



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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May 12, 2014

Mr. Mark LaFave
CS-MA, LLC dba Construction Service
2420 Boston Road
Wilbraham, MA 01095

RE: Sunderland
Transmittal No.: X258632
Application No.: WE-14-005
Class: *SM-25*
FMF No.: 131252
AIR QUALITY PLAN APPROVAL

Dear Mr. LaFave:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Waste Prevention, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed construction of a ready mix concrete batch plant by CS-MA, LLC dba Construction Services (CS-MA) on a parcel of land leased from Delta Sand and Gravel, Inc. and located at 562 Amherst Road, in Sunderland, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control,” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

CS-MA proposes to construct a CON-E-CO PLP-12 ready mix concrete (RMC) batch concrete system (system) which will have the capacity to produce 150 to 200 cubic yards per hour (yd³/hr) of RMC. The proposed system will be enclosed on three sides. The concrete batch plant will be constructed in proximity to an existing sand and gravel processing operation and hot mix asphalt plant.

The pollutants of concern for this process are Particulate Matter (PM), including PM 2.5 and PM 10, and Hazardous Air Pollutants (HAPs). The facility has the potential to emit greater than one ton per year but less than ten tons per year of particulate matter and so is subject to 310 CMR 7.02(4), Limited Plan Application. CS-MA does not have any previous Plan Approvals.

The facility proposes to construct the major components (or equivalent) as outlined in the following table:

Equipment Specifications	
Equipment	Theoretical Maximum Rate/Capacity
2002 CON-E-CO PLP 12	200 yd ³ /hr
Aggregate (fine and course) storage bins	Four (4 each)
Cement silos	Two (2 each)
Air Compressor	10 Horsepower
Inclined batch transfer conveyer – fully covered	30 inches
Cement batcher	12 yd ³
Motor control center	N/A
PCD1 - Two (2) cement storage silos and filter vents for each silo	See Table 2, below
PCD2 - Individual baghouse system	See Table 2, below
Overfill control system	N/A
Natural gas-fired Infern-O-Therm HW-15 water heater with Model 400 burner	5.8 MMBtu/hr

Table Key:

EU# = Emission Unit Number;
 PCD = Pollution Control Device;
 yd³/hr = cubic yards per hour;
 MMBtu/hr = Million British thermal units per hour.

Emissions will be controlled at the point of silo loading, the weigh batcher, and truck loading by two filter systems (or their equivalent) as summarized in the following table:

Pollution Control Equipment									
# of units	Baghouse Filter Model	Point(s) of control	Bag Material	# of filter bags	Total Filter Area (ft ²)	Fan Capacity (ft ³ /min)	Average Pressure Drop Across the Filter (inches of water)	Air to Cloth Ratio (ft ³ /min-ft ²)	Method of Cleaning
2	PCD1 - CON-E-CO Model # 30-250	Silo Loading	Woven Polyester	30	250	N/A	12	6:1	High Frequency Air Vibrator
1	PCD2 - Griffin Clean-A-Batch Model B, Airvac D216TR Concrete Dry Batch Control System Model #U216 baghouse	Weigh Batcher, Truck Loading	9 oz. Spun Polyester	216	1,494	8,260	8	5.35:1	Mechanical Shaker

Table Key:
 PCD = Pollution Control Device
 ft² = square feet
 ft³/min = cubic feet per minute

The CON-E-CO filter system (PCD1) does not have an exhaust fan. Instead, dust laden air is forced up through the filter during filling. The filter system is rated to 1,500 cfm of exhaust flow. To prevent damage to the dust collectors, both silos shall have an automated Griffin (or equivalent) overflow control system with a high bin audible signal and an air-operated closing valve. The CON-E-CO filter system will be cleaned by high frequency air vibration after 30 tons of material (1 load) is processed. Material collected on the filters falls down to the hopper and is recycled back into the process.

The Griffin filter system (PCD2) will control particulate emissions from the batch cement weigh batcher and the truck load-out area. The truck load-out area will be equipped with a hood-type shroud under negative pressure. The trucks will pull in under the batcher. After the shroud is lowered, a blower will activate as the silo is discharged. After the material has been discharged into the truck, the shroud is raised. The blower shuts off and the trapped dust is shaken from the bags. The Griffin filter is cleaned continuously by shaking the bags for three minute intervals between loads. The material filtered out by the baghouse is added to the truck at the end of each batch loading. While the dry cement, cement supplement, aggregate, and sand are dropping into the truck, they are surrounded by an outer stream of water, which also reduces fugitive emissions.

Maximum air flow demands at the cement batcher are not expected to exceed 6,500 CFM, below the fan capacity of the Griffin filter system.

The emissions from the batch concrete plant will consist of particulate matter, particulate matter (PM) with an aerodynamic diameter equal to or less than 10 microns, also known as PM10, particulate matter with an aerodynamic diameter equal to or less than 2.5 microns, also known as PM2.5 and a very small amount of hazardous air pollutants (HAPs).

With the exception of the truck mix loading, PM2.5 emission factors were assumed to be 15% of the PM10 values based on the historical use of this method for the Tresca Brothers Sand & Gravel, Inc. (MBR-08-IND-013, dated 2/26/2009) and Paulini Loam, LLC (MBR-08-IND-009, dated 9/23/2008) Plan Approvals as well as EPA AP 42 guidance¹.

A proposed production rate of 380,640 cubic yards per year was estimated by CS-MA using a low average of the theoretical production rate (170 yd³/hr) and multiplying this by an engineering estimate of 70% to yield a production rate of 120 yd³/hr. The production time over one year was estimated to be 3,172 hours per year, according to a special permit granted by the Town of Sunderland Zoning Board of Appeals (ZBA). Based on EPA AP-42 emission factors calculated using Equation 11.12-1 and Table 11.12-3, as well as emission factors from 11.12-5 and Table 11.12-8, using a proposed maximum annual production of 380,640 cubic yards of concrete, the following PM, PM10, PM2.5 and HAP emissions were determined and are summarized in the following table:

¹ Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Dust Emission Factors (2/06) (Ch. 13.2.4, Fifth Edition, Volume I)

Proposed Particulate Matter and HAP Emissions				
Source	PM (tons per year)	PM10 (tons per year)	PM2.5 (tons per year)	HAPs (tons per year)
Aggregate Delivery to Ground Storage	1.22	0.59	0.088	-
Sand Delivery to Ground Storage	0.29	0.13	0.020	-
Aggregate Transfer to Conveyor	1.22	0.59	0.088	-
Sand Transfer to Conveyor	0.29	0.13	0.020	-
Aggregate Transfer to Elevated Storage	1.22	0.59	0.088	-
Sand Transfer to Elevated Storage	0.29	0.13	0.020	-
Cement Delivery to Silo 1	0.04	0.02	0.003	4.48×10^{-2}
Cement Delivery to Silo 2	0.04	0.02	0.003	4.48×10^{-2}
Cement Supplement Delivery to Silo 1	0.06	0.04	0.006	3.44×10^{-2}
Cement Supplement Delivery to Silo 2	0.06	0.04	0.006	3.44×10^{-2}
Weigh Hopper Loading	1.50	0.72	0.11	-
Truck Mix Loading	1.20	0.48	0.072	2.11×10^{-3}
Total Emissions	7.59	3.56	0.53	0.099

Hot Water Heater

During the winter months, process water will be heated with a natural gas-fired Infern-O-Therm HW-15 water heater with a model 400 burner (or equivalent). Fuel for the water heater will be supplied by an underground natural gas line that is currently accessible to the proposed facility. The unit has a maximum heat input rating of 5.8 MMBtu/hr and is not subject to Plan Approval (7.02(2)(b)(15)a). However, emissions from the water heater have been estimated using AP 42 emission factors from Table 1.4-1 and 1.4-2 for small boiler natural gas combustion with a sulfur content of 2,000 grains per million standard cubic feet, a maximum run time of 3,600 hours per year at 5,600 cubic feet of natural gas per hour. The annual contribution to PM concentrations from the water heater is shown to be insignificant:

Water Heater Emissions	
Pollutant	Ton/year
Nitrogen Oxides	1.0
Sulfur Dioxide	0.006
Carbon Monoxide	0.85
Particulate Matter, Total	0.077
Total Organic Carbon	0.11

BACT Analysis

The CON-E-CO PLP-12 ready mix concrete batch concrete system is subject to the Best Available Control Technology (BACT) requirement of 7.02(8)(a)2. To meet this requirement, the system will have the following specifications:

- both PCD1 and PCD2 shall operate at a minimum capture efficiency of 99.9%, have a minimum temperature rating of 275°F, and operate with an air to cloth ratio of 6:1 and 5.35:1, respectively;
- Both silos shall be equipped with an automated electronic overflow prevention control with an audible alarm;
- The system shall be equipped with a “fail safe” electronic interlock to prevent truck loading and cement weigh hopper operations without the concurrent operation of the baghouse;
- The baghouse hopper on PCD2 shall have an audible high level alarm to alert the operator that clean-out is needed;
- PCD2 shall be equipped with instrumentation to continuously monitor the differential pressure across the fabric collector. The baghouse/dust collectors will be repaired or replaced if the pressure drop is outside the manufacturer’s recommend range of pressure drop for efficient operation;
- Visolite testing will be performed on PCD2 once per year (each spring) to determine the need for repair or replacement of the filters or, alternatively, all PCD2 filters will be replaced annually;
- The coarse aggregate and sand storage bins will be three sided and the material in the bins will be wetted down periodically to prevent fugitive emissions;
- The conveyor that moves the sand and aggregate material from the storage bins to the elevated storage shall be fully covered;
- The truck loadout area shall be equipped with a shroud (hood capture – under negative pressure) that is connected to PCD2;
- The concrete batch plant will be enclosed within a three sided structure to prevent windblown particulates.

Facility-Wide Best Management Practices

To minimize fugitive particulate matter emissions from the facility, the following good housekeeping practices will be employed.

- CS-MA is proposing to purchase their sand and gravel from the adjacent Delta Sand and Gravel. The sand on site is high quality “clean” sand with a relatively low amount of “fines.” Any stone/gravel brought on site shall have the fines removed (it will be washed);
- High traffic areas will be paved;
- A mechanical street sweeper will be used to sweep paved portions of the plant area as conditions warrant;
- A water truck will wet down the unpaved portions of the site on an as needed basis;
- Truck charging stations below the individual mixer station will be periodically cleaned of any spillage. Trucks will also be washed or wet down to control dust. All trucks used for the transport of raw materials entering or exiting the plant property will be properly tarpaulin covered as quickly as possible;
- Front-end loaders that are used to stockpile, transfer and load aggregate will minimize drop heights to minimize fugitive particulate matter;
- Stockpiles will be kept as compact as possible to limit exposure to the wind and so that they may be adequately wetted as necessary to control particulate matter emissions;
- Lastly, a vehicle speed limit of no higher than 10 miles per hour will be established, enforced and posted in highly visible locations at the plant entrance and along the roadways within the facility.

Additional Regulatory

The facility is also subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise reduction requirements of 310 CMR 7.10. Proximity to the nearest residence is estimated to be 0.5 miles and the elevation of the site is roughly 100 feet below that of the surrounding area. Therefore, noise from the facility is not expected to cause a nuisance.

Activities at the facility are not subject to USEPA New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAPs).

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
1	CON-E-CO PLP-12 (or equivalent) Ready Mix Concrete Batch Plant	150-200 yd ³ /hr	(PCD1) - <u>Silo filter units (2)</u> - CON-E-CO Model # 30-250 (PCD2) - <u>Weigh Batcher, Truck Loading</u> - Griffin Model B, Airvac D216TR Concrete Dry Batch Control System with Griffin Model #U216 baghouse

Table 1 Key:
 EU# = Emission Unit Number;
 PCD = Pollution Control Device;
 yd³/hr = cubic yards per hour.

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
1	1. $\leq 380,640$ yd ³ /yr of concrete processed	PM 2.5	0.53 TPY
	2. Replace/repair filter when pressure drop across PCD2 reaches the manufacturers recommended pressure drop for replacement or as needed for performance		0.11 TPM
	3. CON-E-CO Model # 30-250 (or equivalent) with 99.9% filter capture efficiency for silo emission control (PCD1)	PM 10	3.6 TPY
	4. Griffin Model #U216 (or equivalent) with 99.9% filter capture efficiency for truck loading and cement weigh hopper emission control (PCD2)	Total PM	0.72 TPM
	5. Filter temperature rating of $\geq 275^{\circ}\text{F}$ (PCD1 and PCD2)		7.6 TPY
	6. Visible emissions ≤ 5 percent opacity except up to 10 percent opacity for no more than 2 minutes during any one hour, not to exceed 10 percent opacity from any process point, internal roads, work areas, material storage areas or stockpiles	Total HAPs	1.6 TPM
			0.10 TPY
			0.02 TPM

Table 2 Key:

EU# = Emission Unit Number

PCD1 and PCD2 = Pollution Control Device 1 and Pollution Control Device 2, respectively;

lb/yr = pound(s) per year;

yd³/hr = cubic yards per hour;

yd³/yr = cubic yards per year;

PM = Total Particulate Matter;

PM₁₀ = Particulate Matter less than or equal to 10 microns in diameter;

PM_{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter;

TPM = tons per month;

TPY = tons per consecutive 12-month period;

% = Percent;

$^{\circ}\text{F}$

=

Degrees

Fahrenheit.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
1	<ol style="list-style-type: none"> 1. In accordance with 310 CMR 7.02(3)(d), the Permittee shall monitor the total concrete throughput in cubic yards per month and cubic yards per 12 consecutive month period. 2. In accordance with the best available control technology provision of 310 CMR 7.02(8)(a)2, PCD2 shall be equipped with instrumentation to monitor the differential pressure across the unit on a continuous basis. The pressure gauge shall be positioned so that it is easily accessed and read. 3. In accordance with 310 CMR 7.02(3)(d), the Permittee shall conduct a visolite (or equivalent) test on PCD2 at least once per year (each spring) to locate leaks, filter failures, or problems with the operation, such as excessive opacity. Alternatively, the Permittee shall replace the filter bags at a frequency of at least one time per year (each spring). 4. In accordance with 310 CMR 7.02(3)(d), the Permittee shall, on a quarterly basis, inspect the filter bags on PCD2 for leaks and wear. 5. In accordance with 310 CMR 7.02(3)(d), the Permittee shall inspect, on a semi-annual basis, all components on PCD2 that are not subject to wear or plugging including structural components, housing, ducts and hoods. 6. In accordance with 310 CMR 7.06(1)(b), the Permittee shall monitor the emissions from each fabric collector while the facility is operating to ensure that each fabric collector is complying with Table 2, Provision 6 herein. Title 40 CFR 60 Appendix A, Method 22 shall be used to determine compliance with the visible emission limit. 7. In accordance with the best available control technology provision of 310 CMR 7.02(8)(a)2, the CON-E-CO PLP-12 system shall be equipped with an overfill control system to prevent damage to the dust collector filter. The audible alarm on the device shall be tested on a weekly basis.
Facility -wide	<ol style="list-style-type: none"> 8. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration. 9. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.

Table 3 Key:

EU# = Emission Unit Number;
 PCD1 and PCD2 = Pollution Control Device 1 and Pollution Control Device 2, respectively;
 SOMP = Standard Operating and Maintenance Procedure;
 CMR = Code of Massachusetts Regulations.

Table 4	
EU#	Record Keeping Requirements
1	<p>1. In accordance with 310 CMR 7.02(3)(e), the Permittee shall record the total concrete throughput in cubic yards per month and cubic yards per 12 consecutive month period.</p> <p>2. In accordance with 310 CMR 7.02(3)(e), the Permittee shall calculate and record the total facility actual emissions of total particulate matter, total PM10 (filterable and condensable), total PM2.5 (filterable and condensable) and total HAPs for the previous month and for the previous 12 consecutive month period by no later than the 15th day of each month that the facility is operating.</p> <p>3. In accordance with 310 CMR 7.02(3)(e), the Permittee shall record the differential pressure across PCD2 during weigh hopper and truck loading operations and while the blower is in operation at a minimum frequency of once daily (in inches of water).</p> <p>4. In accordance with 310 CMR 7.06(1)(b), the Permittee shall record the date and time during which emissions of greater than 5% opacity were seen as coming from the exhaust of PCD1 or PCD2 and the corrective actions taken to ensure the facility has returned to compliance.</p> <p>5. In accordance with 310 CMR 7.12, the Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.</p>
Facility-wide	<p>6. The Permittee shall maintain records of monitoring and testing as required by Table 3.</p> <p>7. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP (see Table 5, Provision 2) for the EU(s) and PCD(s) approved herein on-site.</p> <p>8. The Permittee shall maintain a record of routine inspection and maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment, including, but not limited to, documentation of PCD2 visolite testing results and/or the replacement of filter cartridges or bags. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.</p> <p>9. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCD(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.</p> <p>10. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.</p> <p>11. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.</p>

Table 4 Key:

EU# = Emission Unit Number;
 CMR = Code of Massachusetts Regulations;
 PCD1 and PCD2 = Pollution Control Device 1 and Pollution Control Device 2, respectively;
 SOMP = Standard Operating and Maintenance Procedure;
 USEPA = United States Environmental Protection Agency.

Table 5	
EU#	Reporting Requirements
Facility -wide	<p>1. The Permittee shall notify MassDEP, in writing, attention Permit Chief, Bureau of Waste Prevention, when installation of the concrete batching process and associated facility emissions control equipment, including pressure differential monitors, product level devices/monitors (for the silos and the baghouse hopper), and “fail-safe” electronic interlock system, has been completed and operational, within 14 days thereof.</p>
	<p>2. Prior to start-up, the Permittee shall submit to MassDEP the updated Standard Operating and Maintenance Procedure (SOMP) manual for the facility, which includes but is not limited to, the operating parameters recommended by the manufacturer, including a) operating pressure differential alarm limits for PCD2; b) product level alarm limits for the storage silos; c) start-up and maintenance procedures for PCD2; d) corrective actions to be taken under alarm conditions; e) emergency measures to be taken should air pollution control equipment malfunction; and f) all monitoring [See Table 3, Item 4.] and record keeping [See Table 4, Item 2.] requirements for the subject equipment. The facility shall operate in accordance with the SOMP, including the parameters that were recommended by the manufacturer. Future updates to the SOMP shall be submitted to MassDEP within fifteen (15) days of said revisions. MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.</p>
	<p>3. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).</p>
	<p>4. The Permittee shall notify the Western Regional Office of MassDEP, BWP Section Chief by telephone (413) 755-2115, email, marc.simpson@state.ma.us, or fax (413) 784-1149, as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Section Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).</p>
	<p>5. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.</p>
	<p>6. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.</p>

Table 5	
EU#	Reporting Requirements
Facility -wide	7. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Provision 9 of Table 3, Monitoring and Testing Requirements.
	8. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Provision 9 of Table 3, Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number;
 PCD1 and PCD2 = Pollution Control Device 1 and Pollution Control Device 2, respectively;
 SOMP = Standard Operating and Maintenance Procedure.

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
1	<p>1. In accordance with the best available control technology provision of 310 CMR 7.02(8)(a)2, the storage silos associated with the batch concrete plant shall each be controlled by a CON-E-CO Model # 30-250 (PCD1), or equivalent as determined by MassDEP, fabric collector. Each fabric collector shall be operated during all material transfers to and from the storage silos. Silo filling shall not take place without operation of the associated overfill control system.</p> <p>2. In accordance with the best available control technology provision of 310 CMR 7.02(8)(a)2, the truck loading charging operations and the cement weigh hopper exhaust shall be controlled by a Griffin Model B, Airvac D216TR Concrete Dry Batch Control System with Griffin Model #U216 baghouse (PCD2), or equivalent as determined by MassDEP, fabric collector. A “fail safe” electronic interlock system shall ensure that the baghouse is in operation during all truck loading and cement weigh hopper operations.</p>

Table 6	
EU#	Special Terms and Conditions
1	3. In accordance with the best available control technology provision of 310 CMR 7.02(8)(a)2, the conveyor that moves the sand and aggregate material from the storage bins to the elevated storage shall be fully covered.
	4. The Permittee shall have readily accessible at all times a sufficient number of replacement filters for PCD1 and PCD2.
	5. The Permittee shall, within 3 months of commencing operation, determine street sweeping frequency and pave any areas that have been determined to be high traffic areas. This schedule shall be added to the SOMP manual (see Table 5, Provision 2).

Table 6 Key:

EU# = Emission Unit Number;
 CMR = Code of Massachusetts Regulations;
 SOMP = Standard Operating and Maintenance Procedure.

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
1 (PCD1, 2 silos)	57	2- (0.16'x3.0') Slotted Vents	25 (3 trucks unloading)	100-250 (maximum)
1 (PCD2)	19	1.54' x 1.33'	66	100-250 (maximum)

Table 7 Key:

EU# = Emission Unit Number;
 °F = Degree Fahrenheit.

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest

protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.

- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Amy Stratford by telephone at (413) 755-2144, or in writing at the letterhead address.

**This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.**

Marc Simpson
Section Chief
Bureau of Waste Prevention

Enclosure

ecc: MassDEP/Boston - Yi Tian
John W. Lavin, PE, Earthworks Engineering, Inc.