



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov.  
Center

**RE: DRAFT PERMIT TO INSTALL MODIFICATION  
FRANKLIN COUNTY  
Application No: 01-06662**

**CERTIFIED MAIL**

**DATE: 6/5/2001**

Inland Products Inc  
Al Bordelon  
Post Office Box 2228  
Columbus, OH

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **\$ 400** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

cc: USEPA

CDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT MODIFICATION OF PERMIT TO INSTALL 01-06662**

Application Number: 01-06662  
APS Premise Number: 0125040083  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Inland Products Inc  
Person to Contact: Al Bordelon  
Address: Post Office Box 2228  
Columbus, OH 432162228

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**599 Frank Rd  
Columbus, Ohio**

Description of proposed emissions unit(s):  
**99.99 MMBTU multi fuel fired boiler.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Director

**Inland Products Inc**  
**PTI Application: 01-06662**

**Facility ID: 0125040083**

**Issued: To be entered upon final issuance**

## **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

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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

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lead to such sanctions

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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.

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**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit..

#### **14. Construction Compliance Certification**

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**

**Pollutant**

**Tons Per Year**

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NOx	83.2 tpy
CO	35.1 tpy
OC	10.1 tpy
Particulate	9.2 tpy
SO2	93.8 tpy

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Facility ID: 0125040083

Emissions Unit ID: B006

**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.

Operations, Property,  
and/or Equipment

Applicable Rules/Requirements

B006 - 99.99 MMBtu/hr steam boiler burning reclaimed number four fuel oil, number two fuel oil, natural gas and recycled cooking oil (modification)	OAC rule 3745-31-05(A)(3)
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NSPS 40 CFR 60, Subpart Dc

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

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

Emissions Unit ID: **B006**

OAC rule 3745-17-10(C)(1)	<p><u>Applicable Emissions                  Limitations/Control Measures</u></p>	OC emissions shall not exceed 2.3 lbs/hr and 10.1 tons/year.
OAC rule 3745-18-06(D)	<p>When burning natural gas:                  NOx emissions shall not exceed 4.76 lbs/hr and 20.9 tons/year.                  CO emissions shall not exceed 8.0 lbs/hr and 35.1 tons/year.                  OC emissions shall not exceed 1.05 lbs/hr and 4.6 tons/year.</p>	<p>Particulate emissions shall not exceed 0.83 lbs/hr and 3.7 tons/year.                  SO<sub>2</sub> emissions shall not exceed 0.9 lbs/hr and 4.0 tons/year.</p>
OAC rules 3745-21-08(B) and 3745-23-06(B)	<p>When burning number two fuel oil:                  NOx emissions shall not exceed 14.8 lbs/hr and 25.0 tons/year.                  CO emissions shall not exceed 3.7 lbs/hr and 6.3 tons/year.                  Particulate emissions shall not exceed 1.5 lbs/hr and 2.5 tons/year.                  SO<sub>2</sub> emissions shall not exceed 52.5 lbs/hr and 88.7 tons/year.</p> <p>When co-firing reclaimed number four fuel oil and natural gas:                  NOx emissions shall not exceed 9.0 lbs/hr and 36.0 tons/year.                  CO emissions shall not exceed 6.18 lbs/hr and 24.8 tons/year.                  OC emissions shall not exceed 0.69 lbs/hr and 2.7 tons/year.                  Particulate emissions shall not exceed 2.29 lbs/hr and 9.2 tons/year.                  SO<sub>2</sub> emissions shall not exceed 23.4 lbs/hr and 93.8 tons/year.</p>	<p>0.5 lb of sulfur dioxide per mmBtu per hour when burning fuel oil or combustion of oil with less than or equal to 0.5 weight percent sulfur.</p>
	When burning recycled cooking oil:	<p>Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.</p>
	<p>NOx emissions shall not exceed 19.0 lbs/hr and 83.2 tons/year.                  CO emissions shall not exceed 0.74 lbs/hr and 3.3 tons/year.</p>	<p>Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input for natural gas and no. 2 fuel oil.</p> <p>Particulate emissions shall not exceed 0.20 lb/mmBtu of actual heat input for reclaimed number four fuel oil and recycled cooking oil.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to NSPS 40 CFR 60, Subpart Dc.</p> <p>None, see Section A.I.2.a below.</p>

**2. Additional Terms and Conditions**

- 2.a** The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively.
- 2.b** To comply with the 0.20 lb particulate per mmBtu per hour emission limit, in any given hour when combusting reclaimed number four fuel oil in this emissions unit, the permittee shall also co-fire natural gas fuel. No more than 42.2% of the total actual hourly heat input of the boiler shall be contributed by combusting number four fuel oil.
- 2.c** Recycled cooking oil, for the purposes of this permit, shall be defined as plant or animal oils and greases which were originally formulated as edible oils, meaning fit for human consumption or for use by the food preparation industry, and have been reclaimed for use as an industrial boiler fuel.

**B. Operational Restrictions**

1. The permittee shall burn only natural gas, number two fuel oil, reclaimed number four fuel oil and recycled cooking oil in this emissions unit.
2. The maximum heat input to this emissions unit shall not exceed 99.99 mmBtu per hour.
3. Reclaimed number four fuel oil shall be co-fired with natural gas in this emissions unit at all times. The source shall not combust more than 312.3 gallons of reclaimed number four fuel oil in any one hour. Reclaimed number four fuel oil shall not be fired by itself.
4. The maximum annual consumption of reclaimed number four fuel oil and number two fuel oil for this emissions unit combined shall not exceed 2,498,237 gallons based upon a rolling 12 month summation of the gallons of fuel burned.
5. The quality of the number two and reclaimed number four fuel oil burned in this emissions unit shall meet the following specifications on an "as burned" basis:
  - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limit of 0.5 pounds of sulfur dioxide per mmBtu actual heat input per hour; or
  - b. a sulfur content which is equal to or less than 0.5 weight percent sulfur; and
  - c. a heat value of the oil burned which is not lower than 135,000 Btu/gallon of oil.

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6. All reclaimed number four fuel oil burned in this emissions unit shall meet the following specifications:

<u>Contaminant/Property</u>	<u>Allowable Concentration</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	50 ppm, maximum
total halogens	1000 ppm, maximum
mercury	1 ppm, maximum
flash point	100° F, minimum
heat content	135,000 Btu/gallon, minimum

Ohio EPA may obtain oil samples for analysis or may require the permittee to have oil samples analyzed for the above parameters. If the permittee is required to analyze one or more oil samples, the analyses shall be conducted by an independent laboratory.

7. The permittee shall operate and maintain the continuous opacity monitoring system equipment to continuously monitor and record the opacity of the particulate matter from this emissions unit. The continuous emissions monitor shall be operated in accordance with the applicable procedures under 40 CFR Part 60, Performance Specification 1 (Appendix B) and the Quality Assurance Plan for the Continuous Emission Monitoring System submitted to Ohio EPA by Inland Products January 11, 2000. The emissions monitoring system shall be operated at all times the emissions unit is in operation.

### **C. Monitoring and/or Recordkeeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, number two fuel oil, reclaimed number four fuel oil and/or recycled cooking oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain daily records of the following information:
  - a. the quantity of reclaimed number four fuel oil combusted every hour and the percentage of the total actual hourly heat input that is contributed by co-firing reclaimed number four fuel oil with natural gas;

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- b. the daily number two fuel oil consumption (gallons) and associated heat input (mmBtu) for each day;
- c. the daily recycled cooking oil consumption (gallons) and associated heat input (mmBtu) for each day;
- d. the natural gas consumption (mmscf) and associated heat input (mmBtu) each day; and
- e. beginning after the first 12 months of operation following the issuance of this permit, the rolling 12 month summation of number two and reclaimed number four fuel usage.

Also, during the first 12 months of operation after the issuance of this permit, the permittee shall record the cumulative number two and reclaimed number four fuel usage combined for each calendar month.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of reclaimed number four and number two fuel oil that is received for burning in this emissions 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 written approval by the Ohio EPA, Central District Office.
4. For each shipment of reclaimed number four and number two fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of reclaimed number four and number two fuel oils.
5. The permittee shall collect a representative grab sample of recycled cooking oil to be burned as fuel in this emissions unit on a monthly basis and perform laboratory analysis for heat content and sulfur content. The permittee shall maintain monthly records for each analysis performed.
6. The permittee shall maintain a record of the name of each facility where the recycled cooking oil is collected for use as fuel in this emissions unit. The record shall be made maintained on site and available to Ohio EPA upon request.
7. The permittee shall maintain daily records which document any time periods when the continuous

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opacity monitoring system was not in service and the emissions unit was in operation.

8. The permittee shall maintain records for all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) basis.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify each day when a fuel other than natural gas, reclaimed number four fuel oil, number two fuel oil, and/or recycled cooking oil was burned in this emissions unit.
2. The permittee shall submit quarterly deviation (excursion) reports which identify each day during which records were not maintained on the amount of natural gas, reclaimed number four fuel oil, number two fuel oil, and/or recycled cooking oil burned in this emission unit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify any record showing an exceedance of the 0.5 lb SO<sub>2</sub>/mmBtu limitation and/or any instance in which the quality of reclaimed number four or number two fuel oil, as received, contains greater than 0.5% sulfur by weight.
4. The permittee shall submit quarterly deviation (excursion) reports which identify any monthly laboratory analysis record for recycled cooking oil which shows an exceedance of 0.5 lb SO<sub>2</sub>/mmBtu or any instance in which the quality of the recycled cooking oil, as analyzed pursuant to Section C.5. above, contains greater than 0.5% sulfur by weight.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month number two and reclaimed number four fuel oil usage limitations, and for the first 12 calendar months of operation after the issuance of this permit, all exceedances of the maximum monthly allowable cumulative oil usage levels.
6. The permittee shall submit quarterly deviation (excursion) reports which identify any daily record showing that the continuous opacity monitoring system was not in service and the emissions unit was in operation. The reports shall include the date, time and duration the monitoring system was not in operation while the emissions unit was in operation along with reasons for the deviation and corrective actions taken.
7. The permittee shall submit quarterly deviation (excursion) reports which identify any recorded data obtained by the continuous opacity monitoring system which exceeds the opacity limitations specified in Section II.A above. The reports shall include the following information:

- a. date and time of exceedance;
- b. duration of exceedance (in minutes);
- c. opacity values (percent) of each six minute block average that exceeds the limitation;
- d. reason for exceedance (if known); and
- e. corrective actions taken (if any).

**E. Testing Requirements**

1. Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:  
 When burning natural gas:  
 NOx emissions shall not exceed 4.76 lbs/hr and 20.9 tons/year.  
 CO emissions shall not exceed 8.0 lbs/hr and 35.1 tons/year.  
 OC emissions shall not exceed 1.05 lbs/hr and 4.6 tons/year.

Applicable Compliance Method:

Compliance with the above hourly limits shall be determined by multiplying the maximum amount of natural gas burned per hour (95,228 cubic feet) by the appropriate AP-42 emission factor listed in the table below.

<u>Pollutant</u>	<u>Emission Factor</u>	<u>AP-42</u>
NOx	50 lb NOx/10 <sup>6</sup> scf	Table 1.4-1 for natural gas (7/98)
CO	84 lb CO/10 <sup>6</sup> scf	Table 1.4-1 for natural gas (7/98)
OC	11 lb OC/10 <sup>6</sup> scf	Table 1.4-1 for natural gas (7/98)

Compliance with the annual limits shall be determined by multiplying the pounds per hour emission rate calculated above by the total amount of natural gas burned per year recorded pursuant to Section II.C.2. above. The resulting product shall be divided by 2000 lbs/ton to obtain tons/year.

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7E for NOx, Method 10 for CO and Methods 18, 25, or 25A for OC. Alternative EPA approved test methods may be used with prior approval from the Ohio

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- b. Emission Limitation:  
 When burning number two fuel oil:  
 NOx emissions shall not exceed 14.8 lbs/hr and 25.0 tons/year.  
 CO emissions shall not exceed 3.7 lbs/hr and 6.3 tons/year.  
 Particulate emissions shall not exceed 1.5 lbs/hr and 2.5 tons/year.  
 SO<sub>2</sub> emissions shall not exceed 52.5 lbs/hr and 88.7 tons/year.

Applicable Compliance Method:

Compliance with the above hourly limits shall be determined by multiplying the maximum amount of number two fuel oil burned per hour (740 gallons) by the appropriate AP-42 emission factor listed in the table below.

<u>Pollutant</u>	<u>Emission Factor</u>	<u>AP-42</u>
NOx	20 lb NOx/10 <sup>3</sup> gal	Table 1.3-1 for distillate (9/98)
CO	5 lb CO/10 <sup>3</sup> gal	Table 1.3-1 for distillate (9/98)
OC	.252 lb OC/10 <sup>3</sup> gal	Table 1.3-3 for distillate (9/98)
Particulate	2 lb PE/10 <sup>3</sup> gal	Table 1.3-1 for distillate (9/98)
SO <sub>2</sub>	142 lb SO <sub>2</sub> /10 <sup>3</sup> gal x (.5)*	Table 1.3-1 for distillate (9/98)

\* The AP-42 emission factor must be multiplied the sulfur content of the number two fuel oil (.5 is the maximum allowable sulfur content for this emissions unit).

Compliance with the annual limits shall be determined by multiplying the pounds per hour emission rate calculated above by the total amount of number two fuel oil burned per year recorded pursuant to Section II.C.2. above. The resulting product shall be divided by 2000 lbs/ton to obtain tons/year.

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7E for NOx, Method 10 for CO, Methods 18, 25, or 25A for OC, Method 5 for particulate and Method 6C for SO<sub>2</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

- c. Emission Limitation:  
 When co-firing reclaimed number four fuel oil and natural gas:  
 NOx emissions shall not exceed 9.0 lbs/hr and 36.0 tons/year.  
 CO emissions shall not exceed 6.18 lbs/hr and 24.8 tons/year.

OC emissions shall not exceed 0.69 lbs/hr and 2.7 tons/year.  
 Particulate emissions shall not exceed 2.29 lbs/hr and 9.2 tons/year.  
 SO<sub>2</sub> emissions shall not exceed 23.4 lbs/hr and 93.8 tons/year.

Applicable Compliance Method:

Compliance with the above hourly limits shall be determined by multiplying the maximum amount of number four fuel oil co-fired with natural gas per hour (312 gallons at 42.2%) by the appropriate AP-42 emission factor listed in the table below. The product should be added to the emissions from the co-firing of natural gas determined by multiplying the amount of natural gas co-fired per hour (55,041 cubic feet at 57.8%) by the appropriate AP-42 emission factor listed above in Section II.E.1.a.

<u>Pollutant</u>	<u>Emission Factor</u>	<u>AP-42</u>
NOx	20 lb NOx/10 <sup>3</sup> gal	Table 1.3-1 for number 4 oil (9/98)
CO	5 lb CO/10 <sup>3</sup> gal	Table 1.3-1 for number 4 oil (9/98)
OC	.252 lb OC/10 <sup>3</sup> gal	Table 1.3-3 for number 4 oil (9/98)
Particulate	7 lb PE/10 <sup>3</sup> gal	Table 1.3-1 for number 4 oil (9/98)
SO <sub>2</sub>	150 lb SO <sub>2</sub> /10 <sup>3</sup> gal x (.5)*	Table 1.3-1 for number 4 oil (9/98)

\* The AP-42 emission factor must be multiplied the sulfur content of the number four fuel oil (.5 is the maximum allowable sulfur content for this emissions unit).

Compliance with the annual limits shall be determined by multiplying the pounds per hour emission rates calculated above by the total amount of reclaimed number four fuel oil and co-fired natural gas burned per year recorded pursuant to Section II.C.2. above. The resulting product shall be divided by 2000 lbs/ton to obtain tons/year.

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7E for NOx, Method 10 for CO, Method 25A for OC, Method 5 for particulate and Method 6C for SO<sub>2</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. Emission Limitation:  
 When burning recycled cooking oil:  
 NOx emissions shall not exceed 19.0 lbs/hr and 83.2 tons/year.  
 CO emissions shall not exceed 0.74 lb/hr and 3.3 tons/year.  
 OC emissions shall not exceed 2.3 lbs/hr and 10.1 tons/year.  
 Particulate emissions shall not exceed 0.83 lb/hr and 3.7 tons/year.  
 SO<sub>2</sub> emissions shall not exceed 0.9 lb/hr and 4.0 tons/year.

**Inland****PTI****Issued: To be entered upon final issuance**Emissions Unit ID: **B006**Applicable Compliance Method:

The hourly emissions for this emissions unit were determined by stack testing conducted on February 22 and 23, 2001 (report submitted to OEPA, CDO April 17, 2001). The emissions limitations represent the maximum hourly emissions recorded during the testing. The following table of emission factors shall be used to determine annual emissions for recycled cooking oil.

<u>Pollutant</u>	<u>Emission Factor</u>	<u>EPA Test Method (40 CFR Part 60)</u>
NOx	19.0 lbs NOx/hr	Method 7E
CO	0.742 lb CO/hr	Method 10
OC	2.3 lbs CO/hr	Method 25A
Particulate	0.83lbs PE/hr	Method 1 - 5
SO <sub>2</sub>	0.9 lbs SO <sub>2</sub> /hr	Method 6C

Compliance with the annual limits shall be determined by multiplying the pounds per hour emission rate listed above by the total amount of recycled cooking oil burned per year recorded pursuant to Section II.C.2. above. The resulting product shall be divided by 2000 lbs/ton to obtain tons/year.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7E for NOx, Method 10 for CO and Methods 18, 25, or 25A for OC, Method 5 for particulate and Method 6C for SO<sub>2</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

- e. Emission Limitation:  
0.5 lb of sulfur dioxide per mmBtu per hour when burning fuel oil or combustion of oil with less than or equal to 0.5 weight percent sulfur.

Applicable Compliance Method:

The record keeping requirements in Section II.C.4. of this permit shall be used to determine compliance with the above limitations.

Compliance with the reclaimed number four fuel oil sulfur limit shall be determined on a 30-day rolling average basis. The initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the stream generating unit to immediately after the fuel tank is filled and before any oil is combusted. Inland Products, Inc. shall analyze the oil sample prior to combustion. If a partially empty fuel tank is

Emissions Unit ID: **B006**

refilled, a new sample and analysis of the fuel in the tank would be required upon filling.

Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, Inland Products, Inc. shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent or less.

- f. Emission Limitation:  
 Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- g. Emission Limitation:  
 0.020 pound of particulate emissions per MMBtu of actual heat input for natural gas and number 2 fuel oil.

Applicable Compliance Method -

For natural gas, compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (95,228 cubic ft/hr) by 1.9 lb/million cubic feet (the emission factor from "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for natural gas combustion) and dividing by the maximum heat input capacity of the emissions unit (99.9 mmBtu/hr).

For number two fuel oil, compliance shall be determined by multiplying the maximum hourly number two fuel oil usage (740 gal/hr) by 2 lbs/1000 gallons (the emissions factor from "Compilation of Air Pollutant Emission Factors", Table 1.3-1 (9/98) for distillate oil) and dividing by the maximum heat input capacity of the emissions unit (99.9 mmBtu/hr).

- h. Emission Limitation:  
 Particulate emissions shall not exceed 0.20 lb/mmBtu of actual heat input for reclaimed number four fuel oil and recycled cooking oil.

Applicable Compliance Method -

For reclaimed number four fuel oil, compliance shall be determined by multiplying the maximum amount of number four fuel oil burned per hour (312 gallons) by 7 lbs/1000

**Inlan****PTI /**Emissions Unit ID: **B006****Issued: To be entered upon final issuance**

gallon (the emission factor from AP-42, Table 1.3-1 (9/98) for number four fuel) and dividing by the maximum heat input capacity of the emissions unit of 99.9 mmBtu/hr.

For recycled cooking oil, compliance shall be determined by multiplying the hourly emission factor of 0.83 lb particulate/hour (obtained through emission testing date above) and dividing by the maximum heat input capacity of the emissions unit of 99.9 mmBtu/hr.

**F. Miscellaneous Requirements**

1. The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation(Subpart)</u>
B006	99.99 mmBtu/hr boiler	Dc

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

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); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Ohio Environmental Protection Agency  
DAPC - Central District Office  
3232 Alum Creek Drive  
Columbus, OH 43207



**Inland Products Inc**  
**PTI Application: 01-06662**  
**Issue: To be entered upon final issuance**

**Facility ID: 0125040083**

Emissions Unit ID: **B006**

Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other/misc.	<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](#)

## ADMINISTRATIVE MODIFICATION inter-office communication

**to:** DAPC, Air Quality Modeling and Planning

**from:** Kelly Meinzer, DAPC-CDO

**subject:** Administrative Modification of Permit To Install (01-06662) for Inland Products, Inc.

**date:** April 2, 2001

Choose one:

Initiated by:

Permittee

DO/laa

This modification is the result of an appeal to the Environmental Review Appeals Commission

***Please fill out the following:***

**SUMMARY (for informational purposes only)**

**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	83.2
CO	35.1
OC	10.1
Particulate	9.2
SO2	93.8

***Please provide a fairly detailed description of the basis for the modification and how the permit is being modified:***

**Inland Products Inc**  
**PTI Application: 01-06662**  
**Issued: To be entered upon final issuance**

**Facility ID: 0125040083**

Emissions Unit ID: **B006**

Inland Products requested an administrative modification to PTI #01-6662, issued August 6, 1997, because they are planning to burn recycled cooking oil (RCO) as fuel in their 99 mmBtu/hr boiler (B006). The originally issued permit limits Inland Products to burning number 2 fuel oil, number 4 fuel oil, landfill gas and natural gas only. The emissions from RCO were determined through a stack test conducted on February 22 and 23, 2001 and were used to determine hourly and annual emissions limitations for the modified permit. The results of the stack test indicated that emissions from RCO will be decreased for all pollutants except for OC, which has the potential to increase emissions by approximately six tons/year. Because the overall decreases in NOx and CO outweighed the slight increase in OC, it was determined by a letter issued by the director on April 6, 2001 that the project would be considered "environmentally beneficial" and would therefore not be considered a "modification" under OAC rule 3745-31-01(KK).

The modified permit allows Inland Products to burn the RCO and provides a specific emissions limit for each type of fuel that may be burned in the boiler. The permit was updated with the most current language but no major changes were made to the content except for the removal of landfill gas as a potential fuel. Landfill gas has never been utilized at the facility and there are no plans to burn it as fuel in the future.

***Additional comments:***

If there are any questions, please contact Kelly Meinzer at (614) 728-5043.

Calculations

Natural Gas:

*NOx:*

Hourly:  $50 \text{ lb NOx}/10^6 \text{ scf (AP-42, Table 1.4-1 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 4.76 \text{ lb NOx/hr}$

Annual:  $(4.76 \text{ lb NOx/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 20.85 \text{ ton NOx/yr}$

*CO:*

Hourly:  $84 \text{ lb CO}/10^6 \text{ scf (AP-42, Table 1.4-1 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 8.0 \text{ lb CO/hr}$

Annual:  $(8 \text{ lb CO/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 35.04 \text{ ton CO/yr}$

*OC:*

Hourly:  $11 \text{ lb OC}/10^6 \text{ scf (AP-42, Table 1.4-2 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 1.05 \text{ lb OC/hr}$

Annual:  $(1.05 \text{ lb OC/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 4.6 \text{ ton OC/yr}$

*Particulate:*

Hourly:  $1.9 \text{ lb PE}/10^6 \text{ scf (AP-42, Table 1.4-2 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 0.18 \text{ lb PE/hr}$

Annual:  $(0.18 \text{ lb PE/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.79 \text{ ton PE/yr}$

*SO<sub>2</sub>:*

Hourly:  $0.6 \text{ lb SO}_2/10^6 \text{ scf (AP-42, Table 1.4-2 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 0.06 \text{ lb SO}_2/\text{hr}$

Annual:  $(0.06 \text{ lb SO}_2/\text{hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.26 \text{ ton SO}_2/\text{yr}$

Number 2 Fuel Oil:

*NOx:*

Hourly:  $20 \text{ lb NOx}/1000 \text{ gal (AP-42, Table 1.3-1 for Distillate, 9/98)} \times (740 \text{ gal/hr}) = 14.8 \text{ lb NOx/hr}$

Annual:  $(20 \text{ lb NOx}/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 24.98 \text{ ton NOx/yr}$

*CO:*

Emissions Unit ID: **B006**

Hourly: 5 lb CO/1000 gal (AP-42, Table 1.3-1 for Distillate, 9/98) x (740 gal/hr) = 3.7 lb CO/hr

Annual: (5 lb CO/1000 gal) x (2,498,237 gal/yr) x (1 ton/2000 lbs) = 6.25 tons CO/yr

*OC:*

Hourly: .252 lb OC/1000 gal (AP-42, Table 1.3-3 for Distillate, 9/98) x (740 gal/hr) = .09 lb OC/hr

Annual: (.252 lb OC/1000 gal) x (2,498,237 gal/yr) x (1 ton/2000 lbs) = 0.32 ton OC/yr

*Particulate:*

Hourly: 2 lb PE/1000 gal (AP-42, Table 1.3-1 for Distillate, 9/98) x (740 gal/hr) = 1.48 lb PE/hr

Annual: (2 lb PE/1000 gal) x (2,498,237 gal/yr) x (1 ton/2000 lbs) = 2.5 ton PE/yr

*SO<sub>2</sub>:*

Hourly: 142 lb SO<sub>2</sub>/1000 gal (AP-42, Table 1.3-1 for Distillate, 9/98) x (.5 = sulfur content limit) x (740 gal/hr) = 52.54 lb SO<sub>2</sub>/hr

Annual: (142 lb SO<sub>2</sub>/1000 gal) x (0.5) x (2,498,237 gal/yr) x (1 ton/2000 lbs) = 88.7 ton SO<sub>2</sub>/yr

Number 4 Fuel Oil Co-fired with Natural Gas:

The maximum hourly usage of number four fuel is 312 gallons because it must be co-fired with natural gas. The number four fuel can not exceed 42% (312 gal) - this requirement is listed as an operational restriction in the permit. The maximum hourly natural gas co-fired with the number 4 fuel is 55,041 cubic feet. The AP-42 emission factors for natural gas are listed above.

*NO<sub>x</sub>:*

Hourly: [20 lb NO<sub>x</sub>/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic feet) x (50 lb NO<sub>x</sub>/10<sup>6</sup> scf)] = 9.0 lb NO<sub>x</sub>/hr

Annual: [(20 lb NO<sub>x</sub>/1000 gal) x (2,498,237 gal/yr)] + [(50 lb NO<sub>x</sub>/10<sup>6</sup> scf) x (440,722,637 cubic feet/year)] x (1 ton/2000 lbs) = 36.0 ton NO<sub>x</sub>/yr

*CO:*

Hourly: [5 lb CO/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (84 lb CO/10<sup>6</sup> scf)] = 6.18 lb CO/hr

Annual: [(5 lb CO/1000 gal) x (2,498,237 gal/yr)] + [(84 lb CO/10<sup>6</sup> scf) x (440,722,637 cubic feet/year)] x (1 ton/2000 lbs) = 24.8 ton CO/yr

*OC:*

Hourly: [.252 lb OC/1000 gal (AP-42, Table 1.3-3 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (11 lb OC/10<sup>6</sup> scf)] = .69 lb OC/hr

Annual: [(.252 lb OC/1000 gal) x (2,498,237 gal/yr)] + [(440,722,637 cubic feet/year) x (11 lb OC/10<sup>6</sup> scf)] x (1 ton/2000 lbs) = 2.74 ton OC/yr

*Particulate:*

Hourly: [7 lb PE/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (1.9 lb PE/10<sup>6</sup> scf)] = 2.29 lb PE/hr

Annual: [(7 lb PE/1000 gal) x (2,498,237 gal/yr)] + [(440,722,637 cubic feet/year) x (1.9 lb PE/10<sup>6</sup> scf)] x (1 ton/2000 lbs) = 9.2 ton PE/yr

*SO<sub>2</sub>:*

Hourly: [150 lb SO<sub>2</sub>/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (.5 = sulfur content limit) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (0.6 lb SO<sub>2</sub>/10<sup>6</sup> scf)] = 23.4 lb SO<sub>2</sub>/hr

**Inlan****PTI**Emissions Unit ID: **B006****Issued: To be entered upon final issuance**

Annual:  $[(150 \text{ lb SO}_2/1000 \text{ gal}) \times (0.5) \times (2,498,237 \text{ gal/yr})] + [(440,722,637 \text{ cubic feet/year}) \times (0.6 \text{ lb SO}_2/10^6 \text{ scf})] \times (1 \text{ ton}/2000 \text{ lbs}) = 93.8 \text{ ton SO}_2/\text{yr}$

Recycled Cooking Oil (RCO):

All emissions factors were obtained through stack testing conducted at the facility on February 22 and 23, 2001. The factors represent the maximum hourly emissions from 3 runs. The stack test data was submitted to OEPA, CDO April 17, 2001.

*NOx:*

Hourly: 19.0 lb NOx/hr

Annual:  $(19 \text{ lb NOx/hr}) \times (8760 \text{ hrs/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 83.2 \text{ ton NOx/yr}$ *CO:*

Hourly: 0.742 lb CO/hr

Annual:  $(0.742 \text{ lb CO/hr}) \times (8760 \text{ hrs/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 3.25 \text{ ton CO/yr}$ *OC:*

Hourly: 2.3 lb OC/hr

Annual:  $(2.3 \text{ lb OC/hr}) \times (8760 \text{ hrs/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 10.1 \text{ ton OC/yr}$ *Particulate:*

Hourly: 0.83 lb PE/hr

Annual:  $(0.83 \text{ lb PE/hr}) \times (8760 \text{ hrs/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 3.64 \text{ ton PE/yr}$ *SO<sub>2</sub>:*Hourly:  $(0.009 \text{ lb SO}_2/\text{mmBtu}) \times (99.9 \text{ mmBtu/hr}) = 0.9 \text{ lb SO}_2/\text{hr}$ Annual:  $(0.9 \text{ SO}_2/\text{hr}) \times (8760 \text{ hrs/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 3.94 \text{ ton SO}_2/\text{yr}$ 


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**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**

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**PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:**

NONE

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Inland Products Inc  
PTI Application: 01-06662  
Issued: To be entered upon final issuance

Facility ID: 0125040083

Emissions Unit ID: B006

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	83.2 tpy
CO	35.1 tpy
OC	10.1 tpy
Particulate	9.2 tpy
SO2	93.8 tpy

Inlan

PTI /

Issued: To be entered upon final issuance

Emissions Unit ID: B006

**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](mailto: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>
<input checked="" type="checkbox"/>	000000c.wpd	<input type="checkbox"/>	
<input type="checkbox"/>	000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	000000t.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

## ADMINISTRATIVE MODIFICATION inter-office communication

**to:** DAPC, Air Quality Modeling and Planning

**from:** Kelly Meinzer, DAPC-CDO

**subject:** Administrative Modification of Permit To Install (01-06662) for Inland Products, Inc.

**date:** April 2, 2001

Choose one:

Initiated by:

**X** Permittee

**9** DO/laa

**X** This modification is the result of an appeal to the Environmental Review Appeals Commission

**Inland****PTI #****Issued: To be entered upon final issuance**Emissions Unit ID: **B006*****Please fill out the following:*****SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	83.2
CO	35.1
OC	10.1
Particulate	9.2
SO2	93.8

***Please provide a fairly detailed description of the basis for the modification and how the permit is being modified:***

Inland Products requested an administrative modification to PTI #01-6662, issued August 6, 1997, because they are planning to burn recycled cooking oil (RCO) as fuel in their 99 mmBtu/hr boiler (B006). The originally issued permit limits Inland Products to burning number 2 fuel oil, number 4 fuel oil, landfill gas and natural gas only. The emissions from RCO were determined through a stack test conducted on February 22 and 23, 2001 and were used to determine hourly and annual emissions limitations for the modified permit. The results of the stack test indicated that emissions from RCO will be decreased for all pollutants except for OC, which has the potential to increase emissions by approximately six tons/year. Because the overall decreases in NOx and CO outweighed the slight increase in OC, it was determined by a letter issued by the director on April 6, 2001 that the project would be considered "environmentally beneficial" and would therefore not be considered a "modification" under OAC rule 3745-31-01(KK).

The modified permit allows Inland Products to burn the RCO and provides a specific emissions limit for each type of fuel that may be burned in the boiler. The permit was updated with the most current language but no major changes were made to the content except for the removal of landfill gas as a potential fuel. Landfill gas has never been utilized at the facility and there are no plans to burn it as fuel in the future.

***Additional comments:***

If there are any questions, please contact Kelly Meinzer at (614) 728-5043.

CalculationsNatural Gas:*NOx:*

Hourly:  $50 \text{ lb NOx}/10^6 \text{ scf (AP-42, Table 1.4-1 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 4.76 \text{ lb NOx/hr}$

Annual:  $(4.76 \text{ lb NOx/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 20.85 \text{ ton NOx/yr}$

*CO:*

Hourly:  $84 \text{ lb CO}/10^6 \text{ scf (AP-42, Table 1.4-1 for NG, 7/98)} \times (95,228 \text{ cu ft/hr}) = 8.0 \text{ lb CO/hr}$

Annual:  $(8 \text{ lb CO/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 35.04 \text{ ton CO/yr}$

*OC:*

Emissions Unit ID: **B006**

Hourly:  $11 \text{ lb OC}/10^6 \text{ scf}$  (AP-42, Table 1.4-2 for NG, 7/98) x (95,228 cu ft/hr) = 1.05 lb OC/hr  
 Annual:  $(1.05 \text{ lb OC/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 4.6 \text{ ton OC/yr}$

*Particulate:*

Hourly:  $1.9 \text{ lb PE}/10^6 \text{ scf}$  (AP-42, Table 1.4-2 for NG, 7/98) x (95,228 cu ft/hr) = 0.18 lb PE/hr  
 Annual:  $(0.18 \text{ lb PE/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.79 \text{ ton PE/yr}$

*SO<sub>2</sub>:*

Hourly:  $0.6 \text{ lb SO}_2/10^6 \text{ scf}$  (AP-42, Table 1.4-2 for NG, 7/98) x (95,228 cu ft/hr) = 0.06 lb SO<sub>2</sub>/hr  
 Annual:  $(0.06 \text{ lb SO}_2/\text{hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.26 \text{ ton SO}_2/\text{yr}$

Number 2 Fuel Oil:

*NO<sub>x</sub>:*

Hourly:  $20 \text{ lb NO}_x/1000 \text{ gal}$  (AP-42, Table 1.3-1 for Distillate, 9/98) x (740 gal/hr) = 14.8 NO<sub>x</sub>/hr  
 Annual:  $(20 \text{ lb NO}_x/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 24.98 \text{ ton NO}_x/\text{yr}$

*CO:*

Hourly:  $5 \text{ lb CO}/1000 \text{ gal}$  (AP-42, Table 1.3-1 for Distillate, 9/98) x (740 gal/hr) = 3.7 lb CO/hr  
 Annual:  $(5 \text{ lb CO}/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 6.25 \text{ tons CO/yr}$

*OC:*

Hourly:  $.252 \text{ lb OC}/1000 \text{ gal}$  (AP-42, Table 1.3-3 for Distillate, 9/98) x (740 gal/hr) = .09 lb OC/hr  
 Annual:  $(.252 \text{ lb OC}/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.32 \text{ ton OC/yr}$

*Particulate:*

Hourly:  $2 \text{ lb PE}/1000 \text{ gal}$  (AP-42, Table 1.3-1 for Distillate, 9/98) x (740 gal/hr) = 1.48 lb PE/hr  
 Annual:  $(2 \text{ lb PE}/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 2.5 \text{ ton PE/yr}$

*SO<sub>2</sub>:*

Hourly:  $142 \text{ lb SO}_2/1000 \text{ gal}$  (AP-42, Table 1.3-1 for Distillate, 9/98) x (.5 = sulfur content limit) x (740 gal/hr) = 52.54 lb SO<sub>2</sub>/hr  
 Annual:  $(142 \text{ lb SO}_2/1000 \text{ gal}) \times (0.5) \times (2,498,237 \text{ gal/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 88.7 \text{ ton SO}_2/\text{yr}$

Number 4 Fuel Oil Co-fired with Natural Gas:

The maximum hourly usage of number four fuel is 312 gallons because it must be co-fired with natural gas. The number four fuel can not exceed 42% (312 gal) - this requirement is listed as an operational restriction in the permit. The maximum hourly natural gas co-fired with the number 4 fuel is 55,041 cubic feet. The AP-42 emission factors for natural gas are listed above.

*NO<sub>x</sub>:*

Hourly:  $[20 \text{ lb NO}_x/1000 \text{ gal}$  (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic feet) x (50 lb NO<sub>x</sub>/10<sup>6</sup> scf)] = 9.0 lb NO<sub>x</sub>/hr

Annual:  $[(20 \text{ lb NO}_x/1000 \text{ gal}) \times (2,498,237 \text{ gal/yr})] + [(50 \text{ lb NO}_x/10^6 \text{ scf}) \times (440,722,637 \text{ cubic feet/year})] \times (1 \text{ ton}/2000 \text{ lbs}) = 36.0 \text{ ton NO}_x/\text{yr}$

*CO:*

Hourly:  $[5 \text{ lb CO}/1000 \text{ gal}$  (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (84 lb CO/10<sup>6</sup> scf)] = 6.18 lb CO/hr

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Annual: [(5 lb CO/1000 gal) x (2,498,237 gal/yr)] + [(84 lb CO/10<sup>6</sup> scf) x (440,722,637 cubic feet/year)] x (1 ton/2000 lbs) = 24.8 ton CO/yr

*OC:*

Hourly: [.252 lb OC/1000 gal (AP-42, Table 1.3-3 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (11 lb OC/10<sup>6</sup> scf)] = .69 lb OC/hr

Annual: [(.252 lb OC/1000 gal) x (2,498,237 gal/yr)] + [(440,722,637 cubic feet/year) x (11 lb OC/10<sup>6</sup> scf)] x (1 ton/2000 lbs) = 2.74 ton OC/yr

*Particulate:*

Hourly: [7 lb PE/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (1.9 lb PE/10<sup>6</sup> scf)] = 2.29 lb PE/hr

Annual: [(7 lb PE/1000 gal) x (2,498,237 gal/yr)] + [(440,722,637 cubic feet/year) x (1.9 lb PE/10<sup>6</sup> scf)] x (1 ton/2000 lbs) = 9.2 ton PE/yr

*SO<sub>2</sub>:*

Hourly: [150 lb SO<sub>2</sub>/1000 gal (AP-42, Table 1.3-1 for No. 4 fuel, 9/98) x (.5 = sulfur content limit) x (312 gal/hr)] + [(55,041 cubic ft/hr) x (0.6 lb SO<sub>2</sub>/10<sup>6</sup> scf)] = 23.4 lb SO<sub>2</sub>/hr

Annual: [(150 lb SO<sub>2</sub>/1000 gal) x (0.5) x (2,498,237 gal/yr)] + [(440,722,637 cubic feet/year) x (0.6 lb SO<sub>2</sub>/10<sup>6</sup> scf)] x (1 ton/2000 lbs) = 93.8 ton SO<sub>2</sub>/yr

Recycled Cooking Oil (RCO):

All emissions factors were obtained through stack testing conducted at the facility on February 22 and 23, 2001. The factors represent the maximum hourly emissions from 3 runs. The stack test data was submitted to OEPA, CDO April 17, 2001.

*NO<sub>x</sub>:*

Hourly: 19.0 lb NO<sub>x</sub>/hr

Annual: (19 lb NO<sub>x</sub>/hr) x (8760 hrs/yr) x (1 ton/2000 lbs) = 83.2 ton NO<sub>x</sub>/yr

*CO:*

Hourly: 0.742 lb CO/hr

Annual: (0.742 lb CO/hr) x (8760 hrs/yr) x (1 ton/2000 lbs) = 3.25 ton CO/yr

*OC:*

Hourly: 2.3 lb OC/hr

Annual: (2.3 lb OC/hr) x (8760 hrs/yr) x (1 ton/2000 lbs) = 10.1 ton OC/yr

*Particulate:*

Hourly: 0.83 lb PE/hr

Annual: (0.83 lb PE/hr) x (8760 hrs/yr) x (1 ton/2000 lbs) = 3.64 ton PE/yr

*SO<sub>2</sub>:*

Hourly: (0.009 lb SO<sub>2</sub>/mmBtu) x (99.9 mmBtu/hr) = 0.9 lb SO<sub>2</sub>/hr

Annual: (0.9 SO<sub>2</sub>/hr) x (8760 hrs/yr) x (1 ton/2000 lbs) = 3.94 ton SO<sub>2</sub>/yr

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

Inland Products Inc  
PTI Application: 01-06662  
Issued: To be entered upon final issuance

Facility ID: 0125040083

Emissions Unit ID: B006

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	83.2 tpy
CO	35.1 tpy
OC	10.1 tpy
Particulate	9.2 tpy
SO2	93.8 tpy

**Inland****PTI**Emissions Unit ID: **B006****Issued: To be entered upon final issuance****Synthetic Minor Determination for Inland Products, Inc.****Permit To Install 01-6662****A. Source Description**

Inland Products, Inc. (Inland) is located in Columbus, Ohio and has submitted a permit to install application for one 99.99 mmBtu per hour steam boiler which will fire number two fuel oil, reclaimed number four fuel oil, natural gas, or recycled cooking oil. The purpose of the boiler is to provide process heat for the facility. This boiler is subject to NSPS 40 CFR 60 Subpart Dc. The facility is requesting federally enforceable limits to stay below the Title V threshold limit for sulfur dioxide.

**B. Facility Emissions and Attainment Status**

The facility has proposed emission restrictions for sulfur dioxide in order to limit the facility's emissions of sulfur dioxide, particulate and nitrogen oxide below 100 tons per year. In addition, the boiler is restricted in its usage of number two and number four fuel oils to ensure the limitation is achieved. Inland is located in Franklin County which is considered designated as attainment for all criteria pollutants.

	<u>PTE Pre-Synthetic Minor PTI</u>	<u>PTE Post Synthetic Minor PTI</u>
SO <sub>2</sub>	260 tpy	93.8 tpy
Particulate	207 tpy	9.2 tpy
OC	4.4 tpy	10.1 tpy
NO <sub>x</sub>	105 tpy	82.2 tpy
CO	64 tpy	35.1 tpy

**C. Source Emissions**

The restricted fuel usage limit Inland's potential emissions to 93.8 tons of sulfur dioxide per year. The terms and conditions of the permit require Inland to track fuel usage and hours of operation daily and submit quarterly deviation reports to Ohio EPA. The terms and conditions were established to reflect the emission unit's potential to emit when burning 2,498,237 gallons of number two or reclaimed number four fuel oil. Inland is not restricted in their usage of recycled cooking oil or natural gas because the potential to emit for these fuels does not trigger Title V

**D. Conclusion**

The operation of the boiler in accordance with the terms and conditions of the PTI will result in

**Inlan****PTI /**Emissions Unit ID: **B006****Issued: To be entered upon final issuance**

maximum sulfur dioxide emissions of 93.8 tons per year. The proposed sulfur dioxide emissions are less than the Title V threshold of 100 tons per year. This permit includes federally enforceable limits and corresponding recordkeeping and reporting requirements. The terms and conditions also include requirements for NSPS 40 CFR 60 Subpart Dc.