

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

LANSING



DAN WYANT DIRECTOR

October 6, 2014

Mr. Allen E. Tomes, Jr. Director of Operations Louis Padnos Iron and Metal Company P.O. Box 1979 Holland, Michigan 49422-1979

Dear Mr. Tomes:

Enclosed is the Notice of Termination for Stipulation for Entry of Final Order by Consent, AQD No. 5-2012. This is in response to the request made by your company to the Michigan Department of Environmental Quality (MDEQ).

If you have any questions regarding the enclosed notice, please contact Ms. Rachel McLeod, Enforcement Unit, Air Quality Division, at 517-284-6770.

Sincerel ynn Fiedler, Acting Chief Air-Quality Division 617-284-6773

Enclosure

cc/enc: Ms. Sarah Marshall, United States Environmental Protection Agency, Region 5 Mr. Neil Gordon, Michigan Department of Attorney General

Ms. Heidi Hollenbach, MDEQ

Mr. Thomas Hess, MDEQ

Ms. Rachel McLeod, MDEQ

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

In the matter of administrative proceedings ) against LOUIS PADNOS IRON AND METAL ) COMPANY, a corporation organized under the ) laws of the State of Michigan and doing ) business at 185 West 8<sup>th</sup> Street, City of Holland) County of Ottawa, State of Michigan )

AQD No. 5-2012

SRN: B1982

# NOTICE OF TERMINATION

This Notice is issued pursuant to a request for termination submitted by Louis Padnos Iron and Metal Company, pursuant to paragraph 21 of the Stipulation for Entry of Final Order by Consent (Consent Order), AQD No. 5-2012. The request contained supporting information as required by paragraph 21 of AQD No. 5-2012. Review of this request and supporting information indicates that Louis Padnos Iron and Metal Company has achieved compliance with the terms and requirements of the Consent Order.

THEREFORE, effective on the date signed below, AQD No. 5-2012 is terminated. The Michigan Department of Environmental Quality reserves the right to pursue administrative, civil and/or criminal proceedings, including the assessment of monetary fines, for any falsification of information submitted in support of Louis Padnos Iron and Metal Company's request for termination of the Consent Order AQD No. 5-2012, or for any violation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.5501 *et seq.;* and all other applicable laws.

Lynn Fiedler, Acting Chief Al Quality Division Michigan Department of Environmental Quality

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF THE DIRECTOR

)

)

)

In the matter of administrative proceedings against LOUIS PADNOS IRON AND METAL COMPANY, a corporation organized under the laws of the State of Michigan and doing business at 185 West 8<sup>th</sup> Street, in the City of Holland, County of Ottawa, State of Michigan

AQD No. 5-2012

SRN: B1982

# STIPULATION FOR ENTRY OF FINAL ORDER BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), against Louis Padnos Iron and Metal Company (Company), a Michigan corporation located at 185 West 8<sup>th</sup> Street in the City of Holland, County of Ottawa, State of Michigan, with State Registration Number (SRN) B1982. The MDEQ alleges that the Company is in violation of the Michigan Administrative Code (MAC), 2001 AACS, R 336.210. Specifically, the MDEQ alleges that the Company failed to obtain a Renewable Operating Permit (ROP) due to hydrochloric acid emissions exceeding the Major Source threshold of Hazardous Air Pollutants which is 10.0 tons per year, as cited herein and in the Violation Notice dated June 14, 2011. The Company and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act. 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.

#### AQD No. 5-2012

3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.

4. The Director has delegated authority to the Chief of the AQD (AQD Chief) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Chief.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

#### COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. A. <u>Permit</u>

Permit to Install (PTI) 182-80C and any subsequent permit revision shall be attached hereto as Exhibit A and made enforceable as part of this Consent Order.

B. Final Emission Limitations

1. On and after the effective date of this Consent Order, the hydrogen chloride and sulfuric acid emission rates from the Continuous Rotary De-oiling Furnace shall not exceed the emission limits specified for Emission Unit EUROTARYDRYER in PTI 182-80C or any subsequent permit revision.

2. On and after the effective date of this Consent Order, the hydrogen chloride and sulfuric acid emission rates from the CORECO Boring Dryer shall not exceed the emission limits specified for Emission Unit EUCORECODRYER in PTI 182-80C or any subsequent permit revision.

. .

# C. Malfunction Abatement Plan (MAP)

 A MAP for EUROTARYDRYER and EUCORECODRYER as outlined in PTI 182-80C and pursuant to R 336.1911 is attached as Exhibit B and is made an enforceable part of this Consent Order.

2. The Company shall not operate EUROTARYDRYER or EUCORECODRYER unless the MAP, or an alternate plan approved by the AQD Grand Rapids District Supervisor is implemented and maintained.

3. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within forty-five (45) days after such an event occurs. The permittee shall also amend the MAP within forty-five (45) days if new equipment is installed or upon request from the AQD Grand Rapids District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD Grand Rapids District Supervisor for review and approval. The revised MAP shall replace the MAP referred to in paragraph 9.C.2 and shall be attached and become an enforceable part of this Consent Order.

# **TESTING**

10. Within 180 days after commencement of initial startup of the dry sorbent injection system, the Company shall verify hydrogen chloride and sulfuric acid emission rates by testing at owner's expense in accordance with Department requirements as outlined in PTI 182-80C or any subsequent permit revision. No less than thirty (30) days prior to testing, the Company shall submit a complete test plan to the AQD Technical Programs Unit and the AQD Grand Rapids District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within sixty (60) days following the last date of the test.

#### SUPPLEMENTAL ENVIRONMENTAL PROJECT

11. The Company agrees to undertake the Supplemental Environmental Project (SEP) described in Exhibit C which is attached, incorporated by reference and made enforceable under this Consent Order. Performance of the SEP will benefit the environment and is a project which the Company is not otherwise legally required to perform. The Company agrees to implement the SEP in accordance with the details specified in Exhibit C and the following terms and conditions:

A. The total expenditure for the SEP is estimated to be \$58,000.00 as provided below. All costs of the SEP shall be the responsibility of the Company. For the SEP which is fully and completely implemented, to the extent that the actual expenditures for the SEP totals less than 90% of \$58,000.00 the Company is subject to a stipulated penalty of up to \$26,000.00 depending on the size of the monetary shortfall realized by the Company. Payment of any stipulated penalty shall be made as outlined in paragraph 16.

B. The plan included as Exhibit C contains a schedule, including specific dates for the implementation of the SEP. The Company shall fully implement all aspects of the SEP within the specified schedule.

C. The Company certifies that the Company is not otherwise required by any local, state, or federal statute, regulation, rule, order, decree, permit, or other law or agreement, to develop or implement the SEP activities specified in Exhibit C. The Company further certifies that the Company has not received, and is not presently negotiating to receive, a credit for the SEP as part of any other enforcement action or any grant from the state, Environmental Protection Agency (EPA) or any other entity.

D. In the event the Company fails to fully and completely implement the SEP as provided here, the MDEQ will provide written notice to the Company describing the nature of the deficiency. The Company shall have thirty (30) days from receipt of the notice to submit documentation to the AQD Grand Rapids District Supervisor demonstrating that the deficiency has been corrected. In the event the deficiency is not corrected, the Company will be notified and the Company shall be in violation of this Consent Order and required to pay a stipulated penalty of up to \$26,000.00 to the MDEQ, subject to the requirements of paragraph 16. The amount of the stipulated penalty may be reduced or waived by the MDEQ if the Company made good faith and timely efforts to complete the project. Payment of stipulated penalties under the terms of this paragraph shall satisfy the Company's obligation to complete the SEP under this Consent Order. Payment of any stipulated penalty shall be made as outlined in paragraph 16.

E. The Company agrees that any public statement, oral or written, making reference to the SEP shall include the following language: "This project was undertaken in connection with the settlement of

an enforcement action taken by the Michigan Department of Environmental Quality for alleged violations of the Clean Air Act."

F. After the effective date of this Consent Order, until completion of all activities specified in Exhibit C, the Company shall provide the AQD Grand Rapids District Supervisor with a progress report every three months. Each progress report shall include a description of the SEP activities the Company completed in the prior three months.

G. No later than thirty (30) days after the completion of all activities specified in Exhibit C, the Company shall submit written certification of completion of the SEP to the AQD Grand Rapids District Supervisor demonstrating that all SEP activities specified in Exhibit C have been completed in accordance with the terms and conditions of this Consent Order and Exhibit C. The certification shall be accompanied by appropriate documentation (such as invoices, receipts) to verify the total expenditure as a result of implementing the activities specified under Exhibit C.

#### **GENERAL PROVISIONS**

12. On and after the effective date of this Consent Order, except as otherwise provided by the administrative rules of Part 55, the Company shall not install, construct, reconstruct, relocate, alter, or modify any process or process equipment including control equipment pertaining thereto, which may emit an air contaminant, unless a permit to install which authorizes such action is issued by the MDEQ pursuant to Rule 201, the Company is issued a waiver pursuant to Rule 202, or the change is exempt from the requirements of Rule 201.

13. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

14. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

15. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of

Michigan" and delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$40,000.00, which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD4003 on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

16. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9B of this Consent Order, the Company is subject to a stipulated fine of up to \$5,000.00 per violation. On and after the effective date of this Consent Order, if the Company fails to comply with paragraphs 9c or 10 of this Consent Order, the Company is subject to stipulated fines of up to \$1000.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with any other provision of this Consent Order except Paragraph 9, 10 and 11, the Company is subject to a stipulated fine of up to \$500.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD4003-S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

17. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

18. To ensure timely payment of the settlement amount assessed in paragraph 15 and any stipulated fines assessed pursuant to paragraph 16 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest penalty shall be determined at a rate of twelve percent (12%) per year

compounded annually, using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 16 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

19. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 15. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 16 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

20. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

21. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Grand Rapids District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Chief.

22. In the event Louis Padnos Iron and Metal Company sells or transfers the facility, with SRN B1982, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD

Page 8

Grand Rapids District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Louis Padnos Iron and Metal Company must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Grand Rapids District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

23. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

24. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

25. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of its facility located at 185 West 8<sup>th</sup> Street, in Holland, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

LOUIS PADNOS IRON AND METAL COMPANY SHELLEY E. MONOS EXEC U.P. Print Name and Title Print Name and Title 4 Date: Signature

The above signatory subscribed and sworn to before me this 290 day of 200, 2012.

RUTH WORKMAN Notary Public, State of Michigan County of Ottawa My Commission Expires July 21, 2013 Acting in the County of Collarity

**Notary Public** 

Approved as to Content:

und

G. Vinson Hellwig, Chief AIR QUALITY DIVISION DEPARTMENT OF ENVIRONMENTAL QUALITY

Dated: 9/14/12

Approved as to Form:

Neil Gordon, Section Head ENVIRONMENTAL REGULATION SECTION ENVIRONMENT, NATURAL RESOURCES, AND AGRICULTURE DIVISION DEPARTMENT OF ATTORNEY GENERAL

Dated: Sept. 7, 2012

# FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

hin G. Vinson Hellwig, Chief

Air Quality Division

Effective Date:  $\frac{9/14/12}{}$ 

# EXHIBIT A

ATTACHED PTI 182-80C

# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

February 24, 2012 PERMIT TO INSTALL 182-80C

ISSUED TO Louis Padnos Iron & Metal

> LOCATED AT 185 West 8<sup>th</sup> Street Holland, Michigan

IN THE COUNTY OF Ottawa

# STATE REGISTRATION NUMBER B1982

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

 DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

 November 28, 2011

 DATE PERMIT TO INSTALL APPROVED:
 SIGNATURE:

 February 24, 2012
 SIGNATURE:

 DATE PERMIT VOIDED:
 SIGNATURE:

 DATE PERMIT REVOKED:
 SIGNATURE:

# PERMIT TO INSTALL

# **Table of Contents**

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	
Special Conditions	5
Emission Unit Summary Table	5
Special Conditions for EUROTARYDRYER	6
Special Conditions for EUCORECODRYER	
Special Conditions for EUBRIQUETTER	
Special Conditions for EUTURNINGCRUSHER	
Flexible Group Summary Table	
Special Conditions for FGFACILITY	20

# **Common Abbreviations / Acronyms**

	Common Acronyms Pollutant/Measurement Abbreviations		
AQD	Air Quality Division	BTU	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	co	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H₂S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NOx	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	РМ	Particulate Matter
MIOSHA	Michigan Occupational Safety & Health Administration (Department)	PM10	PM less than 10 microns diameter
MSDS	Material Safety Data Sheet	PM2.5	PM less than 2.5 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour
NSPS	New Source Performance Standards	ppm	Parts per million
NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonably Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide
SC	Special Condition	THC	Total Hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year Microgram
SRN	State Registration Number	µg VOC	Volatile Organic Compounds
TAC	Toxic Air Contaminant	1	Year
TEQ	Toxicity Equivalence Quotient	yr	i cai
VE	Visible Emissions		

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

#### GENERAL CONDITIONS

- The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

# SPECIAL CONDITIONS

# EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EUROTARYDRYER	Prab Engineering Model Pyrotech 400 Continuous Rotary De-oiling Furnace; maximum production capacity 18 tons per hour. Heat source is one natural gas/oil-fired burner, North American #6514-8B (8.15 MMBtu/hr). Control train is a 54 inch diameter cyclone collector, an afterburner (Prab Engineering, 10.5 feet diameter x 22 feet, natural gas-fired, North American #6514-8A (4.89 MMBtu/hr, 1200°F),) a vertical cooling tower, dry sorbent injection, and a 5-module reverse- air with shaker assist high temperature baghouse.	FGFACILITY
EUCORECODRYER	CORECO Boring Dryer Model 2350; natural gas-fired, 8 MMBtu/hr heat input; maximum production capacity 7 tons per hour. Control is a high efficiency cyclone, hot cyclone collector afterburner (1450°F, 1.25 sec retention time, 6 MMBtu/hr), heat exchanger, and baghouse.	FGFACILITY
EUBRIQUETTER	K-G Industries Model 720 MSS hot roll briquetter with baghouse control (Lynx Model Pulseflo).	FGFACILITY
EUTURNINGCRUSHER	Turnings crusher with fabric filter collector control (Jet Filter Emtrol Model pulse jet baghouse).	FGFACILITY
Changes to the equipment allowed by R 336.1278 to	nt described in this table are subject to the requirements of R 336.1290.	of R 336.1201, except as

## The following conditions apply to: EUROTARYDRYER

**DESCRIPTION:** Prab Engineering Model Pyrotech 400 Continuous Rotary De-oiling Furnace; maximum production capacity 18 tons per hour. Heat source is one natural gas/oil-fired burner, North American #6514-88 (8.15 MMBtu/hr).

## Flexible Group ID: FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** Control train is a 54 inch diameter cyclone collector, an afterburner (Prab Engineering, 10.5 feet diameter x 22 feet, natural gas-fired, North American #6514-8A (4.89 MMBtu/hr, 1200°F),) a vertical cooling tower, dry sorbent injection, and a 5-module reverse-air with shaker assist high temperature baghouse.

# I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.06 lbs per 1000 lbs of gas <sup>a</sup>	Test Protocol*	EUROTARYDRYER	GC 13	R 336.1331
2. PM10	5.4 pph	Test Protocol*	EUROTARYDRYER	GC 13	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. PM2.5	5.4 pph	Test Protocol*	EUROTARYDRYER	GC 13	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
<ol> <li>Hydrogen chloride (HCl)</li> </ol>	0.49 pph	Test Protocol*	EUROTARYDRYER	SC V.1	R 336.1224, R 336.1225
5. Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> )	1.05 pph	Test Protocol*	EUROTARYDRYER	SC V.1	R 336.1224, R 336.1225
	ed on a dry gas ba ocol shall specify a				

6. Visible emissions from EUROTARYDRYER shall not exceed a six-minute average of 15 percent opacity. (R 336.1301, R 336.1331)

## II. MATERIAL LIMITS

- The permittee shall not use more than 28,800 gallons per calendar day and 5,000,000 gallons per 12-month rolling time period as determined at the end of each calendar month of stormwater in the vertical cooling tower and cooling oscillator on EUROTARYDRYER.<sup>1</sup> (R336.1225, R336.1901)
- 2. The permittee shall not use any stormwater in the vertical cooling tower and cooling oscillator on EUROTARYDRYER that contains human sanitary wastewater or septage.<sup>1</sup> (R 336.1225, R 336.1901)

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUROTARYDRYER for more than 8,200 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3), R 336.1224, R 336.1225)
- 2. The permittee shall not operate EUROTARYDRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 60 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for guick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1224, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate EUROTARYDRYER unless the cyclone collector, afterburner, vertical cooling tower, dry sorbent injection system, and a 5-module baghouse are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUROTARYDRYER as required in SC III.2. (R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature for the afterburner portion of EUROTARYDRYER on a continuous basis. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop across each baghouse for EUROTARYDRYER on a continuous basis. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)
- 4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the amount of stormwater used on a continuous basis in the vertical cooling tower and cooling oscillator on EUROTARYDRYER.<sup>1</sup> (R 336.1225, R 336.1901)
- 5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the amount and rate of dry sorbent injection into EUROTARYDRYER. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

 Within 180 days after commencement of initial startup of the dry sorbent injection system, the permittee shall verify opacity, PM, PM10, PM2.5, HCI, and H<sub>2</sub>SO<sub>4</sub> emission rates from EUROTARYDRYER by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.2001, R 336.2003, R 336.2004)

# VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1901)
- The permittee shall keep, in a satisfactory manner, a log of the material processing / operating hours for EUROTARYDRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3), R 336.1224, R 336.1225)
- The permittee shall keep, in a satisfactory manner, continuous records of the afterburner temperature at all times when material is processed in EUROTARYDRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 4. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings from each baghouse for EUROTARYDRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)
- 5. The permittee shall keep, in a satisfactory manner, records of the amount of stormwater used in the vertical cooling tower and cooling oscillator on EUROTARYDRYER on a calendar day and 12-month rolling time period as determined at the end of each calendar month basis. All records shall be kept on file and made available to the Department upon request.<sup>1</sup> (R336.1225, R336.1901)
- 6. The permittee shall keep, in a satisfactory manner, records of the daily amount and rate of dry sorbent injection into EUROTARYDRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 7. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all components of EUROTARYDRYER maintained and operating in a satisfactory manner at all times. The permittee shall keep, in a satisfactory manner, a log of all significant maintenance activities conducted and all significant repairs made to EUROTARYDRYER. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.1911)

## VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of the dry sorbent injection system on EUROTARYDRYER. (R 336.1201(7)(a))

# VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV001	35	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2.	SV002	35	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3.	SV003	35	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4.	SV004	35	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5.	SV005	35	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENTS

1. Within 60 days of issuance of this permit, the permittee shall modify the stacks as specified in SC VIII.1 through 5. Within seven days of completing the stack modifications, the permittee shall notify the AQD District Supervisor, in writing, as to the date the modification was completed. (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# The following conditions apply to: EUCORECODRYER

**<u>DESCRIPTION</u>**: CORECO Boring Dryer Model 2350; natural gas-fired, 8 MMBtu/hr heat input; maximum production capacity 7 tons per hour.

# Flexible Group ID: FGFACILITY

**<u>POLLUTION CONTROL EQUIPMENT</u>:** Control is a high efficiency cyclone, hot cyclone collector afterburner (1450°F, 1.25 sec retention time, 6 MMBtu/hr), heat exchanger, and baghouse.

# I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.05 lbs per 1000 lbs of gas <sup>a</sup>	Test Protocol*	EUCORECODRYER	GC 13	R 336.1331
2. PM10	2.7 pph	Test Protocol*	EUCORECODRYER	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. PM2.5	2.7 pph	Test Protocol*	EUCORECODRYER	<sup>-</sup> GC 13	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. PM10	8.9 tpy	12-month rolling time period as determined at the end of each calendar month	EUCORECODRYER	SC VI.5	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. PM2.5	8.9 tpy	12-month rolling time period as determined at the end of each calendar month	EUCORECODRYER	SC VI.5	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
6. Hydrogen chloride (HCI)	0.056 pph	Test Protocol*	EUCORECODRYER	GC 13	R 336.1224, R 336.1225
7. Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> )	0.21 pph	Test Protocol*	EUCORECODRYER	GC 13	R 336.1224, R 336.1225
	on a dry gas b I shall specify	asis averaging time			

# II. MATERIAL LIMITS

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUCORECODRYER for more than 8,200 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3), R 336.1224, R 336.1225)
- The permittee shall not operate EUCORECODRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, 'specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1224, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate EUCORECODRYER unless the cyclone collector, baghouse, and afterburner with a minimum temperature of 1,450°F and a minimum retention time of 1.25 seconds, are installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature for the afterburner portion of EUCORECODRYER on a continuous basis. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop across the baghouse for EUCORECODRYER on a continuous basis. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1901)

- 2. The permittee shall keep, in a satisfactory manner, a log of the material processing / operating hours for EUCORECODRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3), R 336.1224, R 336.1225)
- 3. The permittee shall keep, in a satisfactory manner, continuous records of the afterburner temperature at all times when material is processed in EUROTARYDRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 4. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings from the baghouse for EUCORECODRYER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)
- 5. The permittee shall calculate the PM10 / PM2.5 emission rate from EUCORECODRYER in tons per calendar month and tons per 12-month rolling time period as determined at the end of each calendar month. The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 6. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all components of EUCORECODRYER maintained and operating in a satisfactory manner at all times. The permittee shall keep, in a satisfactory manner, a log of all significant maintenance activities conducted and all significant repairs made to EUCORECODRYER. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.1911)

# VII. <u>REPORTING</u>

NA

# VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV006	24	50	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENTS

NA

# Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## The following conditions apply to: EUBRIQUETTER

DESCRIPTION: K-G Industries Model 720 MSS hot roll briquetter.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Control is a baghouse (Lynx Model Pulseflo).

## I. EMISSION LIMITS

Pollutar	t Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.08 lbs per 1000 lbs of gas <sup>a</sup>	Test Protocol*	EUBRIQUETTER	GC 13	R 336.1331
2. PM10	3.4 pph	Test Protocol*	EUBRIQUETTER	GC 13	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## II. MATERIAL LIMITS

NA

## III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUBRIQUETTER for more than 8,200 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3))
- The permittee shall not operate EUBRIQUETTER unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee

shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1205, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

# IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate EUBRIQUETTER unless the baghouse is installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop across the baghouse for EUBRIQUETTER on a continuous basis. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)

# V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1331, R 336.1901)
- 2. The permittee shall keep, in a satisfactory manner, a log of the material processing / operating hours for EUBRIQUETTER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3), R 336.1901)
- 3. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings from the baghouse for EUBRIQUETTER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)
- 4. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all components of EUBRIQUETTER maintained and operating in a satisfactory manner at all times. The permittee shall keep, in a satisfactory manner, a log of all significant maintenance activities conducted and all significant repairs made to EUBRIQUETTER. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910, R 336.1911)

## VII. <u>REPORTING</u>

NA

# VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV007	42	28.5	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

# IX. OTHER REQUIREMENTS

NA

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

#### The following conditions apply to: EUTURNINGCRUSHER

**DESCRIPTION:** Turnings crusher.

Flexible Group ID: FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** Fabric filter collector control (Jet Filter Emtrol Model pulse jet baghouse).

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lbs per 1000 lbs of gas <sup>a</sup>	Test Protocol*	EUTURNINGCRUSHER	GC 13	R 336.1331
2. PM10	0.15 pph	Test Protocol*	EUTURNINGCRUSHER	GC 13	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
	d on a dry gas ol shall specify	basis v averaging time	J		

#### II. MATERIAL LIMITS

NA

## III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUTURNINGCRUSHER unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1205, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate EUTURNINGCRUSHER unless the baghouse is installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop across the baghouse for EUTURNINGCRUSHER on a continuous basis. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1331, R 336.1901)
- 2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings from the baghouse for EUTURNINGCRUSHER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910)
- 3. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all components of EUTURNINGCRUSHER maintained and operating in a satisfactory manner at all times. The permittee shall keep, in a satisfactory manner, a log of all significant maintenance activities conducted and all significant repairs made to EUTURNINGCRUSHER. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1331, R 336.1901, R 336.1910, R 336.1911)

#### VII. <u>REPORTING</u>

NA

## VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV008	48	38	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

# IX. OTHER REQUIREMENTS

NA

.

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

# The following conditions apply Source-Wide to: FGFACILITY

**DESCRIPTION:** All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

Emission Units: NA

# POLLUTION CONTROL EQUIPMENT: NA

# I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10	Less than 90 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

# II. MATERIAL LIMITS

NA

# III. PROCESS/OPERATIONAL RESTRICTIONS

NA

# IV. DESIGN/EQUIPMENT PARAMETERS

NA

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
- 2. The permittee shall calculate the PM10 emission rate from FGFACILITY in tons per calendar month and tons per 12-month rolling time period as determined at the end of each calendar month. The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R336.1205(3))

Louis Padnos Iron & Metal (B1982) Permit No. 182-80C

# VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTIONS

NA

# IX. OTHER REQUIREMENTS

NA

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

.

.

AQD No. 5-2012

.

.

# EXHIBIT B

Attached PM/MAP

### Malfunction Abatement Plan EUROTARYDRYER EUCORECODRYER EUTURINGSCRUSHER EUBRIQUETTER

### **Process Description**

- EUROTARYDRYER:

Prab Engineering Model Pyrotech 400 Continuous Rotary De-oiling Furnace; maximum production capacity 18 tons hour. Heat source is one natural gas/oil-fired burner, North American #6514-8B. Control train is a 54 inch diameter cyclone collector, an afterburner, a vertical cooling tower, dry sorbent injection, and a 5-module reverse-air with shaker assist high temperature bag house.

- EUCORECODRYER:

Coreco Boring Dryer Model 2350; natural gas-fired, 8 MMBtu/hr heat input; maximum production capacity 7 tons per hour. Control is a high efficiency cyclone, hot cyclone collector afterburner, heat exchanger, and bag house.

- EUTURNINGCRUSHER: Turnings crusher with fabric filter collector control.
- EUBRIQUETTER:
   K-G Industries Model 720 MMS hot roll briquetter with bag house control

### Supervisory Personnel

- Briquetter Superintendent
- Briquetter Shift Supervisor
- Padnos Electrical Department
- IXL Machine Shop

### **Emission Control Equipment**

- Emtrol Model Pulse Jet Baghouse (EUTURNINGCRUSHER)
- Bag House (EUCORECODRYER)
- 5 Baghouses (EUROTARYDRYER)
- Dry Sorbent Injection System (EUROTARYDRYER)
- Vertical Cooling Tower (EUROTARYDRYER)
- Afterburner (EUCORECODRYER & EUROTARYDRYER)
- Lynx Model Pulsflo Baghouse (EUBRIQUETTER)

### **Daily Inspected Items** (see attached daily inspection checklist)

- Emtrol Model Pulse Jet Bag House (EUTURNINGCRUSHER)
  - o Shell
  - o Ductwork
  - o Airlock
- Bag House (EUCORECODRYER)
  - o Shell
  - o Ductwork
  - o Airlock
  - o Emission Tribo Monitor
- 5 Baghouses (EUROTARYDRYER)

AQD No. 5-2012

- o Shell
- o Ductwork
- o Auger
- o Airlock
- o Emission Tribo Monitor
- Dry Sorbent Injection System (EUROTARYDRYER)
  - o Ductwork
  - o General operation (monitored by sensors)
  - o Feedstock inventory level
  - o Input rate and screw auger operation
- Vertical Cooling Tower (EUROTARYDRYER)
  - o General operation
  - o Ductwork
  - o Water pressure
  - o Air pressure
- Afterburner (EUCORECODRYER)
  - o Temperature
  - o Ductwork
- Afterburner (EUROTARYDRYER)
  - o Temperature
  - o Ductwork
- Lynx Model Pulsflo Baghouse (EUBRIQUETTER)
  - o Ductwork
  - o Shell
  - o Auger
  - o Airlock
  - o Emission Tribo Monitor

### Scheduled Maintenance (90 day shutdown) (See attached 90 day checklist)

- Emtrol Model Pulse Jet Bag House (EUTURNINGCRUSHER)
  - o Cell plate visual inspection
  - o Condition of bags visual inspection
  - o Jet pulsers visual inspection
  - o Condition of ductwork visual inspection
  - o Bag cages visual inspection
  - Air lock visual inspection
- Bag House (EUCORECODRYER)
  - o Cell plate visual inspection
  - o Condition of bags visual inspection
  - o Jet pulsers visual inspection
  - o Condition of ductwork visual inspection
  - Bag cages visual inspection
  - Air lock visual inspection
- 5 Baghouses (EUROTARYDRYER)

-

- o Cell plate visual inspection
- Shaker assembly visual inspection
- o Condition of ductwork and shell visual inspection
- Condition of bags visual inspection
- o Material augers visual inspection

- o Air lock → visual inspection
- Dry Sorbent Injection System (EUROTARYDRYER)
  - o Condition of ductwork visual inspection
  - o Air-lock visual inspection
  - o Condition of feed auger visual inspection
  - Vertical Cooling Tower (EUROTARYDRYER)
    - o Spray nozzles Visual inspection
    - o Condition of ductwork visual inspection
- Afterburner (EUROTARYDRYER)
  - o Refractory visual inspection
  - o Condition of ductwork visual inspection
- Afterburner (EUCORECODRYER)
  - o Refractory visual inspection
  - o Condition of ductwork visual inspection
  - Lynx Model Pulsflo Baghouse (EUBRIQUETTER)
    - o Jet pulsuer visual inspection
    - o Cell plate visual inspection
    - o Condition of ductwork visual inspection
    - o Condition of bags visual inspection
    - o Bag Cages -- visual inspection
    - o Air lock visual inspection
- Mixing Area Bin (Not Emission Control Equipment)
  - o Condition of bin-visual inspection

**<u>Calibration Schedule</u>** (see attached annual calibration checklist)

### - EUROARTRYDRYER

- o Bag house pressure gauge
- o Storm water flow meter
- o Afterburner temperature thermocouple
- o Dry Sorbent feed rate
- o Tribo Sensors
- EUCORECODRYER
  - o Afterburner temperature thermocouple
  - o Bag house pressure gauge
  - o Tribo Sensor
- EUBRIQUETTER
  - o Bag house pressure gauge
  - o Tribo Sensors
- EUTURNINGSCRUSHER
  - o Bag house pressure gauge

### **Inventoried Replacement Parts**

- Filter bags (EUCORECODRYER) (EUROTARYDRYER) (EUTURNINGCRUSHER) (EUBRIQUETTER)
- Spare burners (EUCORECODRYER) (EUROTARYDRYER)
- Water cooling nozzles (EUROTARYDRYER)
- Replacement wear parts for suction fans (EUCORECODRYER) (EUROTARYDRYER) (EUTURNINGCRUSHER) (EUBRIQUETTER)

### **Monitoring Devices:**

- Tribo bag house sensor (EUBRIQUETTER & EUCORECODRYER)
- EUROARTYDRYER
  - o Afterburner temperature at or above 1,200 deg. F.
    - Chart recorder
  - o Baghouse maximum temperature 500 deg. F
    - Recorded
- EUCORECODRYER
  - o Afterburner temperature at or above 1,450 deg. F.
    - Chart recorder
  - o Bag house maximum temperature 400 deg. F.
    - Recorded
- Pressure gauges for bag houses (EUCORECODRYER) (EUROTARYDRYER) (EUTURNINGCRUSHER) (EUBRIQUETTER)
  - o Monitoring and recording pressure readings
    - Coreco Dryer bag house pressure not less than 1.0 WC during operation not to exceed 13.0 WC
    - Rotary Dryer bag house pressure not less than 0.4 WC during operation not to exceed 8.0 WC
    - Turnings Crusher bag house pressure not less than 1.0 WC during operation not to exceed 11.0 WC
    - Briquetter bag house pressure not less than 4.0 WC during operation not to exceed 18.0 WC
- Dry-Sorbent (EUROTARYDRYER)
  - o Sensor for dry sorbent feed

Pressures and temperatures recorded hourly during operation.

#### Corrective Procedure

In the event of an alarm associated with an environmental control, personnel will immediately evaluate its validity. If the alarm is determined to be positive, the necessary corrective actions will be implemented immediately which may include shutting down the inspected item and associated emission unit. If the alarm is determined to be negative, personnel will evaluate the cause of the false trip and make necessary adjustments and or repairs. Any equipment shutdown for corrective procedures will not start up until the corrective action has been completed.

and the second second

. .....



# Briquetter & Turnings Crusher - Daily Inspection Checklist

Month:

Week Of:

Inspected Item	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time							
Unit Shell								
Duct work								
Airlock								

Lucu a sheet them	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time							
Unit Shell	1		1					
Duct work								
Augers					<u> </u>			
Airlock			- Aurile					
Tribo Monitor								

In an anticed theme	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time							*/
General Operation						1		
Ductwork								
Water pressure								
Air pressure								

In a shart than	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time							
General Operation								<u> </u>
Ductwork					]			<u> </u>
eed Stock Inventory								
Rate of Feed Auger			·					

itary Dryer Afterburn	er							
In us a stard it	Day	Sun	Mon	Тие	Wed	Thur	Fri	Sat
Inspected item	Time							
Temperature								
Ductwork								

to an attack to be a	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time			· · · · · · · · · · · · · · · · · · ·				[
Temperature	T							
Ductwork								

### EXHIBIT B

*	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected Item	Time		· · · · · ·					
Unit Shell							T	
Duct work								
Airlock								
Tribo Monitor	1 1							

I	Day	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Inspected item	Time				· · · · · · · · · · · · · · · · · · ·			
Unit Shell								
Duct work								
Augers								
Airlock								
Tribo Monitor	]							

A1	Dete	False	Alarm	<b>Corrective action taken</b>
Alarm	Date	yes	no	
	,			, , , , , , , , , , , , , , , , , , ,
	······································			,

#### Notes & Comments:

 -	 	 		 	 	
 	 	 	and the second se		 	

• • .

.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Briquetter & Turnings Crusher - 90 Day Checklist

#### Date of Shutdown

Inspected Items	Condition (circ	cle one)	Discription of corrective action required	Date Complete
Cell Plate	acceptable re	epairs needed		
Condition of Bags	acceptable re	epairs needed		
let Pulsers (operation)	acceptable re	epairs needed		
Bag cage	acceptable re	epairs needed		
Condition of Ductwork	acceptable re	epairs needed		
Airlock (condition)	acceptable re	epairs needed		

Inspection Conducted By:

Date of Inspection:

Mixing Area Bin				
Inspected Items	Condition (circle one)		Discription of corrective action required	Date Complete
Condition of Bin	acceptable	repairs needed		[

Inspection Conducted By:

Date of Inspection:

Inspected Items	Condition (circle one)	Discription of corrective action required	Date Complete
Cell Plate	acceptable repairs ner		
Condition of Bags	acceptable repairs ne		
Bag Shakers (operation)	acceptable repairs ne		
Airlock (condition)	acceptable repairs ne	i l	
Condition of Material Augers	acceptable repairs ne		
Condition of Ductwork	acceptable repairs ne		·····

Inspection Conducted By:

Date of Inspection:

Rotary Dryer (Kiln) Vertical Cooling 7	lower		
Inspected Items	Condition (circle one)	Discription of corrective action required	Date Complete
Sprayer operation	acceptable repairs needed		
Condition of Ductwork	acceptable repairs needed		

Inspection Conducted By:

Date of Inspection:

\_\_\_\_\_

AQD

No.

5-2012

AQD

Inspected Items	Condition (circle one)	Discription of corrective action required	Date Complete
Condition of Ductwork	acceptable repairs needed		
Condition of Airlock	acceptable repairs needed		
Condition of Feed Auger	acceptable repairs needed		

Inspection Conducted By:

Rotary Dryer Afterburner			an a	
Inspected Items	Condition	(circle one)	Discription of corrective action required	Date Complete
Condition of Refractory	acceptable	repairs needed		
Condition of Ductwork	acceptable	repairs needed		

Inspection Conducted By:

 Coreco Dryer Afterburner
 Discription of corrective action required
 Date Complete

 Inspected Items
 Condition (circle one)
 Discription of corrective action required
 Date Complete

 Condition of Refractory
 acceptable
 repairs needed
 Image: Condition of Ductwork
 Condition of Ductwork
 Complete

Inspection Conducted By:

Coreco Dryer Baghouse Condition (circle one) Discription of corrective action required Inspected Items Date Complete Cell Plate acceptable repairs needed Condition of Bags repairs needed acceptable Jet Pulsers (operation) acceptable repairs needed Bag cage acceptable repairs needed Condition of Ductwork repairs needed acceptable Condition of Airlock acceptable repairs needed

Inspection Conducted By:

Date of Inspection:

Briquetter Pulsflo Baghouse	其情報電報時期になる意味が、それに言語時間では、など、日					
Inspected Items	Condition (circle one)	Discription of corrective action required	Date Complete			
Cell Plate	acceptable repairs needed					
Condition of Bags	acceptable repairs needed					
Jet Pulsers (operation)	acceptable repairs needed		· ·			
Bag cage	acceptable repairs needed					

Date of Inspection:

Date of Inspection:

Date of Inspection:

Condition of Ductwork	acceptable	repairs needed	
Condition of Airlock	acceptable	repairs needed	

Inspection Conducted By:

a.

Date of Inspection:

ł

÷

AQD No.

5-2012



# Annual Calibration Checklist

Date of Last Calibration:

Calibrated Item	Date	Actual Reading	Device Reading	Corrections Needed		Corrections Made	Comments
				yes	no	(date)	
Kiln bag house 1 pressure gauge							
Kiln bag house 2 pressure gauge							
Kiln bag house 3 pressure gauge							
Kiln bag house 4 pressure gauge							
Kiln bag house 5 pressure gauge							
Kiln bag house 1 Tribo sensor							
Kiln bag house 2 Tribo sensor							
Kiln bag house 3 Tribo sensor				-			
Kiln bag house 4 Tribo sensor							
Kiln bag house 5 Tribo sensor							1
Storm water flow meter							
Kiln afterburner thermocouple							
Dry sorbent feed rate							

Calibrated Item	Date	Actual Reading	Device Reading Cori	Correction	is Needed	Corrections Made	Comments
				yes	no	(date)	
Coreco bag house pressure gauge							
Coreco bag house Tribo sensor							
Coreco afterburner	1						

Calibrated Item	Date	Actual Reading	Device Reading	Correction	s Needed	Corrections Made	Comments
				yes	no	(date)	
Bag house pressure gauge							
Bag house Tribo sensor							

EUTURNINGSCRUSHER			e en la secondada a secondada		ennyviette i		
Calibrated Item	Date	Actual Reading	Device Reading	Correction	s Needed	Corrections Made	Comments
				yes	no	(date)	
Bag house pressure gauge			1				

Calibration Conducted By:

AQD No.

# EXHIBIT C

### **Supplemental Environmental Projects**

- Name and Location of Entity Subject to the Enforcement Action: Louis Padnos Iron and Metal Company (Padnos), 185 West 8<sup>th</sup> Street in the City of Holland, County of Ottawa, State of Michigan.
- 2. Regulatory Information: This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) against Padnos relating to operations at its Holland facility. The MDEQ alleges that Padnos violated Michigan Administrative Code, Rule 336.210. Specifically, the MDEQ alleges that Padnos failed to obtain a Renewable Operating Permit (ROP) due to hydrochloric acid emissions exceeding the Major Source threshold of Hazardous Air Pollutants of 10.0 tons per year for at least the last 5 calendar years. Padnos and the MDEQ have agreed to resolution of the allegations through entry of a Stipulation for Entry of a Final Order by Consent (Consent Order), including the performance of a Supplemental Environmental Project (SEP) as described in this submittal.
- 3. Project Name: Tribo Electric Sensor Installation and Mixing Area Bin Installation.
- 4. Project Manager: Mr. Andrew Gatt, 185 West 8<sup>th</sup> Street, Holland, MI 49423; 616-396-6521; fax 616-396-5566; <u>andrew.gatt@padnos.com</u>.
- 5. MDEQ Contact Person: Ms. April Lazzaro, Senior Environmental Quality Analyst, Air Quality Division (AQD), 616-356-0248; <u>lazzaroa@michigan.gov</u>.
- 6. Geographical Area to Benefit from the Project: City of Holland adjacent to Padnos Yard.
- 7. SEP Categories: Category A Pollution Prevention; Category B Pollution Reduction.
- 8. Project Description:
  - a. Tribo Electric Sensor Installation. This project includes the installation of five (5) Auburn Systems Tribo.dsp Series U3600, self-checking particulate monitors in the bag house exhaust stacks. The Tribo.dsp Series U3600 are probe style monitors placed directly into the bag house exhaust stack from the briquetter. Please see the attached specification sheet.
  - b. Mixing Area Bin Installation. This project includes the installation of a 16' tall bin in the raw material mixing area, next to the feed hopper at the Turnings Crusher. Installation of the bin will address the need to contain fugitives generated during the raw material mixing process. The project will include the construction of two new walls installed adjacent to an existing wall at the mixing area. The two new walls along with the existing wall will form the three sided bin. A total of 110' linear feet of new bin wall will

be installed as part of this project. A cover will be installed over the bin. Please see the attached aerial photo of the briquetter showing the layout of the proposed walls in the mixing area.

### 9. Expected Environmental Benefits:

- a. The expected environmental benefit with the Tribo Electric Sensors will be an immediate notification if exhaust stack particulate exceeds a certain level. Potential particulate issues at an exhaust stack will be detected and addressed by operators much more quickly.
- b. The expected environmental benefit with the mixing area bin will be the reduction of fugitive dust escaping the mixing area during the raw material mixing process.

# 10. Project Budget:

- a. Padnos is a "C" corporation.
- b. Capital costs: \$22,640.00 (Tribo Sensors); \$55,000.00 (Mixing Area Bin).
- c. Life of capital equipment: approximately seven (7) years for Tribo Sensors; approximately fifteen (15) years for Mixing Area Bin.
- d. One-time, non-depreciable cost none.
- e. Annual operation costs: approximately \$3,000.00.

### 11. Project Schedule:

- a. Tribo Sensor Installation:
  - 1. Project implementation within 120 days of SEP approval.
  - 2. Project completion within sixty (60) days of project implementation.
  - 3. Project implementation status report to be submitted within thirty (30) days after project starts.
  - 4. Project completion status report to be submitted within thirty (30) days after project is complete.
- b. Mixing Area Bin:
  - 1. Project implementation within 120 days of SEP approval.
  - 2. Project completion within ninety (90) days of project implementation.

- 3. Project implementation status report to be submitted within thirty (30) days after project starts.
- 4. Project completion status report to be submitted within thirty (30) days after project is complete.
- 12. Accounting: Not applicable. No third party implementer is proposed.
- **13. Reporting:** Project status reports will include the date the equipment was ordered, the date the equipment is delivered and installed and the date the project is complete. Copies of the purchase order for the equipment will be provided. The reports will also include equipment design details provided by the equipment vendors.

### 14. Prior Commitments and/or Regulatory Requirements:

- a. No regulations require implementation of this project or any part of this project.
- b. There are no binding private commitments to implement this project.
- c. There are no other requirements to implement this project.
- d. Not Applicable.
- 15. Certification of Expenditures by the Alleged Violator: I certify that to the best of my knowledge the SEP is solely attributed to the settlement of the current enforcement action and that no funding has been budgeted to the project prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributed to Padnos' normal budgetary process. In addition, this SEP is not being done, nor will it receive credit, as part of an environmental incentive or awards program.

