



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL  
LAKE 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: 02-14276**

**DATE: 9/21/2000**

Lonza Inc  
Thomas F. Wilson  
679 Hardy Rd  
Painesville, OH 44077

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

NEDO



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 02-14276**

Application Number: 02-14276  
APS Premise Number: 0243000074  
Permit Fee: **\$400**  
Name of Facility: Lonza Inc  
Person to Contact: Thomas F. Wilson  
Address: 679 Hardy Rd  
Painesville, OH 44077

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**679 Hardy Rd**  
**Painesville, Ohio**

Description of proposed emissions unit(s):  
**Modification of existing #3 Cleaver-Brooks 800LE steam boiler (B008) to burn landfill derived methane or natural gas.**

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

**Lonza Inc**

**PTI Application: 02-14276**

**Issued: 9/21/2000**

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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

**Lonza Inc****PTI Application: 02-14276****Issued: 9/21/2000****Facility ID: 0243000074**

Environmental Protection Agency if the proposed sources are inadequate 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 prove to be inadequate 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.

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**PTI Application: 02-14276**  
**Issued: 9/21/2000**

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#### **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**

<u>Pollutant</u>	<u>Tons Per Year</u>
<u>CO</u>	<u>21.99</u>
<u>HCL</u>	<u>2.80</u>
<u>NOX</u>	<u>14.67</u>
<u>PM</u>	<u>2.93</u>
<u>SO2</u>	<u>0.96</u>
<u>VOC</u>	<u>2.35</u>

**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>	
B008 - Modification of a 33.5 MMBTU/hr natural gas boiler (B008) to use landfill derived methane gas with natural gas back-up; use of induced flue gas recirculation for NOX control; dual fuel burner	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-18-06
		40 CFR, Part 60, Subpart Dc
	OAC rule 3745-17-07(A)	

**Lonza**  
**PTI A**  
**Issued: 9/21/2000**

Emissions Unit ID: **B008**

Applicable Emissions  
Limitations/Control Measures

0.64 pound HCL per hour; 2.80 tons per year;

NOx: 0.10 pound/MMBTU; 14.67 tons per year;

VOC: 0.54 lb/hr and 2.35tpy

CO: 5.02 lbs per hour; 21.99 tpy;

NMOC: 98% reduction by weight or <20ppmv on a dry basis as hexane at 3 % O2

SO2: 0.22 lb/hr and 0.96 tpy

PE: 2.93 tpy

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07 and 3745-17-11 and 40 CFR, Part 60 Subpart Dc.

visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as provided by rule

0.020 pound PM per MMBTU of actual heat input

The emission limitation specified by this rule is less stringent than the emission limitation established

pursuant to OAC rule 3745-31-05(A)(3)

See 2.b.

## **2. Additional Terms and Conditions**

- 2.a** This is a Permit To Install for a 33.5 MMBTU/HR Cleaver Brooks, Model CB700-800-200, natural gas/landfill derived methane gas firetube steam boiler, EPA emission unit number B010, primarily using landfill derived methane gas and natural gas as a back-up fuel. The landfill gas will run through a suction scrubber with a mist pack equipped with a manometer, a compressor, an after cooler, a centrifugal separator equipped with a manometer, and a dryer prior to burning in the boiler. The system will include a 5-micron, polypropylene particulate filter.
- 2.b** The emissions unit is subject to the Federal New Source Performance Standard, 40 CFR., Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

## **B. Operational Restrictions**

1. The permittee shall burn only landfill gas or natural gas in this emissions unit.
2. This boiler shall operate with the use of a Induced Flue Gas Recirculation system..

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

1. For each day during which the permittee burns a fuel other than natural gas or landfill gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. For each day during which the permittee operates this emissions unit without the use of induced flue gas recirculation for NOX control, the permittee shall maintain a record of the date and total time of the operation and an estimate of NOX emissions.
3. Lonza, Inc. shall record and maintain records of the amounts of each fuel combusted during each day and/or any other record keeping as required in 40 CFR, Part 60, Subpart Dc, Section 60.48c(g).
4. The permit to install for this emissions unit B010 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration

(MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hydrochloric Acid (HCL)  
TLV (mg/m<sup>3</sup>): 7.5  
Maximum Hourly Emission Rate (lbs/hr): 0.64  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 2.156  
MAGLC (ug/m<sup>3</sup>): 13.1

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or landfill gas was burned in this emissions unit.
2. The permittee shall submit deviation (excursion) reports that identify each day and the extent of time and an estimate of NO<sub>x</sub> emissions when this emissions unit is operated without flue induced flue gas recirculation.

#### **3. NSPS REQUIREMENTS**

This emissions unit is 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.

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

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**Lonza**

**PTI A**

**Issued: 9/21/2000**

Emissions Unit ID: **B008**

Columbus, OH 43216-1049

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following method(s):

## a. Emission Limitation-

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six minute average, except as provided by rule.

## Applicable Compliance Method-

Compliance shall be demonstrated by Method 9, Visible Determination of the Opacity of Emissions from Stationary Sources, 40 CFR, Part 60, Appendix A, as specified in Ohio Administrative Code section 3745-17-03(B)(1).

## b. Emission Limitation-

0.10 pound NO<sub>x</sub> per MMBTU of actual heat input for this boiler.

## Applicable Compliance Method-

For the use of natural gas, compliance shall be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0323 MMft<sup>3</sup>/hr) by the nitrogen oxides uncontrolled emission factor for natural gas (100 lbs/MMft<sup>3</sup>), from USEPA reference document AP-42 (Fifth Edition) Compilation of Air Pollution Emission Factors, Section 1.4 (Table 1.4-1),(7/98) and dividing by the maximum hourly heat input capacity of the emissions unit (33.5 MMBTU/hr) and multiplying by (1-.40). The control efficiency of Induced Flue Gas Recirculation for this boiler shall be 40%.

When using landfill derived methane gas or natural gas, compliance with this emission limitation shall be demonstrated by using Method 1-4 and Method 7 or 7E of 40 CFR Part 60, Appendix A if required by the Ohio EPA.

## c. Emission Limitation-

14.67 tons NO<sub>x</sub> per year

## Applicable Compliance Method-

Because this limit was established by multiplying the short-term limit of 0.10 lb NO<sub>x</sub>/MMBTU heat input by the maximum heat input of the boiler and by 8760 hours of operation per year and dividing by 2000 (lbs/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.

- d. Emission Limitation-
- 5.02 pounds of Carbon Monoxide per hour
- Applicable Compliance Method-
- Compliance shall be demonstrated by using Method 10 of 40 CFR, Part 60, Appendix A.
- e. Emission Limitation-
- 21.99 tons CO per year
- Applicable Compliance Method-
- Because this limit was established by multiplying the short-term limit of 5.02 lbs CO/hr by 8760 hours of operation per year and dividing by 2000 (lbs/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.
- f. Emission Limitation-
- 0.54 pound of VOC per hour
- Applicable Compliance Method-
- Compliance with the above emission limitation shall be demonstrated by using Method 25 or 25A of 40CFR, Part 60, Appendix A, if required by the Ohio EPA.
- g. Emission Limitation-
- 2.35 ton VOC per year
- Applicable Compliance Method-
- Because this limit was established by multiplying the short-term limit of 0.54 lb VOC/hr by 8760 hours of operation per year and dividing by 2000 (lbs/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.
- h. Emission Limitation-
- 0.64 pound of HCL per hour

Applicable Compliance Method-

Compliance shall be demonstrated by using Method 26 or 26A of 40 CFR, Part 60, Appendix A, if required by the Ohio EPA.

i. Emission Limitation-

2.80 tons HCl per year

Applicable Compliance Method-

Because this limit was established by multiplying the short-term limit of 0.64 lb HCl/hr by 8760 hours of operation per year and dividing by 2000 (lbs/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.

j. Emission Limitation-

0.020 pound of particulate matter per MMBTU of actual heat input

Applicable Compliance Method-

For the use of natural gas, compliance shall be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0323 MMft<sup>3</sup>/hr) by the particulate matter emission factor for natural gas (1.9 lbs/MMft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (33.5 MMBTU/hr).

When using landfill derived methane gas, compliance shall be demonstrated by multiplying the maximum landfill methane gas flow rate (551.7 ft<sup>3</sup>/min) by the particulate matter emission factor for landfill gas (0.00049 lbs/hr/dscfm of methane), and dividing by the maximum hourly heat input capacity of the emissions unit (33.5 MMBTU/hr).

The above emission factors are taken from USEPA reference document AP-42 (Fifth Edition) Compilation of Air Pollution Emission Factors Section 1.4 (Table 1.4-1) (7/98) and Section 2.4 (Table 2.4-5).(11/98)

k. Emission Limitation-

2.93 tons PM per year

Applicable Compliance Method-

Because this limit was established by multiplying the short-term limit of 0.020 lb PM/MMBTU heat input by the maximum heat input of the boiler and by 8760 hours of operation per year and dividing by 2000 (lb/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.

l. Emission Limitation-

0.22 lbs per hour SO<sub>2</sub>

Applicable Compliance Method-

Compliance shall be demonstrated by using Method 6 or 6C of 40 CFR, Part 60, Appendix A if required by the Ohio EPA.

m. Emission Limitation-

0.96 ton SO<sub>2</sub> per year

Applicable Compliance Method-

Because this limit was established by multiplying the short-term limit of 0.22 lb SO<sub>2</sub>/hr by 8760 hours of operation per year and dividing by 2000 (lbs/ton), compliance with the annual limit is assumed provided that compliance with the short-term limit is maintained.

n. Emission Limitation-

NMOC: 98% reduction by weight or <20ppmv on a dry basis as hexane at 3 % O<sub>2</sub>

Applicable Compliance Method-

Compliance with this emission limitation shall be demonstrated in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25 A.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after issuance of this permit.

- b. The emission testing shall be conducted to demonstrate compliance with the control efficiency limitation for NMOC and the emission limitation for Carbon Monoxide (CO).
- c. The following test method(s) shall be employed to demonstrate compliance with the control efficiency for NMOC:

Method 25 of 40 CFR, Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The following test method shall be employed to demonstrate compliance with the emission limitation for CO: Method 10 of 40 CFR, Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA

- e. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.
- f. The control efficiency (i.e. the percent reduction in mass emissions between the inlet and outlet of the boiler) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA. 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 Northeast District Office of the Ohio EPA refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA 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 submitted to the Northeast District Office of the Ohio EPA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Northeast District Office of the Ohio EPA.

#### **F. Miscellaneous Requirements**

1. BAT for this boiler shall include the exclusive use of natural gas and landfill derived methane gas and the use of Induced Flue Gas Recirculation..

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-14276 Facility ID: 0243000074

FACILITY NAME Lonza Inc

FACILITY DESCRIPTION Modification of existing #3 Cleaver-Brooks 800LE steam boiler (B008) to burn landfill derived methane or natural gas CITY/TWP Painesville

SIC CODE 2841 SCC CODE 3-99-999-95 EMISSIONS UNIT ID B010

EMISSIONS UNIT DESCRIPTION A 33.5 MMBTU/hr natural gas boiler using landfill derived methane gas with natural gas back-up; use of induced flue gas recirculation for NOX control; duel fuel burner

DATE INSTALLED 9/2000

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	.03 lb/hr	0.13	.67 lb/hr	2.93 tpy
PM <sub>10</sub>	attainment				
Sulfur Dioxide	attainment	0.108 lb/hr	0.46	0.22 lb/hr	0.96
Organic Compounds	attainment	0.54 lb/hr	2.35	0.54 lb/hr	2.35
Nitrogen Oxides	attainment	2.36 lb/hr	10.11	3.35 lb/hr	14.67
Carbon Monoxide	attainment	5.02	21.99	5.02 lb/hr	21.99
Lead	attainment				
Other: Air Toxics	HCL	0.37 lb/hr	1.62	0.64 lb/hr	2.80 tpy

APPLICABLE FEDERAL RULES:

NSPS? xx NESHAP? \_\_\_\_\_ PSD? \_\_\_\_\_ OFFSET POLICY? \_\_\_\_\_

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

**Enter Determination** Bat for this boiler includes the exclusive use of natural gas and landfill derived methane gas and the use of Induced Flue Gas Recirculation.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**TOXIC AIR CONTAMINANTS**

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

AIR TOXICS MODELING PERFORMED\*? xx YES \_\_\_\_\_ NO \_\_\_\_\_

IDENTIFY THE AIR CONTAMINANTS: HCL

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-14276

Facility ID: 0243000074

FACILITY NAME Lonza Inc

FACILITY DESCRIPTION	Modification of existing #3 Cleaver-Brooks 800LE steam boiler (B008) to burn landfill derived methane or natural gas	CITY/TWP	Painesville
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**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' **Electronic Additional information** File Name

Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modeling form/results	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	<input type="checkbox"/>
BAT Study	<input type="checkbox"/>	<input type="checkbox"/>
Other/misc.	<input type="checkbox"/>	<input type="checkbox"/>

0214276c.wpd

0000000s.wpd

0000000a.wpd

0000000b.wpd

0000000t.wpd

\* 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

NONE

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 DescriptionB. Facility Emissions and Attainment StatusC. Source EmissionsD. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

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

CO

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-14276

Facility ID: 0243000074

FACILITY NAME Lanza Inc

FACILITY DESCRIPTION	CITY/TWP
Modification of existing #3 Cleaver-Brooks 800LE steam boiler (B008) to burn landfill derived methane or natural gas	Painesville

HCL

NOX

PM

SO2

VOC

**Tons Per Year****21.99****2.80****14.67****2.93****0.96****2.35**