



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

September 11, 1996

CERTIFIED MAIL

RE: Permit to Operate Application No 0243081114B002

Borlin Company Greenhouses
Lou Borlin
9885 Johnnycake Ridge
Mentor, Ohio 44060

Enclosed are Permit(s) to Operate which allow you to operate the described air contaminant source(s) in the manner indicated in the permit(s). Because these permits contain several conditions and restrictions, I urge you to read them carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact the air pollution control agency to which you submitted your application.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA
NORTHEAST DISTRICT OFFICE/DAPC

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director



PERMIT TO OPERATE AN AIR CONTAMINANT SOURCE

Date of Issuance **September 11, 1996** Application No. **0243081114B002**

Effective Date **September 11, 1996** Permit Fee **\$000**

This document constitutes issuance to: **BORLIN COMPANY GREENHOUSES
9885 JOHNNYCAKE RIDGE
MENTOR, OHIO 44060**

of a permit to operate for:
**CLIFF MODEL 10837 UNDERFEED STOKER
COAL BOILER**

The following terms and conditions are hereby expressly incorporated into this permit to operate:

1. This permit to operate shall be effective until **09/11/99**
You will be contacted approximately six months prior to this date regarding the renewal of this permit. If you are not contacted, please write to the appropriate Ohio EPA field office.
2. The above-described source is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.
3. Prior to any modification of this source, as defined in rule 3745-31-01 of the Ohio Administrative Code (OAC), a permit to install must be granted by the Ohio EPA pursuant to OAC Chapter 3745-31.
4. The Director of the Ohio EPA or an authorized representative may, subject to the safety requirements of the permit holder, enter upon the premises of this source at any time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit.
5. A permit fee in the amount specified above must be remitted within 15 days from the issuance date of this permit.
6. Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA field office must be notified in writing of any transfer of this permit.
7. This source and any associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices in order to minimize air contaminant emissions. Any malfunction of this source or any associated air pollution control system(s) shall be reported immediately to the appropriate Ohio EPA field office in accordance with OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this source.
8. Any unauthorized or emergency release of an air contaminant from this source which, due to the toxic or hazardous nature of the material, may pose a threat to public health, or otherwise endanger the safety or welfare of the public, shall be reported immediately to the appropriate Ohio EPA field office (during normal business hours) or to the Ohio EPA's Emergency Response Group (1-800-282-9378). (Additional reporting may be required pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act)
9. The appropriate Ohio EPA field office is: **NORTHEAST DISTRICT OFFICE/DAPC
2110 EAST AURORA ROAD
TWINSBURG, OHIO 44087 (216) 425-9171**

10. If this term and condition is checked, the permit holder is subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Director

APPLICATION NUMBER: 02-43-08-1114 B002
FACILITY NAME: BORLIN COMPANY GREENHOUSES
EQUIPMENT DESCRIPTION: CLIFF MODEL 10837 UNDERFEED STOKER
COMPANY ID: COAL BOILER

SPECIAL TERMS AND CONDITIONS

A) APPLICABLE STATE REGULATIONS:

The following rules of the Ohio Administrative Code (OAC) establish the applicable emission limitations and/or control requirements of this source:

OAC Rule 3745-17-07(A)
OAC Rule 3745-17-10(C)
OAC Rule 3745-18-04
OAC Rule 3745-15-06
OAC Rule 3745-35-07

(This condition in no way limits the applicability of other requirements of the Ohio Administrative Code to this source.)

B) ALLOWABLE EMISSIONS LIMITS:

1. Per OAC Rule 3745-17-10(C) (1), Figure I, the particulate emissions from this emissions unit shall not exceed 0.40 pound per million Btu (mmBtu) of heat input. Annual particulate emissions shall not exceed 1.60 pounds per hour or 7.01 tons per year.
2. Sulfur dioxide (SO₂) emissions from this facility shall not exceed 99.01 tons per year. SO₂ emissions from this single coal-fired emissions unit (B002) shall not exceed 5.65 pounds per million Btu of heat input or 99.00 tons per year. (See "Federally Enforceable Emission Requirements for Sulfur Dioxide" below.)

C) GENERAL SOURCE OPERATING RESTRICTIONS:

1. The maximum heat input to this source shall not exceed 4.0 mmBtu per hour, the maximum rated capacity of this boiler.
2. The steam injection system shall be used at all times during operation of this source.
3. The use of flyash reinjection in this source is prohibited.
4. This source shall employ an overfire air system which is designed, maintained, and operated in accordance with good engineering practices and which minimizes visible emissions.

D) PARTICULATE/VISIBLE EMISSION RESTRICTIONS

This source shall comply with OAC Rule 3745-17-07(A), which limits visible particulate emissions as follows:

1. Except as provided below, visible particulate emissions from the stack shall not exceed an opacity of twenty (20) percent as a six-minute average.
2. Visible particulate emissions from the stack may exceed twenty (20) percent as a six-minute average for not more than six (6) consecutive minutes in any sixty-minute period, but shall not exceed sixty (60) percent opacity at any time.

The visible particulate emission limitations specified above shall not apply to the following operations, provided the operations are documented in a boiler operations log kept at the facility:

- a) The start-up of the source for a period of time required to achieve stable combustion conditions, but no more than three (3) hours from the moment of start-up. "Start-up" means the commencement of firing of fuel from a cold non-fired condition.
- b) The shutdown of the source for a period of not more than three (3) hours.

- c) The malfunction of the source or associated equipment, if the owner of the source or operator of the equipment complies with the requirements of OAC Rule 3745-15-06.
- d) Intermittent soot-blowing operations (the cleaning of heat transfer surfaces with pressurized air or steam).
- e) Intermittent ash removal operations (the dumping or pulling of ash).
- f) The commencement of increased coal firing from a banked condition for a period not to exceed thirty (30) minutes. "Banked condition" means the condition where the fuel is burned on the grates at rates which are sufficient to maintain ignition only.

This boiler operations log shall clearly document the date, beginning time, and ending time of the exempted operations listed above.

E) FEDERALLY ENFORCEABLE EMISSION REQUIREMENTS FOR SULFUR DIOXIDE:

The total annual emissions of SO₂ from all emissions units at this facility shall be limited to 99.01 tons. Since another minor source at this facility (a gas fired boiler, source B001, with a maximum heat input rate of 3.4 million Btu per hour) has maximum annual potential SO₂ emissions of 0.01 tons per year, the annual allowable emissions from this coal fired source (B002) shall not exceed 99.00 tons. This annual sulfur dioxide emissions limitation on source B002 shall be achieved by restricting the sulfur content in the coal supply of this source during the entire year (8760 hours) in the following manner.

The quality of coal burned in this source shall meet the following specifications on a dry basis:

- 1) a sulfur content which is sufficient to comply with an allowable sulfur dioxide emission limitation of 5.65 pounds of sulfur dioxide per million Btu actual heat input;
- 2) less than 8.0 percent ash; and

3 greater than 13,000 Btu per pound coal.

Compliance with the above-mentioned specifications for sulfur, ash, and heat content shall be determined by using the analytical results provided by the coal supplier for each shipment of coal. The analytical methods for sulfur content, ash content, and heat content in coal shall be: ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM Method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; ASTM Method D3174, Ash in the Analysis Sample of Coal and Coke; ASTM Method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM Method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM Method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isooperibol Calorimeter, respectively.

The owner/operator of this source shall notify the Ohio EPA immediately if the fuel quality restrictions above are exceeded.

F) RECORDKEEPING REQUIREMENTS:

This facility shall maintain the following records for this emissions unit, in addition to those records referred to paragraph "D" above:

1. For each shipment of coal, the quantity of coal received as well as the results of the coal suppliers analyses for the coal shipment received on both an "as received" and "dry basis". Data recorded shall include;
 - a) the total quantity of coal received in each shipment (tons),
 - b) the sulfur content (percent of the coal received in each shipment,
 - c) the ash content (percent of the coal received in each shipment,

- d) the heat content (Btu per pound) of coal received in each shipment, \
- e) the sulfur dioxide emission rate (pounds SO₂ per million Btu actual heat input) from coal received in each shipment.
- f) Monthly calculations of the weighted average SO₂ emission rate, ash content, and heat content for the coal received each calendar month.

Compliance with the applicable SO₂ emission limit, as well as the ash and Btu limitations, shall be determined based on the weighted arithmetic average of all fuel analyses for each calendar month.

[NOTE: A weighted average fuel quality value is determined by multiplying each fuel analysis value (Btu/pound, percent ash, or SO₂ emission rate) by the weight of the shipment of fuel for which the quality value is representative, adding up all the value-weighted products, and dividing the sum of the value-weighted products by the sum of all the shipment weights.]

These records, as well as any other supporting analyses, computations, operations logs, and fuel receipts, shall be retained on site in facility files for a period of not less than five (5) years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

G. REPORTING REQUIREMENTS:

- 1 The owner/operator of this source shall notify the Ohio EPA immediately if any of the restrictions in the "Federally Enforceable Requirements for Sulfur Dioxide" are exceeded.
- 2) This facility shall submit semi-annual reports to the Ohio EPA, Northeast District Office, which provide the following information for this source:

- a) The total quantity of coal received during each calendar month;
- b) The weighted average ash content (percent) of the coal received during each calendar month;
- c) The weighted average heat content (Btu per pound) of the coal received during each calendar month;
- d) The weighted average SO₂ emission rate (pounds SO₂ per mmBtu actual heat input) for the coal received during each calendar month;
- e) A copy of the coal supplier's analyses for each coal shipment received during the reporting period.

All fuel analyses data shall be reported on both an as received and a dry basis.

These reports shall be submitted by February 15 and August 15 of each year and shall cover operations for the previous six calendar months (July through December and January through June).

All reports required by these terms and conditions shall be sent to:

Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087
Phone: (216) 963-1200

H) FEDERAL ENFORCEABILITY:

Sections B(2), E, F, and G of these Special Terms and Conditions constitute the federally enforceable portions of this Permit to Operate.

Prepared by: F. T. Mueller

Date Prepared: June 6, 1996