

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF THE DIRECTOR

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In the matter of administrative proceedings )  
against **GOKOH COLDWATER** )  
**INCORPORATED**, a company organized )  
under the laws of the State of Michigan and )  
doing business at 100 Concept Drive in the )  
City of Coldwater, County of Branch, State )  
of Michigan )

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AQD No. 9-2013

SRN: N5904

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 Gokoh Coldwater Incorporated (Company), a Michigan corporation located at 100 Concept Drive in the City of Coldwater, County of Branch, State of Michigan, with State Registration Number (SRN) N5904. The MDEQ alleges that the Company is in violation of Code of Federal Regulations (CFR) Title 40, Part 63, Subpart EEEEE, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries (NESHAP for Iron and Steel Foundries). Specifically, the MDEQ alleges that the Company and a nearby facility, Asama Coldwater Manufacturing (ACM), are a single stationary source under Michigan's Renewable Operating Permit (ROP) Program and that the Company has violated the NESHAP for Iron and Steel Foundries by failing to perform opacity readings, failing to perform testing on the cold box core machines for triethylamine (TEA), failing to submit a written Operation and Maintenance Plan, failing to install a continuous parameter monitoring (CPM) system on the capture system, failing to install a CPM to measure and record the scrubbing liquid flow rate from the wet scrubber, and failing to demonstrate that the capture system meets accepted engineering standards, as cited herein and in the Violation Notice dated January 17, 2013. The Company and MDEQ stipulate to the termination of this proceeding by entry of this 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.
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. Permit
  1. On and after the effective date of this Consent Order, the Company shall comply with the conditions specified in Permit to Install (PTI) 162-11A, as amended, which will be attached as Exhibit A upon issuance.
  2. If after the effective date of this Consent Order the conditions of PTI 162-11A, as amended, are included in a ROP, then the Company shall comply with all conditions of that ROP.

B. Control Program and Installation Schedule

1. On April 26, 2013, the Company performed opacity compliance testing, according to the requirements in EPA Method 9, on the structure housing the cold box core operation. Hereafter, the Company shall demonstrate compliance with the opacity limit once every 6 months as required by the NESHAP for Iron and Steel Foundries.
2. By May 30, 2013, the Company shall perform testing to demonstrate compliance with the emission limits of TEA from the cold box core machines.
3. By June 15, 2013, the Company shall submit a written Operation and Maintenance Plan, shall submit documentation that demonstrates that the TEA capture system meets accepted engineering standards, and shall develop a minimum three hour average scrubber liquid flow rate based on testing.
4. By May 3, 2013, the Company shall install a continuous parameter monitoring system for the TEA capture system, as required by the NESHAP for Iron and Steel Foundries 40 CFR 63.7740(a).
5. By May 3, 2013, the Company shall install a continuous parameter monitoring system to monitor and record the liquid flow rate from the wet scrubber, as required by the NESHAP for Iron and Steel Foundries 40 CFR 63.7741(e).

GENERAL PROVISIONS

10. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state and 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.

11. 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.

12. 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 \$15,000.00, which includes AQD costs for investigation and enforcement. The total sum of \$15,000.00 shall be made in four (4) payments as follows: a payment of \$3,750.00 shall be paid within thirty (30) days of the effective date of this Consent Order; a second payment of \$3,750.00 shall be made on or before November 1, 2013; a third payment of \$3,750.00 shall be paid on or before February 1, 2014; a final payment of \$3,750.00 shall be made on or before May 1, 2014. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD40014 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.

13. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.B.1, 9.B.2, 9.B.3, 9.B.4, or 9.B.5 of this Consent Order, the Company is subject to a stipulated fine of up to \$10,000.00 per violation. On and after the effective date of this Consent Order, if the Company fails to comply with any other provision of Exhibit A or this Consent Order, the Company is subject to a stipulated fine of up to \$1,000.00 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. AQD40014-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.

14. 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.

15. To ensure timely payment of the settlement amount assessed in paragraph 12 and any stipulated fines assessed pursuant to paragraph 13 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 13 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.

16. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 12. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 13 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.

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

18. This Consent Order shall remain in full force and effect for a period of at least five (5) 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 Kalamazoo District Office 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.

19. In the event Gokoh Coldwater Incorporated sells or transfers the facility, with SRN N5904, 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 Kalamazoo District Office 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 Gokoh Coldwater Incorporated 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 Kalamazoo District Office District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

20. 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.

21. 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.

22. 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 100 Concept, Coldwater, 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.

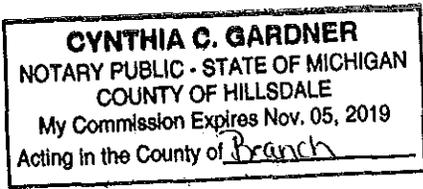
The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

**GOKOH COLDWATER INCORPORATED**

DAN YAMANAKA President  
Print Name and Title

[Signature] Date: 7/18/2013  
Signature

The above signatory subscribed and sworn to before me this 18 day of July, 2013.



[Signature]  
Notary Public

Approved as to Content:

Approved as to Form:

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

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

Dated: 8/6/13

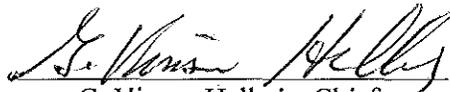
Dated: 7/31/2013

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

  
G. Vinson Hellwig, Chief  
Air Quality Division

Effective Date: 8/6/13

Exhibit A

Permit to Install No. 162-11A

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

June 28, 2013

PERMIT TO INSTALL  
162-11A

ISSUED TO  
Gokoh Coldwater, Inc.

LOCATED AT  
100 Concept Drive  
Coldwater, Michigan

IN THE COUNTY OF  
Branch

STATE REGISTRATION NUMBER  
N5904

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: <b>May 24, 2013</b>	
DATE PERMIT TO INSTALL APPROVED: <b>June 28, 2013</b>	SIGNATURE: <i>Mary Ann DeBasty</i>
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 <sub>2</sub> 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 <sub>2</sub> 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	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
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 <sub>2</sub>	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)	Installation Date / Modification Date	Flexible Group ID
EU-SHELLCORE	7 shell core machines with horizontal exhaust to ambient air. Core wash tank (limited use) with dust collector control exhausted inside the building.	12/2/2011	NA
EU-SILOS	Sand Storage Silos, 2 at 75 tons capacity each, sand handling, and two sand mixers (sand is mixed with resin) with a fabric filter dust collection system. #1, 8,500 cfm  Includes transfer of sand from trucks to the silo and pneumatic sand feed through enclosed piping from the silo	12/2/2011	NA
EU-LAEMPE#1AND#2	Two Laempe cold box core machines  Phenolic Urethane Cold Box core making process. Mixed sand/resin is set to make cores. Triethylamine (TEA) catalyst. Emission control is two Dakota acid scrubbers, 3,850 cfm each  Equipment includes two Laempe core making machines and two natural gas fired core ovens, 1.5 MMBtu/hr each; 1.33 tons/hr cores nominal throughput capacity	12/2/2011	NA
EU-MISCELLANEOUS	Use of materials ancillary to the core making process including daub/mud, glue/paste, coating, core box release agent, and metal cleaners	12/2/2011	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: EU-SHELLCORE**

**DESCRIPTION:** 7 shell core machines. Core wash tank (limited use)

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT:** horizontal exhaust to ambient air from shell core machines at 9,300 cfm. 2,400 cfm dust collector on the wash tank exhausted inside the building.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-SHELLCORE	SC VI.1	R 336.1702(a)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate the EU-SHELLCORE core wash tank unless the dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, venting the dust collector exhaust inside the building. (R 336.1301, R 336.1331, R 336.1910)

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall calculate the VOC emission rates from EU-SHELLCORE for each calendar month and 12-month rolling time period using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1702)

**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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSHELLCORE <sup>A</sup>	24	14	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

<sup>A</sup>Exhaust is vented horizontally to the ambient air

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: EU-SILOS**

**DESCRIPTION:** Sand Storage Silos, (2) at 75 tons capacity each, sand hoppers, and two sand mixers (sand is mixed with resin). Includes transfer of sand from trucks to the silo and pneumatic sand feed through enclosed piping from the silo

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** Fabric filter dust collection system #1, 8,500 cfm

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lb/1,000 lb exhaust gas	Test Protocol*	EU-SILOS	GC 11 SC VI.5, VI.6	R 336.1331
2. PM	2.50 tpy	12-month rolling time period as determined at the end of each calendar month	EU-SILOS	SC VI.4	R 336.1331

\*Test Protocol shall specify averaging time

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sand	25,000 tons/yr throughput	12-month rolling time period as determined at the end of each calendar month	EU-SILOS	SC VI.1	R 336.1205(3), R 336.1331

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EU-SILOS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the sand storage and handling operations, has been submitted within 90 days of permit issuance, and is implemented and maintained. (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 EU-SILOS unless the fabric filter system is installed, maintained, and operated in a satisfactory manner. (R 336.1205(3), R 336.1301, R 336.1331, R 336.1910)
2. The permittee shall not operate EU-SILOS unless a gauge, which continuously measures the pressure drop across the fabric filter dust collection system is installed, maintained and operated in a satisfactory manner. (R 336.1301, R 336.1331, R 336.1910)

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record, in a satisfactory manner, the sand usage for EU-SILOS on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1301, R 336.1331)
2. The permittee shall monitor and record, in a satisfactory manner, the pressure drop across the EU-SILOS fabric filter dust collection system on an each operational day basis. (R 336.1301, R 336.1331, R 336.1910)
3. The permittee shall keep, in a satisfactory manner, all daily records of the EU-SILOS fabric filter dust collection system pressure drop, as required by SC VI.2 on file at the facility and make them available to the Department upon request. (R 336.1301, R 336.1331, R 336.1910)
4. The permittee shall calculate the PM emission rates from EU-SILOS for each calendar month and 12-month rolling time period using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1331)
5. The permittee shall verify the presence of visible emissions by taking six-minute visible emission readings from EU-SILOS a minimum of once per week. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. Multiple stacks may be observed simultaneously. If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures:
  - a) The permittee shall perform the six-minute visible emission readings at least once every 30 minutes until emissions are no longer visible or until emissions have been observed for more than two hours.
  - b) If visible emissions have been observed for more than two hours, a certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).
  - c) If the results of the Federal Reference Test Method 9 visible emission observation indicate a violation of the opacity standard specified in GC 11, the permittee shall immediately initiate corrective actions. (R 336.1301, R 336.1303)
6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings from EU-SILOS. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1301, R 336.1303, R 336.1910)

**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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSILOS	18	25	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

NA

The following conditions apply to: EU-LAEMPE#1AND#2

**DESCRIPTION:** Two Laempe cold box core machines

Phenolic Urethane Cold Box core making process. Mixed sand/resin is set to make cores.  
 Triethylamine (TEA) catalyst

Equipment includes two Laempe core making machines and two natural gas fired core ovens,  
 1.5 MMBtu/hr each; 1.33 tons/hr cores nominal throughput capacity

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT:** Triethylamine (TEA) catalyst emissions controlled by two Dakota  
 packed tower acid scrubbers, 3,850 cfm each

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1.54 tpy	12-month rolling time period as determined at the end of each calendar month	EU-LAEMPE#1AND#2	SC VI.3	R 336.1702
2. TEA	1 ppmv (or 99% reduction)	Test Protocol*	EU-LAEMPE#1AND#2	SC V.1, V.2	R 336.1225, 40 CFR 63.7690(a)(11)(i) or (ii)
3. Visible emissions	20% opacity (except for one 6-minute average per hour of not more than 27% opacity)	Test Protocol*	Any building or structure housing EU-LAEMPE#1AND#2	SC V.3	40 CFR 63.7690(a)(7)

\*Test Protocol shall specify averaging time

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Resin Part A	115 tons/yr throughput	12-month rolling time period as determined at the end of each calendar month	core making	SC VI.1	R 336.1702
2. Resin Part B	115 tons/yr throughput	12-month rolling time period as determined at the end of each calendar month	core making	SC VI.1	R 336.1702
3. Catalyst TEA	35 tons/yr throughput	12-month rolling time period as determined at the end of each calendar month	core making	SC VI.1	R 336.1702

4. The permittee shall burn only natural gas in the core ovens of EU-LAEMPE#1AND#2. (R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall submit to the AQD District Supervisor, implement, and maintain an approvable operation and maintenance plan for the EU-LAEMPE#1AND#2 packed tower scrubber system. The plan shall contain all information required by 40 CFR 63.7710(b). (40 CFR 63.7710(b), 40 CFR 63.7745)
2. The permittee shall not operate EU-LAEMPE#1AND#2 unless the packed tower scrubber system 3-hour average pH of the scrubber blowdown, as measured by a continuous parameter monitoring system, does not exceed 4.5 OR the pH of the scrubber blowdown, as measured once every 8 hours during process operations, does not exceed 4.5. (R 336.1225, R 336.1702, R 336.1901, R 336.1910, 40 CFR 63.7690(b)(5))
3. The permittee shall not operate EU-LAEMPE#1AND#2 unless the packed tower scrubber system 3-hour average scrubbing liquid flow rate is maintained at or above the minimum level established during the initial or subsequent performance test. (R 336.1225, R 336.1702, R 336.1901, R 336.1910, 40 CFR 63.7690(b)(5))
4. The permittee shall operate and maintain the air pollution control and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions. (40 CFR 63.6(e)(1)(1), 40 CFR 63.7710(a))
5. The permittee shall comply with the applicable emission limitations, work practice standards, and operation and maintenance requirements in 40 CFR 63 Subpart EEEEE at all times, except during periods of startup, shutdown, or malfunction. (40 CFR 63.7720(a))
6. The permittee shall develop and implement a written startup, shutdown, and malfunction plan in accordance with 40 CFR 63.6(e)(3). (40 CFR 63.7720(c))

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EU-LAEMPE#1AND#2 unless the packed tower scrubber system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, installing and maintaining the scrubber according to the provisions outlined in 40 CFR 63.7690(b) and 40 CFR 63.7710. (R 336.1225, 40 CFR 63.7690(b), 40 CFR 63.7710)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a continuous parameter monitoring system for the EU-LAEMPE#1AND#2 packed tower scrubber system according to the provisions outlined in 40 CFR 63.7690(b) and 40 CFR 63.7741. (R 336.1225, R 336.1702, R 336.1910, 40 CFR 63.7690(b), 40 CFR 63.7740, 40 CFR 63.7741)

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after the compliance date specified in 40 CFR 63.7683, the permittee shall demonstrate initial compliance with the opacity and TEA emission limitations from EU-LAEMPE#1AND#2 by testing at owner's expense, in accordance with 40 CFR Part 63 Subparts A and EEEEE. 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 initial compliance with the emission limitations 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 63.7730(a), 40 CFR 63.7732, 40 CFR 63.7734)
2. No less frequently than every 5 years and each time the permittee elects to change an operating limit or to comply with a different alternative emissions limit, the permittee shall demonstrate compliance with the TEA emission limitations from EU-LAEMPE#1AND#2 by subsequent testing at owner's expense, in accordance with 40 CFR Part 63 Subparts A and EEEEE. 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 compliance with the emission limitations 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 63.7731(a), 40 CFR 63.7743)
3. No less frequently than once every 6 months, the permittee shall demonstrate compliance with the opacity limitation from EU-LAEMPE#1AND#2 by subsequent testing at owner's expense, in accordance with 40 CFR Part 63 Subparts A and EEEEE. No less than 60 days prior to testing, the permittee shall submit a notification of intent to perform a compliance test to the AQD Technical Programs Unit and District Office. Verification of compliance with the limitation 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 63.7731(b), 40 CFR 63.7743)

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record, in a satisfactory manner, the resin and catalyst usage for EU-LAEMPE#1AND#2 on a monthly and 12-month rolling time period basis. (R 336.1225, R 336.1702)
2. The permittee shall monitor and record the EU-LAEMPE#1AND#2 packed tower scrubber system scrubbing liquid flow rate and pH of the scrubber blowdown using the continuous parameter monitoring system in accordance with the requirements outlined in 40 CFR 63.7740, 40 CFR 63.7741, 40 CFR 63.7742, and 40 CFR 63.7743. (R 336.1225, R 336.1702, R 336.1910, 40 CFR 63.7740, 40 CFR 63.7741, 40 CFR 63.7742, 40 CFR 63.7743)
3. The permittee shall calculate the VOC emission rates from EU-LAEMPE#1AND#2 for each 12 month rolling time period using a method acceptable to the AQD District Supervisor. (R 336.1702)

4. The permittee shall keep, in a satisfactory manner, records to demonstrate continuous compliance with the applicable operation and maintenance requirements of 40 CFR Part 63 Subpart EEEEE. All records shall be kept on file and made available to the Department upon request. (40 CFR 63.7745, 40 CFR 63.7753)
5. The permittee shall keep, in a satisfactory manner, all records required by 40 CFR 63.7752 to demonstrate compliance with 40 CFR Part 63 Subpart EEEEE. All records shall be kept on file and made available to the Department upon request. (40 CFR 63.7752, 40 CFR 63.7753)

## VII. REPORTING

1. The permittee shall submit all applicable notifications required in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), 40 CFR 63.8(f)(4) and (6), and 40 CFR 63.9(b) through (h) for EU-LAEMPE#1AND#2. (40 CFR 63.6, 40 CFR 63.7, 40 CFR 63.8, 40 CFR 63.9, 40 CFR 63.7750)
2. The permittee shall submit semi-annual compliance reports. The permittee shall submit all records to the AQD District Supervisor in an acceptable format, in accordance with 40 CFR 63.7751. (40 CFR 63.7746, 40 CFR 63.7751)

## 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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLAEMPE#1	20	52	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVLAEMPE#2	20	51	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVLaempeOven1	26	52	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SVLaempeOven2	11	53	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

## IX. OTHER REQUIREMENTS

1. Within 30 days after the compliance date specified in 40 CFR 63.7683, the permittee shall demonstrate initial compliance with the applicable work practice standards outlined in 40 CFR 63.7700 and operation and maintenance requirements outlined in 40 CFR 63.7710. (40 CFR 63.7730(b), 40 CFR 63.7734, 40 CFR 63.7735, 40 CFR 63.7736)

**The following conditions apply to: EU-MISCELLANEOUS**

**DESCRIPTION:** Use of materials ancillary to the core making process including daub/mud, glue/paste, coating, core box release agent, and metal cleaners

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	7.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-MISCELLANEOUS	SC VI.1, VI.2, VI.3	R 336.1702

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record, in a satisfactory manner, the VOC content of each material included in EU-MISCELLANEOUS. A Material Safety Data Sheet or other manufacturer's certification acceptable to the District Supervisor is a satisfactory record. (R 336.1205(3), R 336.1225, R 336.1702(a))
2. The permittee shall monitor and record, in a satisfactory manner, the usage rate in gallons on a monthly and 12-month rolling time period basis of each material included in EU-MISCELLANEOUS. (R 336.1205, R 336.1225, R 336.1702)

3. The permittee shall calculate and keep records of the VOC emission rate from EU-MISCELLANEOUS for each 12 month rolling time period using a method acceptable to the AQD District Supervisor. (R 336.1205, R 336.1225, R 336.1702)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA