



# STATE OF IDAHO

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DEPARTMENT OF HEALTH AND WELFARE

STATEHOUSE  
BOISE, IDAHO 83720

May 6, 1983

Mr. Charles R. Pottenger  
Division Vice-President  
Potlatch Corporation  
P.O. Box 1016  
Lewiston, Idaho 83501

Dear Mr. Pottenger:

This Department has reviewed your January 11, 1983, application pertaining to the construction of a new kraft recovery boiler at your facility in Lewiston, Idaho. The Department is aware of EPA Region 10's determination that they will conduct a PSD review for SO<sub>2</sub>, CO and NO<sub>x</sub> on the proposed project.

This permit allows the construction, start-up, and performance testing of a new recovery boiler, designated as "Number 5 Recovery Boiler" by the applicant, and its associated smelt-dissolving tank.

The Department has determined that the project, as proposed, is capable of complying with applicable state and federal regulations pertaining to particulate emissions. Therefore, this letter shall serve as your Permit to Construct the new kraft recovery boiler (Number 5 Recovery Boiler).

The Permit to Construct is granted in accordance with Section 1-1003 of Rules and Regulations for the Control of Air Pollution in Idaho and is subject to the following general conditions:

1. This permit is non-transferable from person to person, from place to place, or from one piece of equipment to another.
2. The Department may cancel an approval if construction has not begun within two years of the date of issuance or if the work involved is suspended for one year.
3. The facility covered by this permit shall be constructed as specified in the application for Permit to Construct. Any deviation from the plans described in the application will be submitted to and approved by the Air Quality Bureau.

4. This permit (a) shall not in any manner affect the title of the premises upon which the equipment is to be located, (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from or arising out of the design, installation, maintenance, or operation of the proposed equipment, (c) does not release the permittee from compliance with other applicable statutes of the State of Idaho, or with applicable local laws, regulations, or ordinances, (d) in no manner implies or suggests the Department of Health and Welfare, or its officer, agents, or employees, assumes any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from or arising out of design, installation, maintenance, or operation of the proposed equipment.
5. The Department is to be promptly notified of the anticipated date of initial startup of the source not more than sixty (60) days or less than thirty (30) days prior to such date; and a notification of the actual date of initial startup of the source within fifteen (15) days after such date. A representative of the Air Quality Bureau will then inspect the equipment.
6. For the purpose of measuring particulate emissions, the permittee shall install sampling ports in the recovery boiler stack and the smelt dissolving tank vent. Additional ports will be installed for the purpose of continuously monitoring TRS and opacity. Safe access to each port will be provided. Drawings illustrating the locations of these ports and access to them shall be submitted to the Bureau for review and approval before construction of the stack has commenced.
7. Documents for Review.

The following documents shall be submitted for review and approval by the Department as they become available:

- a. Purchase documents which specify emission rates and vendor guarantees of emission rates.
- b. Construction drawings which show the following:
  - 1) Breeching and duct work between the boiler and the precipitator, and means of ensuring uniform gas velocity distribution at the inlet to the precipitator, and
  - 2) Installation and duct work for the smelt dissolving tank vent scrubber.
- c. Descriptions of the precipitator in terms of the number of sections and numbers of fields per section, gas

velocity and residence time through the precipitator, and its process controls.

- d. Descriptions and vendor drawings of the smelt tank vent scrubber, including nature and quantity of scrubbing medium, gas pressure drop through the scrubber, and its process controls.

8. Schedule

By June 1, 1983, the permittee shall provide a schedule to the Air Quality Bureau which lists:

- a. Start of detail engineering
- b. Issuing bid invitation for the electrostatic precipitator and smelt tank vent scrubber
- c. Purchase of the precipitator and scrubber
- d. Start-up of the boiler

9. Criteria

Characteristic design values shall be:

- a. Recovery boiler capacity: 90 tons of black liquor solids per hour
- b. Electrostatic precipitator efficiency: 99.7%
- c. Particulate emission rate: 58 pounds per hour, 0.03 grains per standard dry cubic feet.

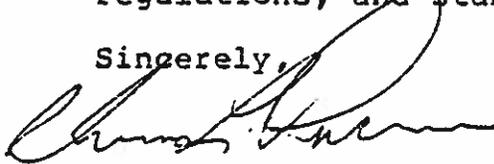
- d. Gaseous emissions:

Sulfur dioxide	200 parts per million, 450 lbs. per hour and 1930 tons per yr.
Carbon Monoxide	1223 lbs. per hour and 5239 tons per yr.
Nitrogen Oxide	321 lbs. per hour and 1375 tons per yr.

- c. Particulate emissions from the smelt dissolving tank vent shall not exceed 10.4 pounds per hour and 45 tons per year.

This permit should not be construed as a waiver of your responsibility to comply with all local, state and federal rules, regulations, and standards.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas L. Purce', written over the word 'Sincerely,'.

THOMAS L. PURCE  
Director

TLP/mg