



# **Air Quality Permitting Response to Public Comments**

**July 17, 2007**

**Permit to Construct / Tier II No. T2-050047**

**Tamarack Mill, LLC dba Evergreen Forests and Tamarack  
Energy Partnership  
New Meadows, Idaho**

**Facility ID No. 003-00001**

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AIR QUALITY DIVISION

**Final**

## 1. BACKGROUND

As deemed appropriate by the Director, the Idaho Department of Environmental Quality (DEQ) provided for public comment the proposed Permit to Construct / Tier II Operating Permit T2-050047 for Tamarack Mills, LLC dba Evergreen Forests and Tamarack Energy Partnership located in New Meadows, Idaho.

DEQ provided a comment period from April 13, 2007 through May 14, 2007. Comments were provided via fax. Each comment and DEQ's Response is provided in the following section. Comments with a common theme have been grouped together as one comment and responded to as one comment. All comments submitted in response to DEQ's proposed action are included as the appendix of this document.

## 2. PUBLIC COMMENT AND RESPONSES

Public comments regarding the permit analysis and air quality aspects of the proposed permit stated in its entirety below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the proposed permit are not addressed.

### Comments Received

**Comment 1:** Title Page: This permit is proposed to be a combined Permit to Construct (PTC) and a Tier II Operating Permit.

We understand that the details of this permit will be solidified with the PTC. Therefore, we don't see the need for this permit to also be a Tier II Operating Permit, which would have an expiration date and require a regular permitting action to maintain in the future. We request that this permit be issued as PTC only.

Response: The entire facility operates under a Tier I Operating Permit. The Tier II operating permit is a result of the compliance section of the Tier I operating permit. After the issuance of the PTC/Tier II permit the Tier I operating permit will be modified to incorporate the terms and requirements of the PTC/Tier II operating permit. After the modified Tier I is issued the facility will operate under the Tier I operating permit only until future permitting action is warranted.

**Comment 2:** Section 3.1. The Tamarack Energy Partnership Cogeneration Unit produces electricity from a steam powered turbine. Steam is produced in a wood-fired boiler capable of producing 72,000 pounds of steam per hour.

This appears to be a statement of fact, and not a permit condition. The boiler/cogeneration unit was built by Yanke. It was originally estimated to have a capacity of 66,000 pounds of steam per hour. After operation and subsequent analysis by Yanke during maintenance, they informed staff that the unit could operate for some time at close to 80,000 pound of steam per hour. While 72,000 pound of steam per hour is probably realistic for a long term average, the unit is capable of operating for short periods at slightly higher steaming rates. IDEQ inspectors have in the past checked hourly steaming rates. For that reason, Tamarack requests that the wording in the second sentence be changed to say "capable of operating at a steaming rate of 72,000 pounds per hour."

Response: The second sentence will be changed to state "capable of operating at an average steaming rate of 72,000 pounds per hour."

**Comment 3:** Section 3.6. The boiler should not operate for more than 8,600 hours in any consecutive 12-month period.

The annual impact analysis was based upon PTE. The PTE calculations assumed 8,600 hours at full capacity. The facility has an energy contract that encourages it to operate the equipment as continuously as it can, though actual operating rates are typically well below the potential rates assumed in the PTE calculations. Therefore, we recommend that rather than limiting the hours of operation, the permit limit be in pound of steam produced annually consistent with 8,600 hours of operation at 72,000 pounds of steam per hour. That would translate to a permit limit of 619.2 million pounds of steam per year.

Response: The operating limit of 8,600 hours in any consecutive 12-month calendar period will be change to a limit of 619.2 million pounds of steam produced in any consecutive 12-calendar month period

**Comment 4:** Section 3.11. PM and PM<sub>10</sub> Performance Test

The boiler emissions are controlled with a wet scrubber. EPA test methods are not definitive for PM<sub>10</sub> from wet exhaust systems. Therefore, we request that this section and all subsequent references to any particulate source tests state only a PM source test, and all references to PM<sub>10</sub> source test(s) be removed.

Response: The NAAQS standard is in reference to PM<sub>10</sub>. EPA has referred a procedure to account for PM<sub>10</sub> from a wet exhaust system. EPA suggests using a Method 5 and Method 202 and all particulate matter collected is considered PM<sub>10</sub>. Therefore, PM<sub>10</sub> will be the pollutant of interest and of the limit stated in the permit.

**Comment 5:** Section 3.12. CO Performance test

We believe that a CO source test was included in this permit primarily because the emission inventory submitted with the permit application included numerous CO emission rates based upon old and new source test and a literature search for generic boilers. The old 1993 source test data and the literature reference for generic boilers (not this specific unit) showed CO PTE approaching the major source threshold. The boiler operations have been refined since 1993. The most recent source test showed CO PTE only half of the major source threshold. Source test results for the same boiler at Plummer Forest Products confirm that the CO emissions rates from this boiler are well below those that would approach the major source threshold.

CO source tests are expensive. Our estimates from our tester is that it would cost approximately \$1,500 using a Enterac wet cell analyzer. The boiler has an oxygen meter. Boiler operators monitor exhaust oxygen levels and log them hourly. Exhaust oxygen concentrations track consistently with CO, each be indicators of combustion efficiency. We recommend that because the most recent source test on this unit and the only similar unit we are familiar with in the area both show no reason to believe that CO emissions will approach the major source thresholds, the facility be required to track oxygen levels daily, and only be required to perform a CO test using an Enterac unit (or equivalent) if quarterly average CO levels estimated consistent with calculations in the O & M manual exceed a rate consistent with a CO PTE on 200 ton per year.

Response: The permit was based on the CO emissions claimed in the application. The CO emissions stated were 241.9 tons per year. The test on May 23, 2002 as referred to in the comment had a test protocol submitted to DEQ for PM and VE only. The PM test was to use Method 5 and Method 202 for the wet scrubber stack. The test protocol was approved by DEQ on May 20, 2002. A search of the Tamarack file at DEQ did not indicate a test protocol for a CO test was submitted. DEQ has a set procedure for a test assessment and qualifying emission rates. This was not a CO test with an approved protocol or a DEQ approved test review. However if the test results from the required test in the permit were to be as low as indicated in the 2002 test summary sheet submitted with the application the facility would be subject to only one CO test. The comments indicate the facility wishes to monitor combustion efficiency with an O2 sensor and recording system. This may be something the facility would like to add to the test protocol to assist the facility in its compliance and assurance program.