

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

October 11, 2012

PERMIT TO INSTALL
158-94C

ISSUED TO
Towns Brothers Construction Company

LOCATED AT
5594 Sixth Street
Ludington, Michigan

IN THE COUNTY OF
Mason

STATE REGISTRATION NUMBER
N2313

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:

October 5, 2012

DATE PERMIT TO INSTALL APPROVED:

October 11, 2012

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO ₂ e	Carbon Dioxide Equivalent	°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
GHGs	Greenhouse Gases	kW	Kilowatt
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	Malfuction Abatement Plan	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM less than 10 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM less than 2.5 microns diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* 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
EUDRYER	A 30.0 MMBtu/hr natural gas-fired rotary drum dryer for drying chrome ore or sand and is controlled by a dry fabric filter dust collector.	NA
EUSANDPROCESS	Sand handling process consisting of equipment used for the feeding, screening, classifying, conveying, and storing of sand. The sand handling processes are either enclosed in a building or covered. Sand processing equipment consisting of hoppers, conveyors, elevators, screens, bins, storage silos, etc, used for material handling, sorting/blending of the sand into various product types, truck loading and bagging operations. Process equipment will minimize emissions by lowering drop heights, conveyor covers, and/or enclosure in a building.	NA
EUCHROMEPROCESS	A combination of process equipment (jaw crusher, screen, pulverizer, feeder, conveyors etc.) used to reduce chrome ore down to a smaller size and transport to storage silo. The jaw crusher, screen, pulverizer and bagging operation exhaust through a common fabric filter collector.	NA
EUSTORAGEPILES	Open area stock piles of various material sizes and product types. Water spray of material products are used when necessary for material storage piles. Chrome ore storage piles are maintained within an enclosed structure.	NA
EUTRUCKTRAFFIC	Truck traffic for delivery of material products to customers; truck traffic from delivery of material products to processing area and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks. All commercial truck areas and unpaved road portions at the facility.	NA
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: EUDRYER

DESCRIPTION: A 30.0 MMBtu/hr natural gas-fired rotary drum dryer for drying chrome ore or sand

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Dry fabric filter dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.01 lbs per 1,000 lbs exhaust gases	Test Protocol*	EUDRYER	SC V.1	R 336.1331(1)(c), 40 CFR 60.732
2. PM10	1.58 pph	Test Protocol*	EUDRYER	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. PM2.5	1.58 pph	Test Protocol*	EUDRYER	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

*Test Protocol shall specify averaging time

4. Visible emissions from EUDRYER shall not exceed a six-minute average of 10 percent opacity. (R 336.1301, R 336.1331, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 60.732)

II. MATERIAL LIMITS

- The permittee shall not process more than 3,600 tons of sand product per day nor 1,314,000 tons of sand product per 12-month rolling time period, as determined at the end of each calendar month, through EUDRYER. (R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
- The permittee shall not process more than 20 tons of chrome ore per hour nor 129,000 tons of chrome ore per 12-month rolling time period, as determined at the end of each calendar month, through EUDRYER. (R 336.1205, R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
- The permittee shall burn only natural gas in EUDRYER. (R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- The permittee shall not process any asbestos tailing or asbestos containing waste materials in EUDRYER pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. (40 CFR Part 61 Subpart M)

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall not operate EUDRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the EUDRYER dry fabric filter dust collector, has been submitted prior to commencement of operation, and is implemented and maintained. 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 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EUDRYER unless the dry fabric filter dust collector is installed, maintained and operated in a satisfactory manner. Satisfactory operation includes maintaining the dry fabric filter dust collector pressure drop in accordance with manufacturer's specifications. The proper pressure drop range shall be specified in the malfunction abatement plan, as required by SC III.1. **(R 336.1205, R 336.1225, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall equip and maintain the EUDRYER dry fabric filter dust collector with a device which measures the pressure drop. **(R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall verify PM emission rates from stack emissions from EUDRYER, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and UUU. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 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. **(40 CFR Part 60 Subparts A & UUU)**
2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall evaluate visible emissions from EUDRYER, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and UUU. Visible emission observation procedures must have prior approval by the AQD Technical Programs Unit and District Office. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD Technical Programs Unit and District Office within 60 days following the last date of the evaluation. **(R 336.1301, 40 CFR Part 60 Subparts A & UUU)**

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 by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep daily, monthly, and 12-month rolling time period records of the amount of sand processed through EUDRYER. The permittee shall keep records of the amount of material processed on file and make them available to the Department upon request. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
3. The permittee shall keep daily, monthly, and 12-month rolling time period records of the amount of chrome ore processed through EUDRYER. The permittee shall keep records of the amount of material processed on file and make them available to the Department upon request. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

4. The permittee shall keep, in a satisfactory manner, daily records of the pressure loss across the EUDRYER dry fabric filter dust collector on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.371, R 336.1901, R 336.1910)**

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 EUDRYER. **(R 336.1201(7)(a))**
2. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stack 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. SVDRYER	36 x 36	62.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and UUU, as they apply to EUDRYER. **(40 CFR Part 60 Subparts A & UUU)**

The following conditions apply to: EUSANDPROCESS

DESCRIPTION: Dry sand handling process consisting of equipment used for feeding, screening, classifying, conveying, and storing of sand.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Minimize emissions by lowering drop heights, conveyor covers, and/or enclosure in a building

I. EMISSION LIMITS

1. Visible emissions from the drop point and transfer point portions of EUSANDPROCESS shall not exceed 10 percent opacity. (R 336.1301, R 336.1331, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSANDPROCESS unless the fugitive dust control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. (R 336.1371, R 336.1901)

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))

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. Prior to start-up, the permittee shall provide a final list of and label all EUSANDPROCESS equipment using the company-provided ID Numbers, according to a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed.
(R 336.1201)

The following conditions apply to: EUCHROMEPROCESS

DESCRIPTION: A combination of process equipment (jaw crusher, screen, pulverizer, feeder, conveyors etc.) used to reduce chrome ore down to a smaller size and transport to storage silo.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: The jaw crusher, screen, pulverizer and bagging operation exhaust through a common fabric filter collector.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.01 lbs per 1,000 lbs exhaust gases	Test Protocol*	EUCHROMEPROCESS	GC 13	R 336.1331(1)(c)
*Test Protocol shall specify averaging time					

2. Visible emissions from the drop point and transfer point portions of EUCHROMEPROCESS shall not exceed 10 percent opacity. (R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 60.670)

II. MATERIAL LIMITS

- The permittee shall not process any asbestos tailing or asbestos containing waste materials in EUCHROMEPROCESS pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. (40 CFR Part 61 Subpart M)
- The permittee shall not process more than 20 tons of chrome ore per hour nor 129,000 tons of chrome ore per 12-month rolling time period, as determined at the end of each calendar month, through EUCHROMEPROCESS. (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall not operate any portion of EUCHROMEPROCESS unless each portion of EUCHROMEPROCESS meets the specific opacity limit listed in Appendix A of this permit. (R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 60.670)
- The permittee shall not operate EUCHROMEPROCESS unless the fugitive dust control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. (R 336.1371, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate any portion of EUCHROMEPROCESS unless the equipment's specified control device is installed, maintained and operated in a satisfactory manner as listed in Appendix A. (R 336.1225, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
- The permittee shall not operate the jaw crusher, screen, pulverizer and bagging operation portions of EUCHROMEPROCESS unless the dry fabric filter dust collector is installed, maintained and operated in a satisfactory manner. (R 336.1225, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

3. The permittee shall equip and maintain the EUCHROMEPROCESS dry fabric filter dust collector with a device which measures the pressure drop. **(R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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 by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep daily and monthly records of the amount of chrome ore processed through EUCHROMEPROCESS and daily hours of operation. Further the permittee shall calculate on a monthly basis, the yearly throughput rate based upon the most recent 12-month rolling time period. The permittee shall keep records of the amount of material processed on file and make them available to the Department upon request. **(R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
3. The permittee shall keep, in a satisfactory manner, daily records of the pressure loss across the EUCHROMEPROCESS dry fabric filter dust collector on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stack 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. SVCHROMEPROCESS	36 x 36	62.5	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall maintain labels on all equipment using the company ID Numbers in Appendix A, according to a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. **(R 336.1201)**

The following conditions apply to: EUTRUCKTRAFFIC

DESCRIPTION: Truck traffic for delivery of material products to customers; truck traffic from delivery of material products to processing area and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks. All commercial truck areas and unpaved road portions at the facility.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Fugitive Dust Control Plan

I. EMISSION LIMITS

1. Visible emissions from all wheel loaders and all truck traffic, operated in conjunction with EUTRUCKTRAFFIC, shall not exceed five (5) percent opacity. Compliance shall be demonstrated using Test Method 9D as defined in Section 324.5525(j) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUTRUCKTRAFFIC unless the fugitive dust control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. **(R 336.1371, R 336.1372, Act 451 324.5524)**

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))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EUSTORAGEPILES

DESCRIPTION: Open area stock piles of various material sizes and product types

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Water spray of material products are used when necessary for material storage piles. Chrome ore storage piles are maintained within an enclosed structure.

I. EMISSION LIMITS

1. Visible emissions from each of the material storage piles maintained under EUSTORAGEPILES (other than chrome ore storage piles), shall not exceed five (5) percent opacity. Compliance shall be demonstrated using Test Method 9D as defined in Section 324.5525(j) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). **(R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
2. There shall be no visible emissions from the EUSTORAGEPILES chrome ore storage piles. **(R 336.1225, R 336.1301, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSTORAGEPILES unless the fugitive dust control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. **(R 336.1371, R 336.1372, Act 451 324.5524)**
2. The permittee shall maintain all EUSTORAGEPILES chrome ore storage piles within an enclosed structure. **(R 336.1225, R 336.1371, Act 451 324.5521, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

APPENDIX A

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
Feeder	381	10	
Conveyor	394	No Visible Emissions	Enclosed inside a building
Jaw Crusher	385	5	Fabric Filter Collector
Conveyor	395	No Visible Emissions	Enclosed inside a building
Dryer	411	5	Fabric Filter Collector
Conveyor	396	No Visible Emissions	Enclosed inside a building
Screen	384	5	Fabric Filter Collector
Conveyor	401	No Visible Emissions	Enclosed inside a building
Conveyor	415	No Visible Emissions	Enclosed inside a building
Pulverizer	438	5	Fabric Filter Collector
Conveyor	416	No Visible Emissions	Enclosed inside a building
Conveyor	429	No Visible Emissions	Covered
Silo	441	No Visible Emissions	Enclosed inside a building
Bagging operation	449	5	Bag wraps around silo outlet and excess air is ducted to the fabric filter collector

APPENDIX B
Fugitive Dust Control Plan

I. Site Roadways / Plant Yard

- A. The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.
- B. All paved roadways and the plant yards shall be swept as needed between applications.
- C. Any material spillage on roads shall be cleaned up immediately.

II. Plant

The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.

III. Storage Piles

- A. Stockpiling of all sand shall be performed to minimize drop distance and control potential dust problems.
- B. Sand stockpiles shall be watered on an as needed basis in order to meet the opacity limit of 5 percent. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

IV. Truck Traffic

On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any side board, side panel or tailgate. Otherwise, the truck shall be tarped.

V. AQD/MDEQ Inspection

The provisions and procedures of this plan are subject to adjustment by written notification from the AQD if, following an inspection, the AQD finds the fugitive dust requirements and/or permitted emission limits are not being met.