

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

March 17, 2017

**PERMIT TO INSTALL**  
94-10A

**ISSUED TO**  
Oldcastle Materials Cement Holdings, Inc. d.b.a. CRH US

**LOCATED AT**  
15225 Day Road  
Dundee, Michigan

**IN THE COUNTY OF**  
Monroe

**STATE REGISTRATION NUMBER**  
P0635

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>February 24, 2017</b>	
DATE PERMIT TO INSTALL APPROVED: <b>March 17, 2017</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

## PERMIT TO INSTALL

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**Common Abbreviations / Acronyms**

<b>Common Acronyms</b>		<b>Pollutant / Measurement Abbreviations</b>	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H <sub>2</sub> S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO <sub>x</sub>	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO <sub>2</sub>	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 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.

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Installation Date/ Modification Date</b>	<b>Flexible Group ID</b>
EU005-1	DV005-1-1 One customer cement silo (North section) (Silo No. 20) equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV008.	01/01/1958, 3/17/2017	FG002
EU005-2	DV005-2-1 Eleven customer cement silos Nos. 9-19 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV009 and SV010.	01/01/1958, 3/17/2017	FG002
EU006-1	DV006-1-1 Packhouse cement silo no. 1 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV017.	01/01/1958, 3/17/2017	FG002
EU006-2	DV006-2-1 Packhouse cement silo no. 2 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV015.	01/01/1958, 3/17/2017	FG002
EU006-3	DV006-3-1 Packhouse cement silo no. 3 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV013.	01/01/1958, 3/17/2017	FG002
EU006-4	DV006-4-1 Packhouse cement silo no. 4 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV011.	01/01/1958, 3/17/2017	FG002
EU006-5	DV006-5-1 Packhouse cement silo no. 5 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV018.	01/01/1958, 3/17/2017	FG002
EU006-6	DV006-6-1 Packhouse cement silo no. 6 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV016.	01/01/1958, 3/17/2017	FG002
EU006-7	DV006-7-1 Packhouse cement silo no. 7 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV014.	01/01/1958, 3/17/2017	FG002
EU006-8	DV006-8-1 Packhouse cement silo no. 8 equipped with a 3,500 acfm reverse air baghouse. This equipment exhausts through SV012.	01/01/1958, 3/17/2017	FG002
EU011-1	DV011-1-1 Cement truck loading operation from Packhouse Silos with self-sealing cone including an integral lump crusher to reduce oversized materials. The truck loading equipment and lump crusher are controlled by a 1,800 acfm pulse jet cartridge filter. It is located at the NW Scale No. 1. This equipment exhausts through SV019.	01/01/1958 05/05/2003	FG003
EU011-2	DV011-2-1 Cement truck loading operation from Packhouse Silos with self-sealing cone including an integral lump crusher to reduce oversized materials. The truck loading equipment and lump crusher are controlled by a 1,800 acfm pulse jet cartridge filter. It is located at the NE Scale No. 2. This equipment exhausts through SV020.	01/01/1958 05/05/2003	FG003

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date/ Modification Date	Flexible Group ID
EU011-3	DV011-3-1 Cement truck loading operation from Packhouse Silos with self-sealing cone including an integral lump crusher to reduce oversized materials. The truck loading equipment and lump crusher are controlled by a 1,800 acfm pulse jet cartridge filter. It is located at the SW Scale No. 3. This equipment exhausts through SV021.	01/01/1958 05/05/2003	FG003
EU011-4	DV011-4-1 Cement truck loading operation from Packhouse Silos with self-sealing cone including an integral lump crusher to reduce oversized materials. The truck loading equipment and lump crusher are controlled by a 1,800 acfm pulse jet cartridge filter. It is located at the SE Scale No. 4. This equipment exhausts through SV022.	01/01/1958 05/05/2003	FG003
EU032	DV032-1 Masonry bagging operation (3 units) equipped with a 6,600 acfm pulse jet baghouse. This equipment exhausts through SV035.	09/15/1993	FG005
EU033	DV033-1 Cement bagging operation (3 units) equipped with a 6,600 acfm pulse jet baghouse. This equipment exhausts through SV036.	9/15/1993	FG005
EU011-5	DV011-5-1 Bulk cement loading operation to rail cars from the Packhouse Silos. The loading operation is controlled by a 4,400 acfm reverse air baghouse. It is located at the N. Scale No. 1. This equipment exhausts through SV023.	1/01/01958 1/1/1966 3/17/2017	FG006/9
EU011-6	DV011-6-1 Bulk cement loading operation to rail cars from the Packhouse Silos. The loading operation is controlled by a 4,400 acfm reverse air baghouse. It is located at the S. Scale No. 2. This equipment exhausts through SV024.	01/01/1958 1/1/1966 3/17/2017	FG006/9
EU011-7	DV011-7-1 Bulk cement loading operation to trucks from the Customer Silos. The loading operation is controlled by a 1,000 acfm pulse jet baghouse. It is located at Scale No. 5. This equipment exhausts through SV041.	01/01/1958 3/1/1984 3/17/2017	FG006/9
EU011-8	DV011-8-1 Bulk cement loading operation to trucks from the Customer Silos. The loading operation is controlled by a 1,000 acfm pulse jet baghouse. It is located at Scale No. 6. This equipment exhausts through SV042.	01/01/1958 3/1/1984 3/17/2017	FG006/9

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.

**FLEXIBLE GROUP SUMMARY TABLE**

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

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FG002	Customer and Packhouse Storage Silos. Operations include railcar and/or truck load out into the silos, and truck, railcar and/or cement bag load out from the silos.	EU005-1, EU005-2, EU006-1, EU006-2, EU006-3, EU006-4, EU006-5, EU006-6, EU006-7, EU006-8
FG003	Bulk cement loading Packhouse silos.	EU011-1, EU011-2, EU011-3, EU011-4
FG005	Cement bagging.	EU032, EU033
FG006/9	Customer and Packhouse Storage Silos. Operations include railcar and/or truck load out into the silos, and truck, railcar and/or cement bag load out from the silos.	EU011-5, EU011-6, EU011-7, EU011-8

**The following conditions apply Source-Wide to: FG002**

**DESCRIPTION:** Customer and Packhouse Storage Silos. Operations include railcar and/or truck load out into the silos, and truck, railcar and/or cement bag load out from the silos.

**Emission Units:** EU005-1, EU005-2, EU006-1, EU006-2, EU006-3, EU006-4, EU006-5, EU006-6, EU006-7, EU006-8

**POLLUTION CONTROL EQUIPMENT:** Each emission unit is equipped with a 3,500 acfm reverse air baghouse.

**I. EMISSION LIMITS**

1. Visible emissions from the fabric filter exhaust portions of FG002 shall not exceed a six-minute average of 10 percent opacity. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

**II. MATERIAL LIMITS**

1. The permittee shall not process more than 4,000,000 tons of material through FG002 per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall implement and maintain a program for continuous fugitive dust control program for all material handling operations at all times at the site. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program 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 336.1371, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FG002 unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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, 40 CFR 52.21(c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of FG002 unless the fabric filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**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 keep monthly records of the amount of material processed through FG002. 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 336.1205)**
2. The permittee shall install and maintain devices for the measurement of the pressure loss across each of the fabric filter portions of FG002. The monitoring device shall be certified by the manufacturer to be accurate within  $\pm 1$  inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall keep a written record of the following information for FG002 each calendar month.
  - a) Daily recording, when in use, of the pressure drop reading across each of the fabric filter dust collectors used to control emissions from filling of the silos.

The permittee shall keep the records in a format 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 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

4. The permittee shall provide the normal operating pressure drop range for each of the fabric filter portions of FG002 to the AQD District Supervisor. This data shall be provided within 30 days of the effective date of this permit. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV008	12	167	40 CFR 52.21(c) & (d)
2. SV009	12	167	40 CFR 52.21(c) & (d)
3. SV010	12	167	40 CFR 52.21(c) & (d)
4. SV017	14	160	40 CFR 52.21(c) & (d)
5. SV015	14	160	40 CFR 52.21(c) & (d)
6. SV013	14	160	40 CFR 52.21(c) & (d)
7. SV011	14	160	40 CFR 52.21(c) & (d)
8. SV018	14	160	40 CFR 52.21(c) & (d)
9. SV016	14	160	40 CFR 52.21(c) & (d)
10. SV014	14	160	40 CFR 52.21(c) & (d)
11. SV012	14	160	40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**The following conditions apply Source-Wide to: FG003**

**DESCRIPTION:** Bulk cement loading Packhouse silos.

**Emission Units:** EU011-1, EU011-2, EU011-3, EU011-4

**POLLUTION CONTROL EQUIPMENT:** Each individual emission unit is equipped with a 1,800 acfm pulse jet cartridge fabric filter.

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/ Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. PM	0.04 lbs per 1000 lbs of exhaust gases*	Test Protocol	Each individual emission unit in FG003	General Condition No. 13	R 336.1205, R 336.1224, R 336.1331
2. PM10	0.32 pph	Test Protocol	Each individual emission unit in FG003	General Condition No. 13	40 CFR 52.21 Subparts (c) & (d)

\* Calculated on a dry gas basis

3. Visible emissions from the fabric filter exhaust portions of FG003 shall not exceed a six-minute average of 10 percent opacity. **(R 336.1301, R 336.1331, 40 CFR 52.21)**

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall implement and maintain a program for continuous fugitive dust control program for all material handling operations at all times at the site. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program 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 336.1371, 40 CFR 52.21(c))**
2. The permittee shall not operate FG003 unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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, 40 CFR 52.21 (c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of FG003 unless the fabric filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**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 install and maintain devices for the measurement of the pressure loss across each of the fabric filter portions of FG003. The monitoring device shall be certified by the manufacturer to be accurate within  $\pm 1$  inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep a written record of the following information for FG003 each calendar month.
  - a) Daily recording, when in use, of the pressure drop reading across each of the fabric filter dust collectors used to control emissions from filling trucks.

The permittee shall keep the records in a format 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 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

3. The permittee shall provide the normal operating pressure drop range for each of the fabric filter portions of FG003 to the AQD District Supervisor. This data shall be provided within 30 days of the effective date of this permit. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases shall be discharged horizontally within the truck loading area.

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV019	10	18	40 CFR 52.21(c) & (d)
2. SV020	10	18	40 CFR 52.21(c) & (d)
3. SV021	10	18	40 CFR 52.21(c) & (d)
4. SV022	10	18	40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**The following conditions apply Source-Wide to: FG005**

**DESCRIPTION:** Customer silos.

**Emission Units:** EU032 and EU033

**POLLUTION CONTROL EQUIPMENT:** Each emission unit is equipped with a 6,600 acfm pulse jet baghouse

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/ Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. PM	0.04 lbs per 1000 lbs of exhaust gases*	Test Protocol	Each individual emission unit in FG005	General Condition No. 13	R 336.1205, R 336.1224, R 336.1331

2. Visible emissions from the fabric filter exhaust portions of FG005 shall not exceed a six-minute average of 5 percent opacity. **(R 336.1301, R 336.1331, 40 CFR 52.21)**

**II. MATERIAL LIMITS**

1. The permittee shall not process more than 140,000 tons of material through FG005 per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. Within 180 days from the issuance of this permit, the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the District Supervisor. Subsequently it shall be implemented and maintained at the site all the time. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program 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 336.1371, 40 CFR 52.21 (c) & (d))**

2. The permittee shall not operate FG005 unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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, 40 CFR 52.21 (c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of FG005 unless the fabric filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1331, R 336.1910, 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 keep monthly records of the amount of material processed through FG005. 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 336.1205)**
2. The permittee shall install and maintain devices for the measurement of the pressure loss across each of the fabric filter portions of FG005. The monitoring device shall be certified by the manufacturer to be accurate within  $\pm 1$  inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall keep a written record of the following information for FG005 each calendar month.
  - a) Daily recording, when in use, of the pressure drop reading across each of the fabric filter dust collectors used to control emissions from filling cement/mortar bags.

The permittee shall keep the records in a format 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 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

4. The permittee shall provide the normal operating pressure drop range for each of the fabric filter portions of FG005 to the AQD District Supervisor. This data shall be provided within 30 days of the effective date of this permit. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged 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. SV035	18	53	40 CFR 52.21(c) & (d)
2. SV036	18	53	40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**The following conditions apply Source-Wide to: FG006/9**

**DESCRIPTION:** Customer and Packhouse Storage Silos. Operations include railcar and/or truck load out into the silos, and truck, railcar and/or cement bag load out from the silos.

**Emission Units:** EU011-5, EU011-6, EU011-7, and EU011-8

**POLLUTION CONTROL EQUIPMENT:** EU011-5 & EU011-6 are each equipped with a 4,400 acfm reverse air baghouse. EU011-7 & EU011-8 are each equipped with a 1,000 acfm pulse jet baghouse.

**I. EMISSION LIMITS**

1. Visible emissions from the fabric filter exhaust portions of FG006/9 shall not exceed a six-minute average of 10 percent opacity. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

**II. MATERIAL LIMITS**

1. The permittee shall not process more than 4,000,000 tons of material through FG006/9 per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall implement and maintain a program for continuous fugitive dust control program for all material handling operations at all times at the site. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program 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 336.1371, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FG006/9 unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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, 40 CFR 52.21(c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of FG006/9 unless the fabric filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

**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 keep monthly records of the amount of material processed through FG006/9. 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 336.1205)**
2. The permittee shall install and maintain devices for the measurement of the pressure loss across each of the fabric filter portions of FG006/9. The monitoring device shall be certified by the manufacturer to be accurate within  $\pm 1$  inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) ) & (d)**
3. The permittee shall keep a written record of the following information for FG006/9 each calendar month.
  - a) Daily recording, when in use, of the pressure drop reading across each of the fabric filter dust collectors used to control emissions from the rail car and truck loading operations.

The permittee shall keep the records in a format 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 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) ) & (d)**

4. The permittee shall provide the normal operating pressure drop range for each of the fabric filter portions of FG006/9 to the AQD District Supervisor. This data shall be provided within 30 days of the effective date of this permit. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) ) & (d)**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV041	20	52	40 CFR 52.21(c) ) & (d)
2. SV042	20	52	40 CFR 52.21(c) ) & (d)
3. SV023	20	52	40 CFR 52.21(c) ) & (d)
4. SV024	20	52	40 CFR 52.21(c) ) & (d)

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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