



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL
BUTLER COUNTY**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05186

DATE: 8/16/2001

Packaging Corporation of America
Howard Lanier
PO Box 127
Middletown, OH 45042

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it 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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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. 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

Very truly yours,

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

cc: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 8/16/2001
Effective Date: 8/16/2001**

FINAL PERMIT TO INSTALL 14-05186

Application Number: 14-05186
APS Premise Number: 1409010942
Permit Fee: **\$200**
Name of Facility: Packaging Corporation of America
Person to Contact: Howard Lanier
Address: PO Box 127
Middletown, OH 45042

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1824 Baltimore Street
Middletown, Ohio**

Description of proposed emissions unit(s):
16.34 mmbtu Flue-Gas Recirculation Boiler.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. 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.)

3. 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 this permit. Such records may be maintained in computerized form.

4. 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 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.

5. 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 units 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 the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

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

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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Facility ID: 1409010942

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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Issued: 8/16/2001

Facility ID: 1409010942

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
NO _x	2.90
CO	6.01
SO ₂	20.58
PM/PM ₁₀	0.58
OC	0.79

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B001 - 16.34 MMBtu/hour natural gas/No. 2 oil fired boiler with low NOx burners and flue-gas recirculation	OAC rule 3745-31-05(A)(3)	OAC rule 3745-18-06(D)

40 CFR Part 60 Subpart Dc

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-10(B)(1)

Packa**PTI A****Issued: 8/16/2001**Emissions Unit ID: **B001**

Applicable Emissions
Limitations/Control Measures

See term C.1.

NOx: 0.071 lb/MMBtu, 2.90 TPY

CO: 0.084 lb/MMBtu, 6.01 TPY

SO₂: 0.50 lb/MMBtu , 20.58 TPYPM/PM10* : 0.014 lb/MMBtu,
0.58 TPY

OC: 0.011 lb/MMBtu, 0.79 TPY

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR Part 60 Subpart Dc.

* Assume all PM emissions are PM10 emissions

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the limited hours of operation when burning #2 fuel oil, emissions limitations, low NOx burners and flue gas recirculation.

2.b The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

1. The permittee shall burn only natural gas and /or number two fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 pound sulfur dioxide/MMBtu actual heat input.

Compliance with the above-mentioned specification shall be determined using the analytical results provided by the permittee or oil supplier for each shipment of oil.

3. The maximum annual operating hours when burning number two fuel oil in this emissions unit shall not exceed 5000 hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the quantity of natural gas and/or #2 fuel oil burned in this emissions unit.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the name of the oil supplier, the total quantity of oil received, the permittee's or oil supplier's analysis for sulfur content, heat content and the calculated SO₂ emission rate [the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-01(F)].
3. The permittee shall maintain monthly records of the operating hours when burning number two fuel oil for this emissions unit.

D. Reporting Requirements

1. 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) 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);
 - b. the weighted* average sulfur content (percent by weight) for the oil received during each calendar month;
 - c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month; and
 - d. the weighted* average SO₂ emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month [the SO₂ emission rate shall be calculated as specified in OAC 3745-18-04(F)].

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

These quarterly reports shall be submitted to the Hamilton County Department of Environmental Services 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.

2. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date);
 - d. Date of performance testing (if required, at least 30 days prior to testing);
 - e. The design heat input capacity of the emissions unit and the type of fuel to be combusted; and
 - f. The annual capacity factor at which the permittee anticipates operating the emissions unit.

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

3. The permittee shall submit annual reports which identify the annual operating hours when burning number two fuel oil for this emissions unit. This report shall also include the SO₂ emissions for the previous calendar year. These report shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emissions limits in term A.1 shall be demonstrated by the emissions factors in AP-42, Tables 1.3-1 and 1.3-3 revised 9/98 and AP-42, Tables 1.4-1 and 1.4-2 revised 7/98 and stated emissions factors from US EPA Fire 6.22 for low NO_x burners with flue gas recirculation.
2. Compliance with the visible particulate emission limitation in term A.1. shall be demonstrated by Method 9, 40 CFR Part 60 Appendix A.
3. Compliance with the sulfur dioxide emission limitation in term B.2. shall be demonstrated by the recordkeeping in term C.2.
4. Compliance with the hours of operation limit in term B.3 shall be demonstrated by the record keeping in term C.3.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 14-05186 Facility ID: 1409010942

FACILITY NAME Packaging Corporation of America

FACILITY DESCRIPTION 16.34 mmbtu Flue-Gas Recirculation Boiler. CITY/TWP Middletown

SIC CODE 2653 SCC CODE 10200602 EMISSIONS UNIT ID B001

EMISSIONS UNIT DESCRIPTION 16.34 MMBtu gas/No. 2 oil fired boiler with low NOx burners and flue-gas recirculation

DATE INSTALLED 10/01

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.014 lb/MMBtu	0.065	0.014 lb/MMBtu	0.58
PM ₁₀	Attainment	0.014 lb/MMBtu	0.065	0.014 lb/MMBtu	0.58
Sulfur Dioxide	Attainment	0.50 lb/MMBtu	0.021	0.50 lb/MMBtu	20.58
Organic Compounds	Attainment	0.011 lb/MMBtu	0.38	0.011 lb/MMBtu	0.79
Nitrogen Oxides	Attainment	0.071 lb/MMBtu	1.09	0.071 lb/MMBtu	2.90
Carbon Monoxide	Attainment	0.084 lb/MMBtu	2.88	0.084 lb/MMBtu	6.01
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NPS 40 CFR Part 60 NESHAP? No PSD? No OFFSET POLICY? No
 Subpart Dc

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT is the use of natural gas and low sulfur oil as back-up fuel, hours of operation limit and low NOx burners and flue gas recirculation .

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? NA

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: NA

NEW SOURCE REVIEW FORM B

PTI Number: 14-05186 Facility ID: 1409010942

FACILITY NAME Packaging Corporation of America

FACILITY DESCRIPTION 16.34 mmbtu Flue-Gas Recirculation Boiler. CITY/TWP Middletown

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to airpti@epa.state.oh.us

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

PTI 14-05186

Packaging Corporation of America
1824 Baltimore Street
Middletown, Ohio 45044

PN: 1409010942

This application is for the installation of a 16.34 MMBtu/hr natural gas/No. 2 fuel oil-fired boiler with low NOx burners and flue-gas recirculation at Packaging Corporation of America in Middletown, Ohio. This boiler will produce steam to moisten corrugated packaging materials and will operate primarily on natural gas with #2 fuel oil as a backup fuel.

Emissions from this source will be comprised only of the products of combustion.

Applicable rules are OAC 3745-17-07(A)(1), 3745-17-10(B)(1), 3745-18-06(D) and 40 CFR Part 60, Subpart Dc.

BAT is use of natural gas as the primary fuel and low sulfur fuel oil as back-up fuel and the use of low NOx burners and flue gas recirculation.

Allowable emissions are based on maximum potential emissions operating 8760 hours per year using natural gas or 5000 hours a year using #2 fuel oil.

Pollutant	Allowable Lbs/MMBtu	Allowable Tons/Year
NOx	0.071	2.90 based on limited oil use

NEW SOURCE REVIEW FORM B

PTI Number: 14-05186 Facility ID: 1409010942

FACILITY NAME Packaging Corporation of America

FACILITY DESCRIPTION	16.34 mmbtu Flue-Gas Recirculation Boiler.	CITY/TWP	Middletown
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CO	0.084	6.01	based on potential gas use
SO2	0.50	20.58	based on limited oil use
PM/PM10	0.014	0.58	based on limited oil use
OC	0.011	0.79	based on potential gas use

The emissions unit will be in compliance with all applicable regulations. Approval of this PTI application is recommended.

Permit Fee for fuel burning equipment 10-99 mmbtu/hr using exclusively natural gas or #2 fuel oil is \$200. (based on fee of \$400 assessed X ½ for using exclusively natural gas or No. 2 fuel oil)

Prepared By: Michael Ploetz
Date Prepared : August 10, 2001

Please complete for these type permits ([For PSD/NSR Permit, place mouse over this text](#)):

Synthetic Minor Determination and/or Netting Determination
Permit To Install ENTER PTI NUMBER HERE

- A. [Source Description](#)
- B. [Facility Emissions and Attainment Status](#)
- C. [Source Emissions](#)
- D. [Conclusion](#)

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	2.90
CO	6.01
SO2	20.58
PM/PM10	0.58
OC	0.79