



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

07/31/00

CERTIFIED MAIL

01-23-00-0005
Ohio Paperboard Corporation
Ed Ortman
310 Water Street
Baltimore, OH 43105-1272

RE: Final Chapter 3745-35 Permit To Operate

Dear Ed Ortman:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, 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 Review Appeals Commission 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 Review Appeals Commission 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 Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact the Central District Office at (614) 728-3778.

Very truly yours,

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

cc: Central District Office
Becky Castle, DAPC PMU

PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 07/31/00

Facility ID: 01-23-00-0005

Expiration Date: 07/31/05

FINAL ISSUE

This document constitutes issuance for:

Ohio Paperboard Corporation
310 Water Street
Baltimore, OH 43105-1272

of a permit to operate for:

B003 (Boiler #1)
Natural gas fired 184 MMBtu/Hr boiler with No. 2 oil backup

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

4. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

5. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable 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. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

6. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of 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 emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permittee. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

10. The permittee is also subject to the attached special terms and conditions.

The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

Central District Office
3232 Alum Creek Drive
PO Box 1049
Columbus, OH 43216-1049
(614) 728-3778

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the Central District Office.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in cursive script, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
180 MMBtu/hr natural gas fired boiler with no. 2 fuel oil back-up	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per MMBtu of actual heat input.
	OAC rule 3745-18-06(D)	The limits of this rule are less strict than the limitations established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-35-07	NOx emissions shall not exceed 99.85 tons per year as a rolling 12-month summation.
		CO emissions shall not exceed 76.49 tons per year as a rolling 12-month summation.
		SO2 emissions shall not exceed 18.19 tons per year as a rolling 12-month summation.
	40 CFR 60 subpart Db	NOx emissions shall not exceed 0.20 lb/MMBtu actual heat input when firing natural gas.
	Visible particulate emissions shall not exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity, except during periods of startup, shutdown or malfunction.	
	The sulfur content of the oil burned in this emissions unit shall not exceed 0.5% by weight.	
OAC rule 3745-31-05	NOx emissions shall not exceed 0.35 pound per MMBtu when firing no. 2 fuel oil.	
PTI 01-4384	CO emissions shall not exceed 0.16 pound per MMBtu when firing natural gas.	
	CO emissions shall not exceed 0.18 pound per MMBtu when firing no. 2 fuel oil.	
	OC emissions shall not exceed 0.02 pound per MMBtu when firing either natural gas or no. 2 fuel oil.	
	SO2 emissions shall not exceed 0.5 pound per MMBtu of heat input when firing no. 2 fuel oil.	

2. Additional Terms and Conditions

None

B. Operational Restrictions

1. The quality of oil burned in this emissions unit shall meet, on an as-received basis, a sulfur content that will allow compliance with the maximum sulfur dioxide emission limitation of 0.5 lb SO₂/MMBtu actual heat input. Compliance shall be demonstrated using analytical results provided by the permittee or oil supplier for each shipment of oil.
2. The actual operating rate for this emissions unit shall not exceed 108.2 MMBtu/hr.
3. The maximum annual natural gas consumption rate for B003 shall not exceed 880 million cubic feet, based upon a rolling, 12-month summation.
4. The maximum annual no. 2 fuel oil consumption rate for B003 shall not exceed 500,000 gallons, based upon a rolling, 12-month summation.
5. At no time shall the steam flow rate from B003 exceed 100,000 pounds per hour (as an average over any one-hour period).
6. For the purpose of demonstrating compliance during the first 12 calendar months of operation covered by this permit, the rolling 12-month natural gas/fuel oil usages (gallons/rolling 12-month period) and SO₂/NO_x/CO emissions shall be based upon the actual fuel (oil/natural gas) usages during the 12-month period prior to issuance of this permit.
7. The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emission unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon receiving written approval from Ohio EPA.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain the following records:
 - a. the total quantity of fuel oil received in each shipment (gallons);
 - b. the permittee's or fuel oil supplier's analysis for sulfur content (percent by weight);
 - c. the permittee's or fuel oil supplier's analysis for heat content (Btu/gallon); and
 - d. the calculated sulfur dioxide emission rate (pounds SO₂ per MMBtu actual heat input) of the fuel oil received in each shipment.
3. The permittee shall maintain monthly records of the following:
 - a. the fuel oil usage (gallons);
 - b. the rolling 12-month summation of the fuel oil usage (gallons);
 - c. the natural gas usage (cubic feet); and
 - d. the rolling 12-month summation of the natural gas usage (cubic feet).
4. The permittee shall continuously monitor and record the steam flow rate from B003. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that document all exceedances of the rolling 12-month natural gas and number 2 fuel oil consumption usage limitations specified above.
2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons); and
 - b. the weighted* average sulfur dioxide emission rate (pounds/MMBtu) for the oil received during each calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

3. The permittee shall submit annual reports that contain the following information:
 - a. the total amount of natural gas burned (cubic feet);
 - b. the total amount of no. 2 fuel oil burned (gallons); and
 - c. the total emissions of NOx, CO, and SO2.

Each report shall be submitted by February 15 of each year and shall cover the previous calendar year.

4. If for any reason the steam flow rate from B003 exceeds 100,000 pounds per hour, the following information shall be reported within 5 business days after the exceedance:
 - a. the date of the exceedance;
 - b. the time interval over which the exceedance occurred;
 - c. the value of the exceedance;
 - d. the cause(s) of the exceedance;
 - e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and
 - f. a copy of the steam chart which shows the exceedance.
5. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be demonstrated by the method specified in OAC rule 3745-17-03(B)(1).

E. Testing Requirements (continued)

- 1.b** Emission Limitation:
Particulate emissions shall not exceed 0.020 pound per MMBtu of actual heat input.

Applicable Compliance Method:

For the use of natural gas, compliance shall be determined by multiplying the maximum gas burning capacity of the emissions unit (108,200 CF/hr) by the AP-42 (Fifth Edition) emission factor for natural gas combustion (1.9 lbs/MMCF) and dividing by the maximum heat input capacity of the emissions unit (108.2 MMBtu/hr). For the use of number two fuel oil, compliance shall be determined by multiplying the maximum allowable capacity of the emissions unit (799 gallons/hr) by the AP-42 (Fifth Edition) emission factor for number two fuel oil (0.252 lbs/thousand gallons) and dividing by the maximum allowable burning capacity of the emissions unit (108.2 MMBtu/hr).

- 1.c** Emission Limitation:
SO₂ emissions shall not exceed 0.5 pound per MMBtu when firing #2 fuel oil.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping and reporting requirements in Sections C.2 and D.2, respectively, using the applicable equation in OAC rule 3745-18-04(F).

- 1.d** Emission Limitation:
NO_x emissions shall not exceed 99.85 tons per year as a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined through the following method:

The total volume of natural gas used for the rolling 12-month period (MMCF/12-month period) shall be multiplied by 1,000 Btu/CF and the natural gas combustion emission limitation of 0.20 lb NO_x/MMBtu. The total volume of fuel oil used for the 12-month period (gallons/12-month period) shall be multiplied by 135,382 Btu/gallon. The product shall be divided by 1,000,000 to convert to MMBtu and then multiplied by the fuel oil combustion emission limitation of 0.35 lb/MMBtu. The calculated emissions from natural gas combustion and fuel oil combustion shall be added and then divided by 2000 lbs/ton to obtain the total NO_x emissions (tons NO_x/12-month period).

- 1.e** Emission Limitation:
CO emissions shall not exceed 0.16 pound per MMBtu when firing natural gas.

Applicable Compliance Method:

Within 60 days of permit expiration, the permittee shall conduct, or have conducted, emission tests for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for carbon monoxide. The carbon monoxide tests shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 10 of 40 CFR Part 60, Appendix A" while the emissions unit is operating at or near maximum capacity. See E.2.

- 1.f** Emission Limitation:
CO emissions shall not exceed 0.18 pound per MMBtu when firing no. 2 fuel oil.

Applicable Compliance Method:

Within 60 days of permit expiration, the permittee shall conduct, or have conducted, emission tests for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for carbon monoxide. The carbon monoxide tests shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 10 of 40 CFR Part 60, Appendix A" while the emissions unit is operating at or near maximum capacity. See E.2.

E. Testing Requirements (continued)

- 1.g** Emission Limitation:
OC emissions shall not to exceed 0.02 pound per MMBtu at any time.

Applicable Compliance Method:

For the use of natural gas, compliance shall be determined by multiplying the allowable gas burning capacity of the emissions unit (108,200 CF/hr) by the AP-42 (Fifth Edition) emission factor for natural gas combustion (5.8 lbs/MMCF) and dividing by the maximum heat input capacity of the emissions unit (108.2 MMBtu/hr). For the use of number two fuel oil, compliance shall be determined by multiplying the maximum allowable capacity of the emissions unit (799 gallons/hr) by the AP-42 (Fifth Edition) emission factor for number two fuel oil (0.2 lbs/thousand gallons) and dividing by the allowable burning capacity of the emissions unit (108.2 MMBtu/hr).

Emission Limitation:

NOx emissions shall not exceed 0.20 pound per MMBtu when firing natural gas.

Applicable Compliance Method:

Within 60 days of permit expiration, the permittee shall conduct, or have conducted, emission tests for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for nitrogen oxides. The nitrogen oxides tests shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 7 of 40 CFR Part 60, Appendix A" while the emissions unit is operating at or near maximum capacity. See E.2.

- 1.** Emission Limitation:
SO2 emissions shall not exceed 18.19 tons per year per rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined through the following method:

The total volume of natural gas used for the rolling 12-month period (MMCF/12-month period) shall be multiplied by 1,000 Btu/CF and the natural gas combustion emission limitation of 0.001 lb SO2/MMBtu. The total volume of fuel oil used for the 12-month period (gallons/12-month period) shall be multiplied by 0.071 lb SO2/gallon. The calculated emissions from natural gas combustion and fuel oil combustion shall be added and then divided by 2000 lbs/ton to obtain the total SO2 emissions (tons SO2/12-month period).

- 1.j** Emission Limitation:
NOx emissions shall not exceed 0.35 pound per MMBtu when number 2 fuel oil is used.

Applicable Compliance Method:

Within 60 days of permit expiration, the permittee shall conduct, or have conducted, emission tests for this emissions unit in order to demonstrate compliance with the allowable mass emission rates for nitrogen oxides. The nitrogen oxides tests shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 7 of 40 CFR Part 60, Appendix A" while the emissions unit is operating at or near maximum capacity. See E.2.

- 1.k** Emission Limitation:
CO emissions shall not exceed 76.49 tons per year per rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be determined through the following method:

The total volume of natural gas used for the rolling 12-month period (MMCF/12-month period) shall be multiplied by 1,000 Btu/CF and the natural gas combustion emission limitation of 0.16 lb CO/MMBtu. The total volume of fuel oil used for the 12-month period (gallons/12-month period) shall be multiplied by 135,382 Btu/gallon. The product shall be divided by 1,000,000 to convert to MMBtu and then multiplied by the fuel oil combustion emission limitation of 0.18 lb/MMBtu. The calculated emissions from natural gas combustion and fuel oil combustion shall be added and then divided by 2000 lbs/ton to obtain the total CO emissions (tons CO/12-month period).

E. Testing Requirements (continued)

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

1. In accordance with OAC rule 3745-35-07, sections A - F of these terms and conditions constitute the federally enforceable portions of this permit.