.3.4.2 Magnitude of excess from the emission limit.
 - 27.3.4.3 The duration of the excess.
 - 27.3.4.4 The probable cause.
 - 27.3.4.5 Corrective actions taken or planned.
 - 27.3.4.6 Any other agency contacted.
- 27.4 SPI-Burlington will maintain monitoring, source test, CEM audit tests and process records:
 - 27.4.1 At the Skagit County facility.
 - 27.4.2 For at least five years.
 - 27.4.3 Records of the times and quantity of natural gas used in the wood-fired cogeneration unit.
 - 27.4.4 SPI-Burlington will provide Ecology and the NWCAA with the monitoring and process records for any period within the five year archive, within 10 working days of request.

Standard Requirements

- 28. SPI-Burlington will provide safe access and sampling ports for source testing of the wood-fired cogeneration unit exhaust stack after the final pollution control device:
 - 28.1 Safe access will consist of permanently constructed platforms on the stacks.

- 28.2 The sampling ports will meet the requirements of 40 CFR, Part 60, Appendix A. Method 1.
- 28.3 Other arrangements may be acceptable if approved by Ecology and the NWCAA prior to installation.
29. Operation and maintenance (O&M) manual for the facility:
 - 29.1 Within 90 days of startup, SPI-Burlington will identify operational parameters and practices for the planer mill bag house, drying kilns, anti-mold spray system, and wood-fired cogeneration unit.
 - 29.2 The operational parameters and practices will constitute proper operation relative to compliance with the emission limitation conditions of this permit.
 - 29.3 SPI-Burlington will include these operational parameters and practices in the planer mill bag house, the drying kilns, the anti-mold spray system, and the wood-fired cogeneration unit O&M manuals. As a minimum, and to the extent they relate to the emission limitations specified in the conditions of this PSD permit, these will include:
 - 29.3.1 Inspection and maintenance procedures and schedule.
 - 29.3.2 Prescribed acceptable ranges for operation based on manufacturer recommendations.
 - 29.3.3 Section specifying maintenance and calibration of all required monitors used to assure compliance with the terms and conditions of this PSD permit.
 - 29.4 SPI-Burlington will keep the operational parameters and practices in the O&M manuals up-to-date to reflect any modifications of the equipment or its operating procedures.
 - 29.5 SPI-Burlington will keep the O&M manuals readily available at the facility for review by state, federal, and local agencies.
 - 29.6 Within 30 days of request from Ecology, SPI-Burlington shall submit the O&M manual to Ecology and the NWCAA for approval within the scope of Condition 29.2.
30. Nothing in this determination will be construed so as to relieve SPI-Burlington of its obligations under any state, local, or federal laws or regulations.
31. Subject to RCW 70.94.200, SPI-Burlington will permit the United States Environmental Protection Agency (EPA), state and local regulatory personnel access to the source upon request for the purposes of compliance assurance inspections.
32. This approval will become invalid:

- 32.1 If construction of the project is not commenced within eighteen (18) months after receipt of the final approval, or if construction of the facility is discontinued for a cumulative period of eighteen (18) months. Ecology may extend either 18-month period upon a satisfactory showing by SPI-Burlington that an extension is justified, pursuant to 40 C.F.R. 52.21(r)(2) and applicable EPA guidance.
- 32.1.1 The extension request must be received by the Ecology prior to expiration of the permit.
- 32.1.2 The Best Available Control Technology (BACT) analysis and determination must be updated to current standards.
- 32.1.3 PSD increment consumption and air quality impacts must be reassessed to assure that interim source growth would not materially alter the conclusions made relative to the original permit decision.
- 32.1.4 The decision to extend the permit must be subjected to the same public review and comment procedures as applicable to the original permit.
33. The effective date of this permit shall not be earlier than the date upon which the EPA notifies Ecology that the EPA has satisfied its obligations, if any, under Section 7 of the Endangered Species Act 16 U.S.C. § 1531 et seq., 50 C.F.R. part 402, subpart B (Consultation Procedures) and Section 305(b)(2) of the Magnuson-Stevens Fishery and Conservation Act 16 U.S.C. § 1801 et seq., 50 C.F.R. part 600, subpart K (EFH Coordination, Consultation, and Recommendations).
34. For federal regulatory purposes and in accordance with 40 CFR 124.15 and 124.19: During the public review period for the preliminary determination, any public reviewer may submit a request for a change in any permit condition. If this occurs, the effective date of this permit shall not be earlier than 30 days after service of notice to the commenters and applicant of the final determination accompanied by the associated summary of responses to comments.
- 34.1 If a review of the final determination is requested under 40 CFR 124.19 within the 30-day period following the date of the final determination, the effective date of the permit is suspended until such time as the review and any subsequent appeal against the permit are resolved.
- 34.2 If there was no public comment requesting a change in the preliminary determination or a proposed permit condition during the public review and comment period, this permit is effective upon the date of finalization subject to consideration of Condition 33 (EPA's ESA requirement) above.

Reviewed by:

Bernard Brady, P.E.
Science and Engineering Section
Air Quality Program
Washington State Department of Ecology

Date

Approved by:

Stuart A. Clark, Program Manager
Air Quality Program
Washington State Department of Ecology

Date

Ecology was notified by the EPA that the EPA has satisfied its obligations under the Endangered Species and Magnuson-Stevens Acts relative to this PSD permit on:

Date of EPA notification

Stuart A. Clark, Program Manager
Air Quality Program
Washington State Department of Ecology