



State of Ohio Environmental Protection Agency

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

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05037

DATE: 12/12/2000

Olympic Mill Services
Jim Shewell
1014 W 9th Ave
King of Prussia, PA 19406

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Very truly yours,

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

cc: USEPA

HCDES



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 14-05037

Application Number: 14-05037
APS Premise Number: 1409010908
Permit Fee: **\$1000**
Name of Facility: Olympic Mill Services
Person to Contact: Jim Shewell
Address: 1014 W 9th Ave
King of Prussia, PA 19406

Location of proposed air contaminant source(s) [emissions unit(s)]:
3024 Oxford State Rd
Middletown, Ohio

Description of proposed emissions unit(s):
Modification to PTI 14-04853 for Oxygen Lancing Operation (F003) issued on 12/29/1999 and installation of Kish and Mill Scale Processing Plant (F004).

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

Environmental Protection Agency if the proposed sources 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.

Olympic Mill Services
 PTI Application: 14-05037
 Issued: 12/12/2000

Facility ID: 1409010908

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>
PM	6.44
PM-10	3.65

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>
F003 - Oxygen lancing operation (2 lancing stations) with carbon dioxide shielding - Modification	OAC rule 3745-31-05(A)(3)	5.6 lbs PM/hr, 5.5 TPY PM as a rolling, 12-month summation 3.2 lbs PM-10/hr, 3.2 TPY PM-10 as a rolling, 12-month summation See Terms A.2.a, A.2.b and B.1
	OAC rule 3745-17-07(B)(1)	The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	The emissions 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 Visible particulate emissions from this emissions unit shall not exceed 10 percent opacity, as a three-minute average.
- 2.b The permittee shall employ carbon dioxide shielding at all times the oxygen lancing torch is in operation.
- 2.c Compliance with OAC rule 3745-31-05(A)(3) (BAT) shall be demonstrated by use of

carbon dioxide shielding, compliance with visible emission limitations and production limitations.

- 2.d** The hourly emission limitations outlined above are based upon the emission unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum amount of tundish lanced for this emissions unit shall not exceed 39,000 tons per year based upon a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the amount of tundish lanced limitation specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Amount of Tundish Lanced (Tons)</u>
1	3250
1-2	6500
1-3	9750
1-4	13,000
1-5	16,250
1-6	19,500
1-7	22,750
1-8	26,000
1-9	29,250
1-10	32,500
1-11	35,750
1-12	39,000

After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the annual amount of tundish lanced limitation shall be based upon a rolling, 12-month summation of the amount of tundish lanced figures.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following:
 - a. The amount of tundish lanced, in tons.

- b. Beginning after the first 12 calendar months of operation following the issuance of this permit to install, the rolling, 12-month summation of the amount of tundish lanced figures.

Also, during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall record the cumulative amount of tundish lanced for each calendar month.

2. The permittee shall perform daily inspections of this emissions unit to determine compliance with the above mentioned applicable requirements. These inspections shall be performed during representative, normal operating conditions. The permittee may, upon receipt of written approval from the appropriate Ohio EPA 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.
3. The permittee shall maintain daily records of the following information:
 - a. The date and time of the inspection.
 - b. The date and reason any required inspection was not performed.
 - c. Any steps taken to bring the emissions unit into compliance when the inspection indicated that the emissions unit was not in compliance with the above mentioned applicable requirements.
4. The permittee shall maintain the following daily records on each day this emissions unit is in operation:
 - a. The number of hours the emissions unit was in operation.
 - b. The amount of carbon dioxide used.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month tundish lanced limitation and, for the first 12 calendar months of operation following the issuance of this permit to install, all exceedances of the maximum allowable cumulative amount of tundish lanced figures.
2. 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; and

Emissions Unit ID: F003

- b. each instance when any steps were taken to bring the emissions unit into compliance when the inspection indicated that the emissions unit was not in compliance with the above mentioned applicable requirements.
3. 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 emissions limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.
2. Compliance with the PM / PM-10 emissions limitations shall be based on the emission factor of 2.8 lb PM /ton lanced and 1.624 lb PM-10/ ton lanced, the hourly and annual production rates and 90% control efficiency for CO2 shielding.
3. Compliance with the tundish lanced limitation in term B.1. shall be determined by the recordkeeping in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit (F003) contained in permit to install 14-04853 as issued on December 29, 1999.

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>
F004 - Kish and Mill Scale Processing Plant	OAC rule 3745-31-05(A)(3)	1.29 lbs PM/hr, 0.94 TPY PM as a rolling, 12-month summation 0.61 lb PM-10/hr, 0.45 TPY PM-10 as a rolling, 12-month summation See Terms A.2.b and B.1 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).
	OAC rule 3745-17-07(B)(1)	The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See Terms A.2.c and A.2.d

2. Additional Terms and Conditions

- 2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - i. All conveyors (7) and chutes (1) in the kish and mill scale processing plant and associated transfer points.

- ii. Feed hopper.
- iii. SECO 5' x 12' double deck screen.
- iv. Single deck screen.

2.b Visible particulate emissions from any screen, conveyor or transfer point shall not exceed 10 percent opacity, as a six-minute average.

2.c The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
Feed hopper	Use of dedicated water sprays, as needed to comply with the applicable regulations, to wet slag feed material to meet visible emissions limitations Minimize front end loader bucket-to-feeder drop height
All screens	Use of dedicated water spray, as needed to comply with the applicable regulations, at each screen to meet visible emissions limitations Minimize drop height

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.d For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation

Emissions Unit ID: F004

confirms that use of the control measure(s) is unnecessary.

- 2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by using water sprays, as needed to comply with the applicable regulations, at each feeder and screen and compliance with the visible emissions limitations.
- 2.f The hourly emission limitations outlined above are based upon the emission unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum amount of kish processed for this emissions unit shall not exceed 216,000 tons per year as a rolling, 12-month summation. The maximum amount of mill scale processed shall not exceed 225,000 tons per year as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the amount of kish and mill scale processed limitations specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Amount of Kish Processed (Tons)</u>	<u>Maximum Allowable Amount of Mill Scale Processed (Tons)</u>
1	18,000	18,750
1-2	36,000	37,500
1-3	54,000	56,250
1-4	72,000	75,000
1-5	90,000	93,750
1-6	108,000	112,500
1-7	126,000	131,250
1-8	144,000	150,000
1-9	162,000	168,750
1-10	180,000	187,500
1-11	198,000	206,250
1-12	216,000	225,000

After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the annual amount of kish and mill scale processed limitation shall be based upon a rolling, 12-month summation of the amount of kish and mill scale processed figures.

2. All feeders and screens identified in term 2.c, above within the processing plant shall be equipped with a dedicated water spray. In the case of failure or malfunction of any individual water spray, the failure or malfunction shall be reported as described in term D.1.c and D.1.d, below.
3. In the event of failure or malfunction of a pump affecting more than one water spray location, the permittee shall evaluate visible emissions from such affected points upon discovery. Should observations indicate a potential or actual violation of visible emissions limitations, the permittee shall perform one or more of the following until normal control measures are restored:
 - a. utilize portable water sprays at the affected locations;
 - b. shut down the affected sources until repairs are made;

- c. increase water flow to "upstream" conveyors to ensure that slag maintains sufficient moisture to prevent visible emissions violations from points of malfunctioning sprayers.

C. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies to determine compliance with the above mentioned applicable requirements:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
All chutes, conveyors, transfer points, screens and feeder	daily

- 2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA 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.
- 4. The permittee shall maintain daily records of the following information:
 - a. The date and time of the inspection.
 - b. The date and reason any required inspection was not performed.
 - c. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s).
 - d. The dates the control measure(s) was (were) implemented.
 - e. On a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 5. The permittee shall maintain monthly records of the following:
 - a. The amount of kish and mill scale processed, in tons.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit to install, the rolling, 12-month summation of the amount of kish and mill scale

processed figures.

Also, during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall record the cumulative amount of kish and mill scale processed for each calendar month.

D. Reporting Requirements

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.
 - b. Each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
 - c. Each day that an inspection indicated a malfunction of any individual water spray or pump.
 - d. The dates that replacement or repair parts were ordered and installed for D.1.c, above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month kish and mill scale processed limitation and, for the first 12 calendar months of operation following the issuance of this permit to install, all exceedances of the maximum allowable cumulative amount of kish and mill scale processed limitation.
3. 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 emissions limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.
2. Compliance with the hourly and annual PM/PM-10 emissions limitations shall be determined through the following methods using the following equations and emissions factors:

Conveyor transfer points = 4.8×10^{-5} lb PM-10/ton material processed, 0.000101 lb PM/ton material processed. (Based on AP-42, Table 11.19.2-2, 1/95, PM=2.1*PM-10)

Feeder loading = 0.000531 lb PM-10/ton material processed, 0.001122 lb PM/ton material processed. (Based on AP-42, Section 13.2.4.3, 1/95, U=7.17 mph, M = 0.92%, 90% control for watering)

Screening = 0.00084 lb PM-10/ton material processed, 0.001764 lb PM/ton material processed. (Based on AP-42, Table 11.19.2-2, 1/95, PM=2.1*PM-10)

$$H_{total} = H_t + H_f + H_s$$

where:

H_{total} = total hourly emissions for all transfer points, feeder, and screens

H_t , H_f , and H_s shall be found individually through the following equations.

$$A_{total} = A_t + A_f + A_s$$

where:

A_{total} = total annual emissions for all transfer points, feeder, and screens

A_t , A_f , and A_s shall be found individually through the equations for H_t , H_f and H_s and replacing the hourly production rates by annual production rates.

Transfer points

$$H_t (\text{PM-10}) = (4.8 \times 10^{-5} \text{ lb PM-10/ton}) * \sum_{i=1}^n T_i$$

$$H_t (\text{PM}) = (0.000101 \text{ lb PM/ton}) * \sum_{i=1}^n T_i$$

where:

H_t = hourly PM / PM-10 emissions from transfer points (lbs/hr)

T_i = hourly throughput at transfer point "i", tons/hr

n = total number of transfer points in the plant (1 to n)

Feeder loading

$$H_f (\text{PM-10}) = 0.000531 * T_f$$

$$H_f (\text{PM}) = 0.001122 * T_f$$

where:

H_f = hourly PM / PM-10 emissions for feeder loading (lbs/hr)

T_f = hourly throughput for feeder loading, tons/hr

Screens

$$H_s (\text{PM-10}) = (0.00084 \text{ lb PM-10/ton}) * \sum_{i=1}^n T_i$$

$$H_s (\text{PM}) = (0.001764 \text{ lb PM/ton}) * \sum_{i=1}^n T_i$$

where:

H_s = hourly PM / PM-10 emissions for screens (lbs/hr)

T_i = hourly throughput at screen "i", tons/hr

n = Total number of screens in the plant (1 to n)

3. Compliance with the kish and mill scale limitation in term B.1. shall be determined by the recordkeeping in term C.5.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 14-05037 Facility ID: 1409010908

FACILITY NAME Olympic Mill Services

FACILITY DESCRIPTION Modification to PTI 14-04853 for Oxvgen CITY/TWP Middletown

Emissions Unit ID: F004

SIC CODE 3295 SCC CODE 3-05-888-04 EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Oxygen lancing operation (2 lancing stations) with carbon dioxide shielding - Modification

DATE INSTALLED 1/00

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	5.6 lbs/hr	5.5	5.6 lbs/hr	5.5
PM ₁₀	Attainment	3.2 lbs/hr	3.2	3.2 lbs/hr	3.2
Sulfur Dioxide	Attainment				
Organic Compounds	Attainment				
Nitrogen Oxides	Attainment				
Carbon Monoxide	Attainment				
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

BAT is satisfied by using CO2 shielding and compliance with the visible emissions limitations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 14-05037

Facility ID: 1409010908

FACILITY NAME Olympic Mill Services

FACILITY DESCRIPTION Modification to PTI 14-04853 for Oxvgen CITY/TWP Middletown

Emissions Unit ID: **F004**

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

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

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

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

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

NSR Discussion

PTI 14-05037

Olympic Mill Services
3024 Oxford State Road
Middletown, OH 45044
Facility ID: 1409010908

Olympic Mill Services (OMS) performs slag processing operations for the AK Steel facility in Middletown, Ohio. Ohio EPA Legal has determined that OMS should be considered a separate facility from AK Steel for New Source Review Purposes. OMS is proposing to modify the oxygen lancing operation (emissions unit F003) by cutting the tundish 100% across the width of the tundish as compared to the present limitation of cutting 50% across the width of the tundish. In addition, OMS is modifying the currently deminimis mill scale screening plant by adding more equipment and converting it to a new emissions unit - kish & mill scale processing plant (emissions unit F004). OMS does not wish the annual emissions allowable to be based on 8760 hours per year of operation and would like the annual emissions allowable based on the projected annual production rate. The overall PTI emissions allowable is 3.65 TPY PM-10 and 6.44 TPY PM.

The applicable regulations are OAC rules 3745-31-05(A)(3), 3745-15-07, 3745-17-07 and 3745-17-08.

Best Available Technology (BAT) for emissions unit F003 is satisfied by using CO2 shielding and compliance with the visible emissions limitations. BAT for emissions unit F004 is satisfied by using water sprays at each feeder and screen and compliance with the visible emissions limitations.

NEW SOURCE REVIEW FORM B

PTI Number: 14-05037

Facility ID: 1409010908

FACILITY NAME Olympic Mill Services

FACILITY DESCRIPTION Modification to PTI 14-04853 for Oxvgen CITY/TWP Middletown

Emissions Unit ID: **F004**

A final PTI should be issued as the emissions units will be in compliance with all applicable regulations.

The permit fee is:	F003 (based on max PWR 20 tons/hr, SIC code 3295)	=	\$300
	F004 (based on max PWR 300 tons/hr, SIC code 3295)	=	<u>\$700</u>
	Total fee	=	\$1000

Prepared by: Ajay Bahri

Date prepared: December 16, 1999

24 **NEW SC**

PTI Num

FACILITY

Emissions Unit ID: **F004**

FACILITY DESCRIPTION

Modification to PTI 14-04853 for Oxygen
Lancing Operation (F003) issued on
12/29/1999 and installation of Kish and
Mill Scale Processing Plant (F004)

CITY/TWP

Middletown

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

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

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

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	6.44
PM-10	3.65

NEW SC

PTI Num

FACILITY

Emissions Unit ID: **F004**

FACILITY DESCRIPTION	Modification to PTI 14-04853 for Oxygen Lancing Operation (F003) issued on 12/29/1999 and installation of Kish and Mill Scale Processing Plant (F004)	CITY/TWP	Middletown
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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'

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

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

NSR Discussion
PTI 14-05037

Olympic Mill Services
3024 Oxford State Road
Middletown, OH 45044
Facility ID: 1409010908

Olympic Mill Services (OMS) performs slag processing operations for the AK Steel facility in Middletown, Ohio. Ohio EPA Legal has determined that OMS should be considered a separate facility from AK Steel for New Source Review Purposes. OMS is proposing to modify the oxygen lancing operation (emissions unit F003) by cutting the tundish 100% across the width of the tundish as compared to the present limitation of cutting 50% across the width of the tundish. In addition, OMS is modifying the currently deminimis mill scale screening plant by adding more equipment and converting it to a new emissions unit - kish & mill scale processing plant (emissions unit F004). OMS does not wish the annual emissions allowable to be based on 8760 hours per year of operation and would like the annual emissions allowable based on the projected annual production rate. The overall PTI emissions allowable is 3.65 TPY PM-10 and 6.44 TPY PM.

The applicable regulations are OAC rules 3745-31-05(A)(3), 3745-15-07, 3745-17-07 and 3745-17-08.

Best Available Technology (BAT) for emissions unit F003 is satisfied by using CO2 shielding and compliance with the

NEW SOURCE REVIEW FORM B

PTI Number: 14-05037

Facility ID: 1409010908

FACILITY NAME Olympic Mill Services

FACILITY DESCRIPTION Modification to PTI 14-04853 for Oxvgen CITY/TWP Middletown

Emissions Unit ID: **F004**

visible emissions limitations. BAT for emissions unit F004 is satisfied by using water sprays at each feeder and screen and compliance with the visible emissions limitations.

A final PTI should be issued as the emissions units will be in compliance with all applicable regulations.

The permit fee is:	F003 (based on max PWR 20 tons/hr, SIC code 3295)	=	\$300
	F004 (based on max PWR 300 tons/hr, SIC code 3295)	=	<u>\$700</u>
	Total fee	=	\$1000

Prepared by: Ajay Bahri

Date prepared: December 16, 1999

NEW SC

PTI Num

FACILITY

Emissions Unit ID: **F004**

FACILITY DESCRIPTION

Modification to PTI 14-04853 for Oxygen
Lancing Operation (F003) issued on
12/29/1999 and installation of Kish and
Mill Scale Processing Plant (F004)

CITY/TWP

Middletown

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

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

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

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
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PM-10	3.65