

**WASHINGTON DEPARTMENT OF ECOLOGY  
MAIL STOP 47600  
OLYMPIA, WASHINGTON 98504**

IN THE MATTER OF AIR EMISSIONS FROM:

Port Townsend Paper Corporation  
100 Mill Road  
Port Townsend, WA 98368

NOC ORDER No. 2892-05AQ  
Modification 2

### **DESCRIPTION**

The Washington State Department of Ecology (Ecology) originally issued Order 2892-05AQ on August 10, 2006. Order 2892-05AQ modified and replaced Order DE 00AQIS-131 which was issued on March 16, 2000 to consolidate multiple historical orders.

Ecology modified Order 2892-05AQ on April 20, 2010. The modification removed an NSPS sulfur dioxide emission limit for Power Boiler #10. The NSPS emission limit was included in the AOP as an applicable requirement. The modification of Order 2892-05AQ also corrected other minor errors.

On May 6, 2003, Ecology issued Compliance Order 9823 as a result of multiple particulate matter (PM) source test failures at the Recovery Furnace and the Lime Kiln between April 2011 and May 2012. Compliance Order 9823 implemented changes to Recovery Furnace and Lime Kiln compliance methods which included the following requirements: PM source tests must consist of at least three runs of at least one hour per run, source test frequency must be monthly/quarterly, and Recovery Furnace oxygen content must be monitored to help identify leaks. While Compliance Order 9823 is in effect, the conditions in Compliance Order 9823 supersede the overlapping requirements in Order No. 2892-05AQ.

Compliance Order 9823 states that it “terminates upon issuance of the next renewal of the PTPC AOP. The conditions in this Order may be incorporated into the next AOP as updates to the applicable requirements upon which the AOP is based.”

Port Townsend Paper Corporation (PTPC) requested and Ecology has determined that Order No. 2892-05AQ, Modification 1 should be modified to carry forward relevant requirements in Compliance Order 9823, update source testing frequency, and correct additional minor errors.

### **FINDINGS**

Pursuant to New Source Review (NSR) regulations in the Washington Administrative Code (WAC) 173-400-110, 173-400-111 and 173-460-040, and based upon the Order Modification Request submitted by Port Townsend Paper Corporation and the review performed, the Washington State Department of Ecology (Ecology) now finds the following:

1. *Order Modification Request Processing Timeline*

An Order Modification Request dated December 6, 2021 was submitted by PTPC for the modification of Order 2892-05AQ, Modification 1.

2. *Regulatory Requirement – Order Modification*

Per WAC 173-400-111(8), the owner or operator may request, at any time, a change in the conditions of an approval order and the permitting may approve the request provided the permitting authority finds that:

- The change in conditions will not cause the source to exceed an emissions standard set by regulation or rule;
- No ambient air quality standard will be exceeded as a result of the change;
- The change will not adversely impact the ability of the permitting authority to determine compliance with an emission standard;
- The revised order will continue to require BACT for each new source approved by the order except where the Federal Clean Air Act requires LAER; and
- The revised order meets the requirements of WAC 173-400-111, 173-400-112, 173-400-113, 173-400-720, 173-400-830, and 173-460-040, as applicable.

Ecology finds that the above requirements are met by the proposed Order modification.

3. *Changes to Order No. 2892-05AQ, Modification 1*

- Updating Condition 2 to require source testing during representative conditions, consistent with other similar federal requirements.
- The reference to Power Boiler 2 (in Condition 5) has been removed. Power Boiler 2 is not an active emission unit at PTPC as of 2001.
- Condition 6 has been updated to reflect that the submittal of a continuous emission monitoring quality assurance plan has already occurred.
- Condition 7 has been updated to remove repetitive reporting requirements. Reporting requirements were either already contained within the Title V AOP or in Appendix A of this Order.
- Changes to the emissions limit table (Appendix A) include:
  - o Updating the source testing frequency to a minimum annual frequency.
  - o Removing the allowance for one 1-hour tests. Three 1-hours tests are required.
  - o Updated source test reporting requirements.
  - o Updating the Lime Kiln monitoring requirements for TRS and O<sub>2</sub> to provide additional detail.
  - o Addition of Condition C.3 which was previously included in the body of the permit. Inclusion of the condition in the emission limit table will make the requirement more clear and visible.

4. *State Environmental Policy Act (SEPA)*

An environmental checklist was submitted with the NOC Application which considered environmental impacts of the project as required by chapter 43.21C of the Revised Code of Washington (RCW), also known as the State Environmental Policy Act (SEPA). Ecology reviewed the checklist and made a Determination of Nonsignificance (DNS) which was signed on DATE and made available for public comment at the same time as the order.

THEREFORE, it is ordered that PTPC is subject to the conditions listed below.

## CONDITIONS

1. The emission limits specified in Appendix A shall not be exceeded.
2. The emission limits shall be monitored at the monitoring frequency and with the compliance test methods specified in Appendix A. Ecology may approve alternate compliance test methods that are of equivalent stringency for any air pollutant. Compliance monitoring frequency may be adjusted by Ecology depending on compliance history.
3. Performance testing shall be conducted based on representative performance during the period being tested. The owner/operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner/operator shall make available such records as may be necessary to determine the conditions of performance tests.
4. Sampling ports and platforms must be provided for each affected source after the final pollution control device. The ports must meet the requirements of Reference Method 1 of 40 CFR Part 60, Appendix A. Other arrangements may be acceptable if approved by Ecology prior to installation. Adequate permanent and safe access to the test ports must be provided.
5. Average over time specified in emission limits shall be determined by the arithmetic mean of measurements taken during the specified time period.

Compliance with the annual limits for particulates and SO<sub>2</sub> shall be determined by adding the annual emissions from the Recovery Furnace, Smelt Dissolver Tank, Lime Kiln, and Power Boiler 10. Annual emission from an emission unit for measured parameters shall be calculated using the average of test results collected during the year. Annual emissions from an emission unit for unmeasured parameters shall be calculated using emission factors and production data.

6. The Permittee must maintain a continuous emission monitoring quality assurance plan. Ecology may require the continuous emission monitoring quality assurance plan to be periodically updated in the future. The updates shall satisfy 40 CFR Part 60, Appendix F.
7. Data required to demonstrate compliance with emission limits in Appendix A of this order shall be reported to Ecology at least monthly in an approved format. The report shall be submitted no later than 15 days after the end of the calendar month being reported.

For each occurrence of monitored emission or process parameters in excess of the standard, the report shall include the following:

- The time of the occurrence.
  - Magnitude of the emission or process parameters excess.
  - The duration of the excess.
  - The probable cause.
  - Any corrective actions taken or planned.
  - Any other agency contacted.
  - Signature of responsible person.
8. In addition to source test data submitted from the Recovery Furnace, the average opacity occurring during the source test run shall be reported with the results of the source test. Sufficient data from the source test shall be submitted to allow Ecology to make the calculations leading to the source test results. Such data shall be reported for each source test run. The Permittee shall establish a means to determine the flow split between the ESPs. During each source test, the flow split will be determined using this method and will be reported with the source test data.

Black liquor flow rate, density, and percent solids shall be averaged and reported for the period of time of each source test run. As an alternative, the Permittee can estimate the total solids fired during the source test run. Primary and secondary voltage and current, and spark rate (if available) for each TRC unit shall be logged every hour during the source test. This data shall be reported with the source test data.

9. This Condition, issued pursuant to authorities set forth in WAC 173-405-040(4), is not federally enforceable under the Federal Clean Air Act. All noncondensable gases from the digesters, evaporators, and condensate stripper system shall be continuously treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln.

To provide continuous treatment:

- the NCG collection and treatment system shall be properly operated and maintained at all times,
  - venting shall be minimized, and
  - venting necessary for safe/proper system operation and maintenance shall be less than 10 hours per month. Report venting duration and cause in the monthly air report.
10. Wind speed and direction shall be continuously measured and recorded. Any change in location of the sensory equipment shall be approved in advance by Ecology. Monitoring records shall be maintained at the mill.
  11. Operations and maintenance manuals for all equipment that has the potential to affect emissions to the atmosphere shall be developed and followed. Copies of the manuals shall be available to Ecology. Emissions that result from a failure to follow the requirements of the manuals may be considered proof that the equipment was not properly operated and maintained.
  12. Operation of the equipment must be conducted in compliance with all data and specifications submitted as part of the PSD and NOC applications unless otherwise approved by Ecology.
  13. Ecology may modify conditions contained herein based on air quality, emission monitoring results, or upon the request of the Permittee.
  14. Power Boiler 10 shall comply with all the applicable requirements of the New Source Performance Standards for fossil-fuel-fired-steam generators in 40 CFR Part 60, Subpart D.
  15. Any activity or operation, which is undertaken by the Permittee or others, in a manner which is inconsistent with the notice of construction applications received by Ecology, other information submitted to Ecology in reference thereto, and this order, shall be subject to Ecology enforcement under applicable regulation. Nothing in this order shall be construed so as to relieve the Permittee of its obligations under any state, local, or federal laws or regulations.

## **YOUR RIGHT TO APPEAL**

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do both of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

#### ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
<b>Department of Ecology</b> Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	<b>Department of Ecology</b> Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
<b>Pollution Control Hearings Board</b> 1111 Israel Road SW STE 301 Tumwater, WA 98501	<b>Pollution Control Hearings Board</b> PO Box 40903 Olympia, WA 98504-0903

#### MORE INFORMATION

- **Pollution Control Hearings Board**  
[www.eho.wa.gov/Boards\\_PCHB.aspx](http://www.eho.wa.gov/Boards_PCHB.aspx)
- **Chapter 43.21B RCW, Environmental Hearings Office – Pollution Control Hearings Board**  
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice and Procedure**  
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**  
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 70.94 RCW, Washington Clean Air Act**  
<http://apps.leg.wa.gov/RCW/default.aspx?cite=70.94>
- **Air Quality Rules**  
<https://ecology.wa.gov/Air-Climate/Air-quality/Business-industry-requirements/Permits-for-burning-industrial>

**SIGNATURES**

Reviewed by:

Signature Authority:

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Shingo Yamazaki, P.E.  
Environmental Engineer  
Solid Waste Management Program

James DeMay, P.E.  
Industrial Section Manager  
Solid Waste Management Program

Date \_\_\_\_\_

Date \_\_\_\_\_

**APPENDIX A**

**1. RECOVERY FURNACE (RF)**

RF	Parameter	Limit (shall not exceed)	Monitoring & Reporting
A.1	Particulate (PM)	0.08 gr/dscf @ 8% O <sub>2</sub> , 1-hr average	<p><i>Performance Testing:</i>            Sample once per year, at a minimum <sup>1</sup>, using EPA RM 5.</p> <p><i>Reporting:</i>            Submit source test results in the monthly air report and must include the following elements:</p> <ol style="list-style-type: none"> <li>1. Average opacity during each source test run.</li> <li>2. Sufficient data to allow verification of source test results.</li> <li>3. Air flow split between ESP chambers.</li> <li>4. Average black liquor flow rate, density, and % solids during source test.</li> <li>5. As alternative to #4, PTPC can estimate the total solids fired during the source test run.</li> <li>6. Log, every hour during the source test, primary and secondary voltage and current, and spark rate (if available) for each TRC unit.</li> <li>7. Exhaust stack percent O<sub>2</sub>.</li> </ol>
A.2	PM [State-Only Requirement]	0.05 gr/dscf @ 8% O <sub>2</sub> , 1-hour average.	Same as above.



RF	Parameter	Limit (shall not exceed)	Monitoring & Reporting
A.3	Total Reduced Sulfur (TRS) [State-Only Requirement]	5.0 ppm @ 8% O <sub>2</sub> , 24-hour average	<p><i>Monitoring:</i> Monitor continuously using an approved CEMS that conforms to 40 CFR 60, App. F and to App. B, Perf. Spec. 5.</p> <p><i>Reporting:</i> Report calendar day 24-hour averages and exceedances monthly.</p>
A.4	O <sub>2</sub>	No limit - required to correct TRS data	Monitor continuously using an approved CEMS that conforms to 40 CFR 60, App. F and to App. B, Perf. Spec. 3.

1. Ecology may establish more frequent monitoring in the AOP.

**B. LIME KILN (LK)**

LK	Parameter	Limit (shall not exceed)	Monitoring & Reporting
B.1	TRS (as H <sub>2</sub> S)	8 ppm <sub>dv</sub> @ 10% O <sub>2</sub> , 12-hour average	<p><i>Monitoring:</i> Monitor continuously using a CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, PS-5. See Facility-wide General Requirement, Condition 26 for CMS data recovery requirements.</p> <p>Calculate and record on a daily basis 12-hour average TRS and oxygen concentrations pursuant to Condition B.2 for two consecutive periods of each operating day. Each 12-hour</p>

LK	Parameter	Limit (shall not exceed)	Monitoring & Reporting
			<p>average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average TRS concentrations provided by the CEMS using the following equation:</p> $C_{corr} = C_{meas} \times (21 - X) / (21 - Y)$ <p>where:  <i>C<sub>corr</sub></i> = the concentration corrected for oxygen  <i>C<sub>meas</sub></i> = the concentration uncorrected for oxygen  <i>X</i> = the volumetric oxygen concentration in percentage to be corrected to (8 percent for recovery furnaces and 10 percent for lime kilns, incinerators, or other devices)  <i>Y</i> = the measured 12-hour average volumetric oxygen concentration.</p> <p><b>Reporting:</b></p> <p>Report daily maximum concentrations, 12-hr average concentrations, maximum monthly 12-hr concentrations, and exceedances monthly.</p>
B.2	O <sub>2</sub>	No limit – required for O <sub>2</sub> correction	<p>Monitor and record the percent oxygen by volume on a dry basis, using a CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, PS-3.</p> <p>Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations in Condition B.1 and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by the continuous monitoring system.</p>

**C. MILLWIDE**

Millwide	Parameter	Limit (shall not exceed)	Monitoring & Reporting
C.1	PM	729 tons/yr	Compliance determined by adding calendar year emission from all applicable units (see Condition 5). Emissions from a unit for which the pollutant is measured shall be calculated using the average of test results collected during the year. Emissions from a unit for which the pollutant is not measured shall be calculated using emission factors and production data or fuel consumption. Report annually within 30 days of the end of the calendar year.
C.2	SO <sub>2</sub>	1,300 tons/yr	Same as above.
C.3	Pulp Production	N/A	Report average daily production of air dried unbleached pulp from chips and from the OCC process.