



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
TRUMBULL COUNTY**

**CERTIFIED MAIL**

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: 02-20417**

**Fac ID: 0278060791**

**DATE: 8/30/2005**

International Technical Polymer Systems  
Samuel H. Berkowitz  
P.O. Box 111 852 Ann St.  
Niles, OH 444460111

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  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

NEDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 8/30/2005  
Effective Date: 8/30/2005**

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**FINAL PERMIT TO INSTALL 02-20417**

Application Number: 02-20417  
Facility ID: 0278060791  
Permit Fee: **\$675**  
Name of Facility: International Technical Polymer Systems  
Person to Contact: Samuel H. Berkowitz  
Address: P.O. Box 111 852 Ann St.  
Niles, OH 444460111

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**942 Carle St.  
Niles, Ohio**

Description of proposed emissions unit(s):  
**2 drying furnaces, 2 ball mills, storage pile.**

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

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

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

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

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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **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.

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**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 ninety (90) days after commencing operation of the emissions unit(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

<u>Pollutant</u>	<u>Tons Per Year</u>
particulate emissions(PE)	23.4

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**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>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - titanium grindings piles	OAC rule 3745-31-05	no visible emissions except for one minute in any hour
load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)		best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f)
wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05	no visible emissions except for one minute in any hour  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d through A.2.f)
all storage pile operations	OAC rule 3745-31-05	1.3 tons per year particulate emissions (see Section A.2.g)

**2. Additional Terms and Conditions**

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:

titanium grinding piles

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to use water or a suitable dust control suppressant to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to use water or a suitable dust control suppressant to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

Emissions Unit ID: **F001**

- 2.g** The 1.3 tons per year fugitive PE emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

**B. Operational Restrictions**

None

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

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
titanium grinding piles	daily

- 2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
titanium grinding piles	daily

- 3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
titanium grinding piles	daily

- 4. No inspection shall be necessary for wind erosion from the surface of a storage pile

when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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

**Intern****PTI A****Issued: 8/30/2005**Emissions Unit ID: **F001**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.
2. Compliance with the emission limitation(s) in this permits terms and conditions shall be determined in accordance with the following method(s):

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**Emissions Unit ID: F001**

Emissions Limitation:  
1.3 tons per year of particulate emissions.

Applicable Compliance Method:  
Compliance shall be based upon the use of the emission factors specified in AP-42, Compilation of Air Pollution Emission Factors , Section 13.2.4.

**F. Miscellaneous Requirements**

None

**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>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - ball mills	OAC rule 3745-31-05(A)(3)	Particulate Emissions(PE): 4.5 pounds per hour and 5.6 tons per year.  see B.1
	OAC rule 3745-17-07(B)	Visible particulate emissions from this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

**2.a** None

**B. Operational Restrictions**

1. The ball mill load hoppers shall be covered or closed while the emissions units are in

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**PTI A**

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Emissions Unit ID: **F002**

operation.

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

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e. material hoppers) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions; and
  - d. any corrective actions taken to minimize or eliminate the visible emissions.

If observed visible fugitive emissions are not representative of normal operations, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform daily checks, when the emissions unit is in operation of the integrity of the hooding, covering, or enclosure on this emissions unit that is used to reduce fugitive dust emissions. If the hooding, covering, or enclosure on this emissions unit is not functioning properly, this shall be noted in an operations log. The permittee shall also shut down the operation of the emissions unit and make any repairs necessary to restore the integrity of the controls.
3. The permittee shall maintain monthly records of the following information:

Emissions Unit ID: **F002**

- a. the amount of titanium grindings processed, in pounds or tons;

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

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., material hoppers) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that identify all days during which it was observed that hooding, covering, or enclosure on this emissions unit was not functioning properly, and the emissions unit was not shut down to repair the problem. The reason repairs were not made shall also be included in this report. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit an annual report which summarizes the following:
  - a. the amount of titanium grindings processed, in pounds or tons;

#### **E. Testing Requirements**

1. Compliance with the emissions limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation: 20% opacity, as a 3 minute average .

**Applicable Compliance Method:**

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(3) using the methods and procedures specified in U.S.EPA Reference Method 9, 40 CFR Part 60, Appendix A.

- c. Emission Limitation: 4.5 lb/hr and 5.6 ton/yr PE from the ball mills

**Applicable Compliance Method:** Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Compilation of Air Pollution Emission Factors, Section 11.12 for loading (0.61 lb/ton processed), from AP-42, Section 11.24 for mixing (2.4 lb/ton processed), assuming 50% control for the mixer closure [  $0.61 + 2.4 \times 0.5 =$

1.81 lb/ton processed], and the maximum process weight rate from the application.

$$E(\text{PE})_{\text{dryer}} = 1.81 \text{ lb/ton} \times 2.5 \text{ tons/hr, max. Ti grindings} = 4.5 \text{ lb PE/hr.}$$

Tons per year are determined by multiplying the emission factor by the annual production rate (summation of C.2) and dividing by 2000 lbs/ton.

If required compliance shall be demonstrated as listed in OAC Rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

None

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

**A. Applicable Emissions Limitations and/or Control Requirements**

- 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>
P001 - drying furnace No.1 rotary dryer	wood fired heater	OAC rule 3745-31-05(A)(3)
		OAC rule 3745-17-07(B)
		OAC rule 3745-17-11

Intern

PTI A

Issued: 8/30/2005

Emissions Unit ID: P001

	<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>	<p>rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-31-05(A)(3)</p>	<p>Particulate Emissions(PE): 6.7 pounds per hour and 6.7 tons per year.</p>	
<p>OAC rule 3745-17-07(A)</p>	<p>see B.1</p> <p>Visible particulate emissions from this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.</p>	
<p>OAC rule 3745-17-11</p>	<p>The emission limitation specified by this rule is less stringent than or equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Particulate Emissions(PE): 1.4 pounds per hour and 1.4 tons per year.</p> <p>see B.2</p> <p>Visible particulate emissions from the stack serving this emissions unit shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC</p>	

## 2. Additional Terms and Conditions

### 2.a None

## B. Operational Restrictions

1. The permittee shall employ an enclosure surrounding the dried material hopper, and it shall be kept closed during dryer operation, except for hopper change out or emptying.
2. The permittee shall employ an enclosure on the conveyor feeding material to the dryer, and on the dryer entrance.
3. The wood used as fuel shall be fired wet to reduce emissions(per USEPA AP-42,Compilation of Air Pollution Emission Factors, Sec 1.6, Table 1.6-1). the permittee shall notify the Ohio EPA Northeast District Office if there is any change to the fuel used in this emissions unit, any change may result in requiring a permit modification.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the egress points (i.e., dryer fuel stack, conveyor, material inlet and outlet) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions; and
  - d. any corrective actions taken to minimize or eliminate the visible emissions.

If observed visible emissions are not representative of normal operations, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the

**Intern****PTI A****Issued: 8/30/2005**Emissions Unit ID: **P001**

operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform daily checks, when the emissions unit is in operation of the integrity of the hooding, covering, or enclosure on this emissions unit that is used to reduce fugitive dust emissions. If the hooding, covering, or enclosure on this emissions unit is not functioning properly, this shall be noted in an operations log. The permittee shall also shut down the operation of the emissions unit and make any repairs necessary to restore the integrity of the controls.
3. The permittee shall maintain monthly records of the following information:
  - a. the amount of titanium grindings dried, in pounds or tons; and
  - b. the amount of wood fuel used, in pounds or tons.

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

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the egress points (i.e., dryer fuel stack, material inlet and outlet)) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. This report shall be submitted to the Director (or the Ohio EPA Northeast District Office) by January 31 of each year and shall cover the previous 12-month period.
2. The permittee shall submit semiannual written reports that identify all days during which it was observed that hooding, covering, or enclosure on this emissions unit was not functioning properly, and the emissions unit was not shut down to repair the problem. The reason repairs were not made shall also be included in this report. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit an annual report which summarizes the following:

Emissions Unit ID: **P001**

- a. the amount of titanium grindings dried, in pounds or tons; and
- b. the amount of wood fuel used, in pounds or tons.

**E. Testing Requirements**

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

- a. Emission Limitation: 20% opacity, as a 3 minute average .

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(3) using the methods and procedures specified in U.S.EPA Reference Method 9, 40 CFR Part 60, Appendix A.

- b. Emission Limitation: 20% opacity, as a 6 minute average .

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(1) using the methods and procedures specified in U.S.EPA Reference Method 9, 40 CFR Part 60, Appendix A.

- c. Emission Limitation: 6.7 lb/hr and 6.7 ton/yr PE from the rotary dryer

Applicable Compliance Method: Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 11.19 (1995 update) for rotary drying (2 lb/ton processed), and the maximum process weight rate from the application.

$$E(\text{PE})_{\text{dryer}} = 2 \text{ lb/ton} \times 2.1 \text{ max. Ti grindings tons/hr} = 4.2 \text{ lb PE/ hr.}$$

Tons per year are determined by multiplying the emission factor by the annual production rate (summation of C.2) and dividing by 2000 lbs/ton.

If required compliance shall be demonstrated as listed in OAC Rule 3745-17-03(B)(10).

- d. Emission Limitation: 1.4 lb/hr and 1.4 ton/yr PE from the fuel

Applicable Compliance Method: Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.6 (2003 update) for wet wood combustion (0.33 lb/mm Btu), and the maximum heat input from the application.

$$E(\text{PE})_{\text{fuel}} = 0.33 \text{ lb/mm Btu} \times 3.6 \text{ mm Btu/hr} = 1.2 \text{ lb PE/hr.}$$

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Tons per year are determined by multiplying the emission factor times the annual fuel usage rate (summation of C.2) times 8600Btu/lb of wood and dividing by 2000 lbs/ton.

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If required compliance shall be demonstrated as listed in OAC Rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

None



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**PTI A**

**Issued: 8/30/2005**

Emissions Unit ID: **P002**

Applicable Emissions  
Limitations/Control Measures

Particulate Emissions(PE): 6.7 pounds per hour and 6.7 tons per year.

see B.1

Visible particulate emissions from this emissions unit shall not exceed twenty percent opacity, as a three-minute average, except as provided by rule.

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

Particulate Emissions(PE): 1.4 pounds per hour and 1.4 tons per year.

see B.2

Visible particulate emissions from the stack serving this emissions unit shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.

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

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

**Intern****PTI A****Issued: 8/30/2005**Emissions Unit ID: **P002****2. Additional Terms and Conditions****2.a** None**B. Operational Restrictions**

1. The permittee shall employ an enclosure surrounding the dried material hopper, and it shall be kept closed during dryer operation, except for hopper change out or emptying.
2. The permittee shall employ an enclosure on the conveyor feeding material to the dryer, and on the dryer entrance.
3. The wood used as fuel shall be fired wet to reduce emissions(per USEPA AP-42,Compilation of Air Pollution Emission Factors, Sec 1.6, Table 1.6-1). the permittee shall notify the Ohio EPA Northeast District Office if there is any change to the fuel used is this emissions unit, any change may result in requiring a permit modification.

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

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the egress points (i.e., dryer fuel stack, material inlet and outlet) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions; and
  - d. any corrective actions taken to minimize or eliminate the visible emissions.

If observed visible emissions are not representative of normal operations , a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident

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was continuous during the observation period (or, if known, continuous during the operation of the

emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform daily checks, when the emissions unit is in operation of the integrity of the hooding, covering, or enclosure on this emissions unit that is used to reduce fugitive dust emissions. If the hooding, covering, or enclosure on this emissions unit is not functioning properly, this shall be noted in an operations log. The permittee shall also shut down the operation of the emissions unit and make any repairs necessary to restore the integrity of the controls.
3. The permittee shall maintain monthly records of the following information:
  - a. the amount of titanium grindings dried, in pounds or tons; and
  - b. the amount of wood fuel used, in pounds or tons.

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

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the egress points (i.e., dryer fuel stack, material inlet and outlet)) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. This report shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 of each year and shall cover the previous 12-month period.
2. The permittee shall submit semiannual written reports that identify all days during which it was observed that hooding, covering, or enclosure on this emissions unit was not functioning properly, and the emissions unit was not shut down to repair the problem. The reason repairs were not made shall also be included in this report. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit an annual report which summarizes the following:

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- a. the amount of titanium grindings dried, in pounds or tons; and
- b. the amount of wood fuel used, in pounds or tons.

## E. Testing Requirements

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

- a. Emission Limitation: 20% opacity, as a 3 minute average .

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(3) using the methods and procedures specified in U.S.EPA Reference Method 9, 40 CFR Part 60, Appendix A.

- b. Emission Limitation: 20% opacity, as a 6 minute average .

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(1) using the methods and procedures specified in U.S.EPA Reference Method 9, 40 CFR Part 60, Appendix A.

- c. Emission Limitation: 6.7 lb/hr and 6.7 ton/yr PE from the rotary dryer

Applicable Compliance Method: Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 11.19 (1995 update) for rotary drying(2 lb/ton processed), and the maximum process weight rate from the application.

$$E(\text{PE})_{\text{dryer}} = 2 \text{ lb/ton} \times 2.1 \text{ max. Ti grindings tons/hr} = 4.2 \text{ lb PE/hr.}$$

Tons per year are determined by multiplying the emission factor by the annual production rate (summation of C.2) and dividing by 2000 lbs/ton.

If required compliance shall be demonstrated as listed in OAC Rule 3745-17-03(B)(10).

- d. Emission Limitation: 1.4 lb/hr and 1.4 ton/yr PE from the fuel

Applicable Compliance Method: Hourly compliance shall be based on a one time

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calculation by using emission factors from AP-42, Section 1.6 (2003 update) for wet wood combustion (0.33 lb/mm Btu), and the maximum heat input from the application.

$$E(\text{PE})_{\text{fuel}} = 0.33 \text{ lb/mm Btu} \times 3.6 \text{ mm Btu/hr} = 1.2 \text{ lb P.}$$

Tons per year are determined by multiplying the emission factor times the annual fuel usage rate (summation of C.2) times 8600Btu/lb of wood and dividing by 2000 lbs/ton.

If required compliance shall be demonstrated as listed in OAC Rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

None