

**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 8th 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:

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	3
Special Conditions	5
Emission Unit Summary Table.....	5
Special Conditions for EUROTARYDRYER	6
Special Conditions for EUCORECODRYER.....	10
Special Conditions for EUBRIQUETTER.....	13
Special Conditions for EUTURNINGCRUSHER.....	16
Flexible Group Summary Table	19
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	H ₂ S	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	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	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 ₂	Sulfur Dioxide
SC	Special Condition	THC	Total Hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	µg	Microgram
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds
TEQ	Toxicity Equivalence Quotient	yr	Year
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

1. 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 conditions or malfunction has been corrected, or within 30 days of discovery of 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.
12. 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 described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.		

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 #6514-8B (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 ^a	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)
4. Hydrogen chloride (HCl)	0.49 pph	Test Protocol*	EUROTARYDRYER	SC V.1	R 336.1224, R 336.1225
5. Sulfuric acid (H ₂ SO ₄)	1.05 pph	Test Protocol*	EUROTARYDRYER	SC V.1	R 336.1224, R 336.1225
^a Calculated on a dry gas basis * Test protocol shall specify averaging time					

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.¹ **(R336.1225, R336.1901)**
- The permittee shall not use any stormwater in the vertical cooling tower and cooling oscillator on EUROTARYDRYER that contains human sanitary wastewater or septage.¹ **(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 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 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))**
2. 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.¹ **(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))**

1. Within 180 days after commencement of initial startup of the dry sorbent injection system, the permittee shall verify opacity, PM, PM10, PM2.5, HCl, and H₂SO₄ 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)**
2. 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)**
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 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.¹ **(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. REPORTING

1. 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:

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

The following conditions apply to: EUCORECODRYER

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

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: 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 ^a	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	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 (HCl)	0.056 pph	Test Protocol*	EUCORECODRYER	GC 13	R 336.1224, R 336.1225
7. Sulfuric acid (H ₂ SO ₄)	0.21 pph	Test Protocol*	EUCORECODRYER	GC 13	R 336.1224, R 336.1225
^a Calculated on a dry gas basis * Test protocol shall specify 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)**
2. 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))**
2. 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))**

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)**

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. REPORTING

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:

¹This 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

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.08 lbs per 1000 lbs of gas ^a	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)
^a Calculated on a dry gas basis * Test protocol shall specify averaging time					

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))**
2. 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))**
2. 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))**

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, 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. REPORTING

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:

¹This 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 Emtrrol 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 ^a	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)

^a Calculated on a dry gas basis
 * Test protocol shall specify averaging time

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. REPORTING

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:

¹This 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))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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