STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMMISSIONER

**Boralex Fort Fairfield LP**
**Aroostook County**
**Fort Fairfield, Maine**
**A-181-75-H-X**

**Departmental**
**Findings of Fact and Order**
**Sales and Use Tax and Property Tax**
**Exemption Certification**

After review of the tax exemption certification application and supporting documents, pursuant to Maine's Sales and Use Tax Law, 36 M.R.S.A. § 1760(30), and Property Tax Law, §§ 655(1)(N) and 656(1)(E)(2), and the Department of Environmental Protection's (Department) *Rules for the Processing of Applications*, 06-096 CMR 2, the Department has considered the application of Boralex Fort Fairfield LP (Boralex), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

## 1. APPLICATION SUMMARY

### A. History

Boralex Fort Fairfield LP (Boralex) owns and operates an electrical generation facility located in Fort Fairfield, Maine. Operation of this facility requires Department licensing of, among other things, air pollutant emissions.

### B. Application

On October 6, 2011 Boralex filed an application seeking property, sales and use tax exemption for the following equipment:

1. Fuel Conveyor Covers
2. Traveling Boiler Grate
3. Steam Coil Air Heater
4. Low Pressure Feedwater Heater (2)
5. High Pressure Feedwater Heater (2)
6. Mechanical (Multicyclone) Dust Collector
7. Electrostatic Precipitator (ESP)
8. Ash Conveyor Covers
9. Ash Storage Facility (Ash Silo)
10. Fly Ash Conditioning System

The application was deemed complete for processing by the Department on October 31, 2011.

## 2. OTHER FINDINGS

### A. Decision Obligations.

Pursuant to the Property Tax Law, 36 M.R.S.A. § 656(3), the Department shall issue a determination by April 1st regarding certification for any air or water pollution control facility for which it has received a complete application by December 15th of the preceding year. Pursuant to the Department's *Rules for the Processing of Applications*, 06-096 CMR 2.14(1) and (2), this Decision shall set forth a findings of fact with sufficient explanation to make interested persons aware of the basis for the determination that the applicant has met the licensing criteria set forth in the appropriate statute or rule; or deny the application and set forth in the findings the explanation for the basis of the disapproval.

In making tax exemption certification decisions, the Department's responsibility is to determine whether an item is eligible for certification pursuant to the laws of the State of Maine. In a case where an exemption certification is approved, Maine Revenue Service has the responsibility of auditing receipts and determining the amount of reduction of sales and use tax liability. Municipal tax assessors perform the same function regarding property tax.

### B. Industrial Air Pollutants.

CO, $NO_x$, and Particulate Matter are industrial air pollutants as defined in the Department's *Emission Statements* Rule, 06-096 CMR 137.

### C. Decision Making Process.

The decision as to whether a facility is eligible for exemption is made by determining the facility's "primary purpose". That determination is made as follows:

1. If the facility serves no pollution control function, then the primary purpose is not pollution control and the exemption is denied.
2. If the facility serves dual or multiple <u>functions</u>, the "primary" <u>function</u> must be determined.
3. If the facility's only <u>function</u> or its primary <u>function</u> is pollution control, then the primary purpose of the facility is pollution control and exemption must be granted.
4. If pollution control is merely a secondary function, then other factors, including taxpayer <u>motivation</u>, must be considered.

5. If the primary motivation for installation of the facility is pollution control, then the Department may conclude that the primary purpose is pollution control and exemption may be granted.
6. If neither the primary function nor the primary motivation is determined to be pollution control, then the primary purpose cannot be pollution control and the exemption is denied.

## D. Primary Function.

The following pieces of equipment were found to have a primary function of air pollution control.

1. Fuel Conveyor Covers are metal shrouds installed on all out door wood fuel conveyors. The purpose of the shrouds is to minimize fugitive dust emissions associated with conveyance of the wood fuel from the fuel yard, via the reclaimer to enclosed day bin located in the boiler building. The Department has determined that the primary function of the dust control equipment is pollution control.

   This dust control equipment is not a facility "such as an air conditioner, dust collector, fan or similar facility designed, constructed or installed solely for the benefit of the person for whom installed or the personnel of such person" (or company) and they were not designed or installed for the reduction or control of automobile exhaust emissions.

2. A split style Travelling Boiler Grate with equalization dampers is installed in the combustion boiler. The split style grate allows for independent control of each grate via independent grate drive mechanisms. This provision enhances control of fuel distribution, which promotes full and even combustion of the biomass fuel and reduces $NO_x$ and CO emission formation. The split style travelling grate is also equipped with equalization dampers located in the partition between the grates. Equalization dampers also reduce $NO_x$ and CO formation by equally distributing the under-grate-air supply to each travelling grate. By controlling the under-grate-air in this manner, an even bed of burning fuel is produced and pockets of rich/lean fuel on the grates are minimized. This control mechanism reduces $NO_x$ and CO emissions and promotes full, even and complete combustion of the biomass fuel. The Department has determined that the primary function of this equipment is pollution control.

3. The main purpose of the Mechanical (Multicyclone) Dust Collector is to reduce air pollution through mechanically pre-treating the combustion gases by removing particulate matter using centrifugal force before exhausting to the

electrostatic precipitator. Particulate collected in the multicyclone falls into one of four multicyclone ash hoppers and is conveyed to the ash silo via a drag chain style enclosed ash conveyor. The Department has determined that the primary function of this dust collector is pollution control.

This dust control equipment is not a facility "such as an air conditioner, dust collector, fan or similar facility designed, constructed or installed solely for the benefit of the person for whom installed or the personnel of such person" (or company) and they were not designed or installed for the reduction or control of automobile exhaust emissions.

4. The main purpose of the Electrostatic Precipitator (ESP) is to remove the remaining small entrained particulate from the combustion gases leaving the mechanical dust collector before they exit through the stack to the atmosphere. ESPs use electrical energy to charge the ash particles which are then attracted to collection electrodes that have a lesser charge (electrostatic precipitation). Particulate is removed from the collection electrodes by automatically shutting off the energy supply to the collection electrodes and rapping the field, causing the particulate to fall into one of the six ash hoppers and be conveyed to the ash silo via one of the tow drag chain style, enclosed ash conveyors. The ESP is located between the mechanical dust collector and the stack. It is configured with two chambers which run parallel with the combustion gas flow and three fields which run perpendicular to the chambers. The Department has determined that the primary function of this equipment is pollution control.

5. The main purpose of the Ash Conveyor Covers is to minimize fugitive dust emissions as the dry ash is being conveyed from the ash hoppers located under the air heater, mechanical dust collector, and ESP. The Department has determined that the primary function of these covers is pollution control.

6. The enclosed Ash Storage Facility (Ash Silo) is a common storage facility for all flyash collected from the mechanical dust collector and ESP. It provides temporary storage for the dry ash (approximately 6 hours). The silo is equipped with a vibratory mechanism and rotary valve to facilitate removal of the ash from the silo into the conditioning system. The Department has determined that the primary function of this silo is pollution control.

7. The main purpose of the Fly Ash Conditioning System is to condition (humidify and mix) the ash with water to prevent live ember formation and minimize fugitive emissions. The dry ash stored in the ash silo is discharged through a rotary valve into a screw conveyor. Water is applied through spray nozzles while the ash travels along the screw conveyor. The conditioned ash discharges directly into a container mounted on the body of the ash transport

truck. The Department has determined that the primary function of this conditioning system is pollution control.

**E. Primary Motivation.**

Boralex provided no motivation for installation for any of the equipment listed in section 1.B.

**F. Ineligible equipment.**

The following pieces of equipment were found to have neither a primary function of air pollution control nor a primary motivation for installation of air pollution control.

1. The main purpose and function of the Steam Coil Air Heater is to preheat air entering the air heater in order to rise the average cold end temperature to prevent dew point corrosion under startup and low load conditions. It is located in the duct between the FD fan and the main air heater.

2. Two Low Pressure Feedwater Heaters of the tube and shell type are installed in the feedwater system. The source of steam of each low pressure feedwater heater is derived from steam extracted once the steam has given up some of its useful energy in the preceding turbine stage to drive the turbine. The primary purpose of the low pressure feedwater heaters is to take advantage of waste heat to increase the combustion unit's efficiency.

3. Two High Pressure Feedwater Heater of the tube and shell type are installed in the feedwater system. The source of steam of each high pressure feedwater heater is derived from steam extracted once the steam has given up some of its useful energy in the preceding turbine stage to drive the turbine. The primary purpose of the high pressure feedwater heaters is to take advantage of waste heat to increase the combustion unit's efficiency.

Based on the Findings of Fact in this Order, the Department makes the following CONCLUSION:

1. The Department hereby finds that the equipment listed in Section 2.D above are air pollution facilities qualifying for an exemption from property tax pursuant to 36 M.R.S.A., Section 656 (1)(E)(2).

2. The Department hereby finds that the equipment listed in Section 2.D above are air pollution facilities qualifying for an exemption from sales and use tax pursuant to 36 M.R.S.A., Section 1760 (30).

3. The Department hereby finds that the equipment listed Section 2.F above are not air pollution facilities qualifying for an exemption from property tax pursuant to 36 M.R.S.A., Section 656 (1)(E)(2).

4. The Department hereby finds that the equipment listed in Section 2.F above are not air pollution facilities qualifying for an exemption from sales and use tax pursuant to 36 M.R.S.A., Section 1760 (30).

THEREFORE, the Department APPROVES the equipment as explained above as described in the application of Boralex.

DONE AND DATED IN AUGUSTA, MAINE, THIS 13th DAY OF December 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie L. Loyzim for
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/11/11
Date of application acceptance: 10/31/11

Date filed with the Board of Environmental Protection: Filed DEC 14 2011 State of Maine Board of Environmental Protection

This Order prepared by Kristen M. Colby, Bureau of Air Quality.