MOJAVE DESERT
AIR QUALITY MANAGEMENT DISTRICT

Preliminary Determination/Decision - Statement of Basis

for

Modification to

FOP Number:11800001

For:

Mitsubishi Cement Corporation

Facility:

Cushenbury Plant

Facility Address:

5808 State Highway 18
Lucerne Valley, CA 92356

Document Date: May 15, 2019
Submittal date to EPA/CARB for review: May 20, 2019
EPA/CARB 45-day Commenting Period ends: July 5, 2019
Public Notice Posted: May 23, 2019
Public Commenting Period ends: June 24, 2019
Permit Issue date: July 8, 2019

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A. Introduction

1. Application and Setting

Mitsubishi Cement Corporation – Cushenbury Plant (MCC) is a Portland cement manufacturing facility located in Lucerne Valley, which includes the mining and processing of limestone, excavation, conveying, calcining, crushing, screening, storage, and transporting of materials including their primary product, cement.

The Mojave Desert Air Quality Management District (MDAQMD or District) received an application on March 25, 2019 proposing the following:

- Modification to replace the roll press associated with Finish Mill No. 4 (permit unit B002405).
- Addition of a new dust collector, 5-DC-41A (permit unit C013459) to the conveyor belt that carries material to the roll press, 5-BC-41, to improve dust control.
- Modification to replace a dust collector sweep for Finish Mill No. 2 currently shared between two dust collector units 5-DC-6 and 5-DC-7 (permit unit C001000).
- Modification of a portable, diesel-fired IC engine powering a welder (permit unit B009466) to commit unit as a "Low-Use Engine" pursuant to the CARB's *Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater*.

A copy of this application can be viewed in Appendix A.

Pursuant to District Rule 1301 – *New Source Review Definitions*, MCC is an existing Major Facility for CO, NO_x, PM_{10}, and VOC. The MDAQMD is classified as 'attainment/unclassified' by USEPA and CARB for CO and SO_2; therefore, pursuant to District Rule 1303 – *New Source Review Requirements*, the proposed equipment is subject to both the BACT and Offset requirements for the Nonattainment Air Pollutant/Precursors of NO_x and VOC (ozone Precursors), as well as PM_{10}. The proposed modification does not constitute a NSR Modification, as defined under District Rule 1301, as the proposed changes do not result in any Net Emissions Increase. This document serves as the preliminary decision for NSR purposes.

In addition, MCC is defined as a federal Major Facility pursuant to District Rule 1201 – *Federal Operating Permit Definitions.* The proposed modification classifies as a Significant Modification to MCC's Federal Operating Permit (FOP). Pursuant to District Rule 1205 – *Modifications of Federal Operating Permits*, section (B)(2), this document serves as the preliminary determination to issue MCC the modified FOP, inclusive of the proposed changes.

This preliminary decision/determination will be submitted to USEPA, CARB, and the public for review and comment on May 20, 2019. The public notice for this preliminary determination will be published on May 23, 2019, allowing for public comment until June 24, 2019.

2. Description of Project

a. *Modification to replace the roll press associated with Finish Mill No. 4:*
MCC proposes to replace the roll press which serves as a pre-grinding clinker circuit of the Finish Mill No. 4 Roller Press System (permit unit B002405). Finish Mill No. 4 is the only finish mill at MCC that has a roll press. While the roll press is a separate equipment unit from Finish Mill No. 4 there is no storage between the roll press and the finish mill; therefore, the system is listed as one permitted unit with a throughput of 1,138,800 tons per year. There will be no change in throughput or emissions with the proposed roll press replacement.

b. Addition of a new Dust Collector 5-DC-41A serving Finish Mill No. 4:
MCC is proposing to add a new dust collector 5-DC-41A (permit unit C013459) to control particulate associated with the conveyor belt that carries material to the roll press under Finish Mill No. 4 (B002405). The proposed dust collector is manufactured by Parker BHA, Custom Model, with an airflow of 2,500 acfm, cloth area 900 sq. ft., and an air to cloth ratio of 2.8:1. The fan motor is rated at 7.5 hp. The addition of this proposed new dust collector will result in an emissions increase which MCC proposes to offset using simultaneous emission reductions (SERs).

c. Modification to replace two dust collectors serving Finish Mill No. 2 with one new dust collector 5-DC-6 (C001000):
MCC is proposing to replace a dust collector sweep for Finish Mill No. 2 which is currently shared between two dust collector units, 5-DC-6 and 5-DC-7. Only one of these dust collectors currently operates at a time, thus were permitted under the same dust collection system under permit C001000. MCC is proposing to replace both dust collectors and replace them with one new dust collector with the same air flow design, but with fewer filter elements. The proposed dust collector is manufactured by Parker BHA, Custom Model, with an airflow of 20,000 acfm, cloth area 10,560 sq. ft., and an air to cloth ratio of 1.9:1. The fan motor is rated at 150 hp. The addition of this proposed new dust collector will result in an emissions decrease. MCC proposes to use the emissions decrease as SERs to offset the additional dust collector proposed for Finish Mill No. 4 described in section ‘b.’ above.

d. Modification of a portable, diesel-fired IC engine powering a welder (permit unit B009466):
MCC is proposing to commit the above listed permit unit as a “Low-Use Engine” pursuant to the CARB’s *Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater* (PATCM). The PATCM requires any tier 1 engines to be designated as low-use prior to 7/1/19 for engines rated 50 to 750 bhp; or, any tier 1 engine (rated 50 to 750 bhp) must be removed from service no later than 1/1/20. MCC is proposing to designate this unit as low-use in order to comply with these PATCM requirements. The PATCM defines a low-use engine as one that has been designated by the responsible official on the permit or registration to operate 200 hours or less in a calendar year. This modification will add a condition to the permit that limits this unit to 200 hours per year, and will designate the engine as “low-use” in the permit description. There is no emissions change associated with this

modification; it is solely administrative; therefore, this modification will be excluded from the Determination of Emissions, BACT and Offsets sections discussed below.

B. Analysis

1. Determination of Emissions

[District Rule 1302(C)(1)]

The proposed new and modified equipment does not constitute a NSR Modification, as defined under District Rule 1301, as the proposed changes do not result in any Net Emissions Increase. The overall effect of the proposed permit change is a net decrease demonstrated by the emission calculations below. Since the proposed project does not result in an emissions increase, offsets are not required. Please note that offsets are not required for CO or SO_X as the District is designated as Attainment or Unclassified for these Air Pollutants by USEPA and the State.

District Rule 1304 – *Emissions Calculations*, provides the procedures and formulas to calculate emission increases and decreases for new or modified Facilities. Section (A)(1)(a)(iii), of this rule, states that District Rule 1304 shall determine the Potential to Emit of new or modified Facilities and Emission Unit(s). Pursuant to District Rule 1304, the emission change for a new or modified Facility or Emissions Unit(s) shall be calculated, in pounds per day, by subtracting Historic Actual Emission from Proposed Emissions (section (B)(1)(a)):

Emissions Change = (Proposed Emissions) – (Historic Actual Emissions)

For a modified Facility, such as in the case of MCC, Proposed Emissions shall be equal to the Potential to Emit as defined in District Rule 1301 – NSR Definitions, section (UU). Section (UU) of District Rule 1301 specifically states that Potential to Emit is the maximum capacity of a Facility or Emissions Unit(s) to emit any Regulated Air Pollutant under its physical and operational design. It also states that any physical or operational limitation on the capacity of the Facility or Emissions Unit(s) to emit an Air Pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processes, shall be treated as part of its design only if the limitation or the effect it would have on emissions is Federally Enforceable.

District Rule 1304, section (D)(2)(a)(iv), allows Historic Actual Emissions, in the case of a modified Facility, as in the case of MCC, to be equal to the Potential to Emit for that Emission Unit, as indicated by a Federally Enforceable Emissions Limitation, if all the emissions from that Emissions Unit have been previously offset in a documented prior NSR permitting action. All the equipment proposed for removal – both the roll press for Finish Mill No. 4 and the dust collectors 5-DC-6 and 5-DC-7, serving Finish Mill No. 2, were previously offset under a prior NSR permitting action in 2006 (See Appendix E for prior NSR Analysis); therefore, the Historical Actual Emissions from these units will be equal to their Potential to Emit which will be based on the operational limitation (i.e. Federally Enforceable Emissions Limitation) on the capacity of each unit.

a. *Modification to replace the roll press associated with Finish Mill No. 4:*
As mentioned under the Description of Project, the while the roll press is a separate equipment unit from Finish Mill No. 4 there is no storage between the roll press and the finish mill; therefore, the system is listed as one permitted unit with a throughput of 1,138,800 tons per year. The proposed roll press replacement is not considered an identical replacement since the maximum rating of the proposed replacement is greater than that of the roll press being replaced, as there is an increase in the crushing portion of the roller from 1,200 hp to 1,400 hp; however, this increase in horsepower does not translate into a potential increase in the hourly rated throughput for the Finish Mill No. 4 Roller Press System (permit unit B002405). Since the throughput of the Finish Mill No. 4 Roller Press System will not be changing as a result of the replacement, and this throughput limit is a Federally Enforceable Emissions Limitation having being previously offset in a prior NSR permitting action the Potential to Emit for both the current roll press and the proposed preplacement can be based on the permitted throughput limit of 1,138,800 tons per year. A summary of the Potential to Emit for both the current roll press and the proposed preplacement is calculated, below:

PM_{10} Emissions in pounds per year for roll press for Finish Mill No. 4:

$$\frac{1138800\ tons}{yr} \times \frac{1.64x10^{-03}\ lb}{ton} = 1868\frac{lb}{yr}$$

Finish Mill No. 4 Roll Press (B002405)	**Annual Throughput (tons)[1]**	**Controlled Emission Factor (lb/ton)[2]**	**PM10 Emissions (lb/year)**
pre-replacement	1,138,800	1.64E-03	1,868
post-replacement	1,138,800	1.64E-03	1,868

Notes:
1. Current Federally Enforceable Emissions Limitation
2. Controlled Emission Factor was calculated using number of pickup points, and a control efficiency based on the MDAQMD Emission Inventory Guidance for Mineral Handling and Processing Industries. See page 3 of Appendix C of application for calculation details.

In calculating the emissions change pursuant to District Rule 1304, there is no emissions change since the Historical Actual Emissions of the current roll press are equal to the Potential to Emit of the system (allowed since was previously offset in a prior NSR action), and the Potential to Emit of the Finish Mill No. 4 Roller Press System will not change with the replacement.

b. Addition of a new Dust Collector 5-DC-41A serving Finish Mill No. 4:
The Potential to Emit associated with adding the new dust collector 5-DC-41A (C013459) is calculated, below, using the proposed grain loadings and acfm ratings from the application, and assuming 8,760 hours of operation per year:

PM_{10} Emissions in pounds per year for dust collector 5-DC-41A (C013459):

$$\frac{2500\ acfm}{min} \times \frac{60\ min}{hr} \times \frac{8760\ hr}{yr} \times \frac{0.005\ gr}{acfm} \times \frac{1\ lb}{7000\ gr} = 939\frac{lb}{yr}$$

c. Modification to replace two dust collectors serving Finish Mill No. 2 with one new dust collector:
Both the Potential to Emit and the Historical Actual Emissions (which are also based on the Potential to Emit based on operational limitation – allowed since was previously offset in a prior NSR action) associated with the dust collector replacement serving Finish Mill No. 2 (permit unit C001000) is calculated, below, using the proposed grain loadings and acfm ratings from the application, and assuming 8,760 hours of operation per year:

PM_{10} Emissions in pounds per year for dust collector 5-DC-6,7 (C001000) being removed:

$$\frac{20000\ acfm}{min} \times \frac{60\ min}{hr} \times \frac{8760\ hr}{yr} \times \frac{0.01\ gr}{acfm} \times \frac{1\ lb}{7000\ gr} = -15017\frac{lb}{yr}$$

PM_{10} Emissions in pounds per year for dust collector 5-DC-6 (C001000) being added as a replacement:

$$\frac{20000\ acfm}{min} \times \frac{60\ min}{hr} \times \frac{8760\ hr}{yr} \times \frac{0.005\ gr}{acfm} \times \frac{1\ lb}{7000\ gr} = 7509\frac{lb}{yr}$$

MCC is proposing to use the emissions from the removal of dust collectors 5-DC-6,7 as simultaneous emission reductions (SERs) to offset the increase in emissions from the addition of the replacement dust collector serving Finish Mill No. 2, as well as the addition of the new dust collector proposed for serving Finish Mill No. 4. District Rule 1304(B)(2)(b) allows SERs to be equal to the Historical Actual Emissions for the shut down of an Emissions Unit. As mentioned previously, since dust collectors 5-DC-6,7 were previously offset under a prior NSR action, the Historical Actual Emissions limit can be based on the Potential to Emit based on the operation limitation, which was calculated above. A summary of the overall emissions change of the proposed project is summarized below:

Proposed Modification	**PM_{10} Emissions (lb/yr)**
b. Addition of a new Dust Collector 5-DC-41A serving Finish Mill No. 4:	
C013459	939
c. Modification to replace two dust collectors serving Finish Mill No. 2 with one new dust collector, 5-DC-6:	
C001000 (Removed Units)	- 15017
C001000 (Added Unit)	7509
Total Change	- 6569

→ ***Net Decrease***

As indicated by the above calculation, the proposed PM_{10} emissions equate to a net emissions decrease; therefore, offsets are not required.

2. Determination of Nonattainment NSR Requirements

[District Rule 1302(C)(2)]

a. BACT Evaluation

[District Rule 1302(C)(2)(a)]

Best Available Control Technology (BACT) is required for a each new or Modified Permit Unit at a Modified Facility that emits, or has the Potential to Emit, twenty-five (25) tons per year or more of any Nonattainment Air Pollutant or its Precursors (District Rule 1303(A)(3)). MCC has a facility PTE in excess of twenty – five (25) tons per year for the Nonattainment Air Pollutant and Precursors of CO, NO_x, PM_{10}, and VOC; therefore, the proposed new and modified, Permit Units must be equipped with BACT pursuant to District Rule 1303. BACT is defined as the most stringent emission limit or control technique which has been achieved in practice, for such Permit Unit class or category of source [District Rule 1301].

To address BACT on the roll press and the new Dust Collector 5-DC-41A (C013459) serving Finish Mill No. 4, the district is requiring that any modified or new transfer points serving the roller press of Finish Mill No. 4 be controlled by a baghouse, which the District has determined BACT for particulate to be 0.005 grains per dry standard cubic foot. Additionally, the District has deemed this BACT requirement for particulate for the new proposed dust collector 5-DC-6 (C001000) serving Finish Mill No. 2. MCC has accepted this limit for both the proposed new dust collectors (C013459 & C00100). This grain loading limit will be enforced by permit condition and verified by manufacturer's data.

b. *Offsets Evaluation*

[District Rule 1302(C)(3)]

Offsets are required for any new or modified Facility which has the Potential to Emit a Regulated Air Pollutant in an amount greater than or equal to the thresholds for the Nonattainment Air Pollutants and their Precursors specified in District Rule 1303 (B)(1). The offset threshold is 25 tons per year for NO_X; however, since the proposed permitting action results in a net emissions decrease as indicated in the Determination of Emissions section, above, offsets are not required.

3. Determination of Requirements for Toxic Air Contaminants

[District Rule 1302(C)(5)]

a. *District Rule 1320:*

Pursuant to District Rule 1320 – *New Source Review for Toxic Air Contaminants*, MCC is subject to both State and Federal Toxic New Source Review, as MCC is a Modified Facility (or Emissions Units) which has the potential to emit a Toxic Air Contaminant, as well contains Emissions Units which are subject to an Airborne Toxic Control Measure (State T-NSR), and

MCC also has the potential to emit 10 tons per year of any single Hazardous Air Pollutant (Federal T-NSR). Pursuant to the requirements of District Rule 1320, an applicability analysis of state and federal air toxic regulations was conducted for the proposed equipment (State T-NSR and Federal T-NSR, respectively). The State T-NSR and Federal T-NSR analyses are described below:

1. State T-NSR:
Section (E)(1)(b) of District Rule 1320 requires that if any ATCM applies to the proposed equipment, the requirements of that ATCM shall be added to the District permit. There are no ATCMs that apply to the affected equipment proposed in this permitting action.

Pursuant to District Rule 1320, section (E)(2), State T-NSR also requires an Emission Unit Prioritization Score. Section (E)(2) requires prioritization scores to be calculated utilizing the most recently approved CAPCOA Facility Prioritization Guidelines, the most recently approved OEHHA Unit Risk Factor for cancer potency factors, and the most recently approved OEHHA Reference Exposure Levels for non-cancer acute factors, and non-cancer chronic factors. The Emission Unit Prioritization Score was calculated using MCC's most recently approved (2018 emission year) Comprehensive Emission Inventory Report (CEIR) in HARP software, which is consistent with the 2016 *CAPCOA Facility Prioritization Guidelines*, and is based on a conservative receptor selection of 2,000 meters (please refer to Appendix B for the Emission Unit Prioritization HARP data). Using the 2018 CEIR is a conservative reflection of the Emission Unit modification since the proposed limit will result in a decrease in emissions. The toxic air contaminants/hazardous air pollutants and associated emission factors were taken from the 2017 CEIR and were calculated based on the proposed particulate emissions of the proposed equipment. Details of these calculations are on page 7-10 of Attachment C of the Application in Appendix A.

	Cancer Priority	Chronic Noncancer Priority	Acute Noncancer Priority
Roll Press Replacement Finish Mill No. 4 (B002405)	0.00E+00	0.00E+00	0.00E+00
New Dust Collector 5-DC-41A Finish Mill No. 4 (C013459)	1.30E-02	4.03E-05	2.04E-05
New Dust Collector 5-DC-6 Finish Mill No. 2 (C001000)	1.04E-01	6.30E-04	1.63E-04
Total Emission Unit Prioritization Score	**1.17E-01**	**6.70E-04**	**1.83E-04**

As shown in the table above, the total Emission Unit Prioritization Scores for the proposed new and modified Emission Units are less than 1; therefore, categorized as "Low Priority." Pursuant to District Rule 1320, section (E)(2)(b), no further State T-NSR action is required.

2. Federal T-NSR:
Pursuant to section (F)(1) of District Rule 1320, the Modified Facility/Emissions Units were analyzed to determine if any current, enforceable Maximum Achievable Control Technology (MACT) standards apply to the equipment affected by this permitting action, and if so to ensure that those requirements are enforced by permit condition. Both Finish Mill No. 2 and 4 are subject to 40 CFR 63, Subpart LLL – NESHAP for Portland Cement Manufacturing Industry. The applicable requirements of this MACT are reflected in Appendix C, Sections C5, C7, C8 and C9 through C10 of MCC's FOP.

b. District Rule 1520 – Toxic Hot Spots Analysis:
District Rule 1520 – *Control of Toxic Air Contaminants from Existing Sources* applies to MCC, as they are an existing facility that has a facility PTE greater than ten (10) tons per year for VOC, PM, and NO_x, as well as a PTE to emit a TAC (Section (B)(1)(a) and (c)). MCC's most recently approved (2018 emission year) Comprehensive Emission Inventory Report (CEIR) was utilized to fulfill the requirements of section (D)(1)(b)(i) of District Rule 1520. Section (E)(1)(a)(ii) requires prioritization scores to be calculated utilizing the most recently approved CAPCOA Facility Prioritization Guidelines, the most recently approved OEHHA Unit Risk Factor for cancer potency factors, and the most recently approved OEHHA Reference Exposure Levels for non-cancer acute factors, and non-cancer chronic factors. Therefore, MCC prepared the Facility Prioritization Scores using the July 2016 CAPCOA Facility Prioritization Guidelines (as these are the latest approved), and account for the recent updates to the OEHHA's Risk Assessment Guidance Document. The prioritization was calculated, using these parameters, and the Facility Prioritization Scores for MCC are greater than (1) and less than ten (10); therefore, categorizes MCC as 'Intermediate Priority'. Based on the requirements of District Rule 1520, section (E)(1)(b), no further analysis is required. The data for the Facility Prioritization Scores can be viewed in Appendices A and B (A shows pos-mod and B shows PS from CEIR EY18).

	Cancer Priority	Chronic Noncancer Priority	Acute Noncancer Priority
Current EY 2018 Facility Prioritization Score	8.79E+00	3.03E-01	1.32E-01
Roll Press Replacement Finish Mill No. 4 (B002405)	0.00E+00	0.00E+00	0.00E+00
New Dust Collector 5-DC-41A Finish Mill No. 4 (C013459)	1.30E-02	4.03E-05	2.04E-05
New Dust Collector 5-DC-6 Finish Mill No. 2 (C001000)	1.04E-01	6.30E-04	1.63E-04
Removal of Dust Collectors 5-DC-6,7	-2.08E-01	-1.26E-03	-3.26E-04
Post-mod Total Facility Prioritization Score	**8.70E+00**	**3.02E-01**	**1.32E-01**

Section (E)(2)(a) and (b) of District Rule 1520 allows the APCO to determine whether further toxic analysis of the facility is required for Facility Prioritization Scores that are categorized as "Intermediate Priority." At this time, the District is not requiring further toxic analysis for MCC and the proposed modification. MCC's toxic emissions are routinely tracked on an annual basis as part of the District's Hot Spots Program.

4. Determination of Requirements for Prevention of Significant Deterioration
[District Rule 1302(C)(6)]

a. PSD Analysis

Per the language in the applicability procedures of 40 CFR 52.21 (a)(2)(i) and (ii), PSD applies to "any new major stationary source or the major modification of any existing major stationary source". The proposed modification does not result in a new major stationary source and does not constitute a major modification; hence, the project is not subject to PSD.

b. NAAQS Impact Analysis

District Rule 1302, section (D)(5)(b)(iv) requires that any new or Modified Facility located in an area classified by USEPA as attainment or unclassifiable shall determine if the Facility will cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). The proposed modification, discussed herein, do not cause an increase in emissions; therefore, the proposed project will not contribute to a violation of the NAAQS.

7. Rules and Regulations Applicable to the Proposed Project

District Rules

Rule 201/203 – *Permits to Construct/Permit to Operate*. Any equipment which may cause the issuance of air contaminants must obtain authorization for such construction from the Air Pollution Control Officer. MCC is in compliance with this rule as they appropriately applied for a District permit for all new equipment and maintains District permits for all residing equipment.

Rule 204 – *Permit Conditions*. To assure compliance with all applicable regulations, the Air Pollution Control Officer (Executive Director) may impose written conditions on any permit. The District has imposed permit conditions to ensure MCC complies with all applicable regulations.

Rule 206 – *Posting of Permit to Operate*. Equipment shall not operate unless the entire permit is affixed upon the equipment or kept at a location for which it is issued and will be made available to the District upon request.

Rule 207 – *Altering or Falsifying of Permit.* A person shall not willfully deface, alter, forge, or falsify any issued permit.

Rule 209 – *Transfer and Voiding of Permits*. MCC shall not transfer, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. When equipment which has been granted a permit is altered, changes location, or no longer will be operated, the permit shall become void.

Rule 210 – *Applications*. MCC provided all the required information to correctly address the proposed equipment pursuant to this rule, although there were instances in which additional information were required, in which the thirty (30) day clock was restarted.

Rule 212 – *Standards for Approving Permits*. This rule establishes baseline criteria for approving permits by the District for certain projects. In accordance with these criteria, the proposed modifications and application does not cause issuance of air contaminants in violation of Sections 41700 or 41701 of the State Health and Safety code.

Rule 221 – *Federal Operating Permit Requirement.* MCC is in compliance with this rule, as they currently hold and maintain a Federal Operating Permit.

Rule 301 – *Permit Fees*. The proposed equipment will increase MCC's annual permit fees by the applicable amounts described in section (E) of this rule.

Rule 401 – *Visible Emissions*. This rule limits visible emissions opacity to less than 20 percent (or Ringlemann No. 1). In normal operating mode, visible emissions are not expected to exceed 20 percent opacity.

Rule 402 – *Nuisance*. This rule prohibits facility emissions that cause a public nuisance. The proposed modifications and associated equipment is required by permit condition to employ good engineering and operational principles in order to minimize emissions and the possibility of a nuisance.

Rule 408 – *Circumvention*. This rule prohibits hidden or secondary rule violations. The proposed modifications as described is not expected to violate Rule 408.

Rule 430 – *Breakdown Provisions*. Any Breakdown which results in a violation to any rule or regulation as defined by Rule 430 shall be properly addressed pursuant to this rule.

Rule 900 – *Standards of Performance for New Stationary Sources (NSPS)*. Rule 900 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 60. There are no NSPSs applicable to the proposed permitting action.

Regulation X – *National Emission Standards for Hazardous Air Pollutants*. Pursuant to Regulation X, MCC is required to comply with all applicable ATCMs. There are no ATCM requirements triggered by this permitting action.

Rule 1161 – *Portland Cement Kilns*. Rule 1161 limits the emissions of NO_X from existing Portland cement kilns. MCC has an existing Portland cement kiln, specifically a Preheater-Precalciner Kiln, and is currently compliant with the NO_X limit of Rule 1161.

Regulation XII – *Title V Permits*. This regulation contains requirements for sources which must have a FOP. MCC currently has a FOP and is expected to comply with all applicable rules and regulations.

Rule 1201 – *Federal Operating Permit Definitions.* MCC is defined as a federal Major Facility pursuant to this rule.

Rule 1203 – *Federal Operating Permits*. This document represents the preliminary determination for the proposed modifications to MCC's FOP. This proposed Significant Modification will also be properly noticed pursuant to District Rule 1207, as required.

Rule 1205 – *Modifications of Federal Operating Permits*. The proposed equipment classifies as a Significant Modification to MCC's Federal Operating Permit (FOP), and subsequently, this permit modification is issued in accordance with the provisions of District Rule 1203.

Rule 1208 – *Certification*. MCC included a Certification of Responsible Official as required with the submitted application for the proposed equipment.

Rule 1211 – *Greenhouse Gas Provisions of Federal Operating Permits*. MCC is a Major GHG Facility pursuant to Rule 1211. MCC's FOP includes all the requirements of this rule.

Regulation XIII – *New Source Review*
Rule 1302 – *Procedure*. This rule applies to all new or Modified Facilities and requires certain requirements to be fulfilled when submitting an application. All applicable requirements of this rule are discussed in this NSR document as part of the Analysis procedure. Certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable District rules and regulations have been addressed. The Authority to Construct (ATC) application package for the proposed equipment includes sufficient documentation to comply with Rule 1302(D)(5)(b)(ii). Permit conditions for the proposed project will require compliance with Rule 1302(D)(5)(b)(iii).

Rule 1303 – *Requirements*. This rule requires BACT and offsets for selected facility modifications. Equipment installed shall meet BACT and prior to the commencement of construction the proponent shall have obtained sufficient offsets to comply with Rule 1303(B)(1). The proposed permitting action does not trigger BACT or offsets.

Rule 1304 – *Emissions Calculations*. The Proposed Emissions from the proposed modifications were calculated pursuant to section (B)(1)(a) of this rule.

Rule 1320 – *New Source Review for Toxic Air Contaminants*. Pursuant to the requirements of District Rule 1302, an applicability analysis of state and federal air toxic regulations was conducted for the proposed modifications (State T-NSR and Federal T-NSR, respectively) and is discussed in further detail in section (B)(3)(a)(1) of this document.

Rule 1520 – *Control of Toxic Air Contaminants from Existing Sources*. The proposed project is subject to Rule 1520, as MCC has a facility PTE greater than ten (10) tons per year for VOC, PM, and NO_x, as well as a PTE to emit a TAC (Section (B)(1)(a) and (c)). A Toxic 'Hot Spots' Program Analysis was conducted pursuant to section (E) of District Rule 1520. Facility Prioritization Scores were calculated pursuant to this rule and the results of the analysis is discussed in further detail in section (B)(6), above.

Regulation XVII – *Prevention of Significant Deterioration*. The purpose of this regulation is to set for requirements for all new Major PSD Facilities and Major PSD Modifications which emit

or have the potential to emit a PSD Air Pollutant pursuant to the requirements of 40 CFR 52.21. The proposed modification does not constitute a new Major PSD Facility or a Major PSD Modification; therefore, PSD does apply to the proposed project.

State Regulations

No state regulations are applicable to the proposed permitting action.

Federal Regulations

40 CFR 60, Subpart A – *NSPS General Provisions.* MCC complies with this regulation per Appendix C, Sections C1 and C2 of their FOP.

40 CFR 60, Subpart Y – *NSPS for Coal Preparation Plants and Processing Plants*. MCC complies with this regulation per Appendix C, Section C1 of their FOP.

40 CFR 60, Subpart OOO – *NSPS for Nonmetallic Mineral Processing Plants*. MCC complies with this regulation per Appendix C, Section C2 of their FOP.

40 CFR 60, Subpart IIII – *NSPS for Stationary Compression Ignition Internal Combustion Engines*. MCC complies with this regulation per Appendix C, Section C12 for non-emergency engines of their FOP.

40 CFR 61, Subpart M – *NES for Asbestos*. MCC complies with 40 CFR 61, Subpart M – *NESHAP for Asbestos* per conditions in Part II, section C.7, C.8, and C.9 of their FOP.

40 CFR 63, Subpart A – *NESHAP General Provisions*. MCC complies with this regulation per Appendix C, Sections C3 through C7 of their FOP.

40 CFR 63, Subpart LLL – *NESHAP for the Portland Cement Industry*. MCC complies with this regulation per Appendix C, Sections C3 through C7 and C9 through C10 of their FOP. MCC is proposing the applications and modifications predominantly as a compliance strategy for the upcoming NESHAP requirements of 40 CFR 63, Subpart LLL. The Dust Shuttling System and Lime Injection System assist in the control of HCl. The modifications to the Kiln/Mill Dust Collector and Clinker Cooler Exhaust Stacks will allow MCC to meet the USEPA's standard methods for demonstrating compliance with the requirements of 40 CFR 63, Subpart LLL.

40 CFR 63, Subpart ZZZZ – *NESHAP for Stationary Reciprocating Internal Combustion Engines*. MCC complies with this regulation per Appendix C, Section C11 for emergency engines and Section C12 for non-emergency engines of their FOP.

40 CFR 64, *Compliance Assurance Monitoring*. The Compliance Assurance Monitoring (CAM) rule (40 CFR 64) applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at a Major Facility that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria. "PSEU" means an emissions unit considered separately with respect to each regulated air pollutant.

The PSEU must:
a. Be subject to an emission limitation or standard [40 CFR 64; AND,
b. Use a control device to achieve compliance [40 CFR 64.2(a)(2)]; AND,
c. Have the **potential pre-control** emissions that exceed or are equivalent to the major source threshold. [40 CFR 64.2(a)(3)]

The MCC facility currently has two PSEU applicable to CAM. Please refer to the CAM PSEU Emission Unit Evaluation and Analysis under C.2 of this document, and the corresponding CAM Plan can be found in Appendix C.

40 CFR 82, *Protection of Stratospheric Ozone*. MCC complies with this regulation per Appendix C, Section C13 of their FOP.

40 CFR 98, *Mandatory Greenhouse Gas Reporting*. MCC is required to comply with Subpart A – General Provisions, and Subpart H – Cement Production. This requirement is proposed for addition to their MCC under section Part II, Section A, condition 44.

8. NSR Preliminary Decision - Conclusion

The District has reviewed the proposed modifications and application for MCC and conducted a succinct written analysis as required by District Rule 1302, section (D)(1)(b) and District Rule 1203, section (B)(1)(a). The District has determined that the proposed modifications and application are in compliance with all applicable District, state, and federal rules and regulations as proposed and when operated in terms of the permit conditions of the associate, revised FOP.

C. Title V Permit/FOP – Significant Permit Modification

1. Proposed Changes to FOP

The proposed changes to the FOP are indicated in the red-line version of the draft FOP dated May 15, 2019.

2. CAM Analysis

The Compliance Assurance Monitoring (CAM) rule (40 CFR 64) applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at a Major Facility that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria. "PSEU" means an emissions unit considered separately with respect to each regulated air pollutant.

The PSEU must:
a. Be subject to an emission limitation or standard; AND,
b. Use a control device to achieve compliance; AND,
c. Have the **potential pre-control** emissions that exceed or are equivalent to the major source threshold.

The MCC facility currently has two PSEU applicable to CAM. Please refer to the CAM PSEU Emission Unit Evaluation on the following page and the full CAM Analysis under Appendix D. The proposed modification does not trigger new CAM requirements.

2. Title V/FOP Preliminary Determination – Conclusion

The District has reviewed the applications and proposed modifications to MCC's Federal Operating Permit. The District has determined that the proposed modification is in compliance with all applicable District, state, and federal rules and regulations as proposed when operated in the terms of the permit conditions given herein, and the attached revised FOP.

This preliminary determination will be submitted to USEPA, CARB, and the public for review and comment on May 20, 2019. The public notice for this preliminary determination will be published on May 23, 2019 allowing for public comment until June 24, 2019.

Mitsubishi Cement Corporation

Pollutant Specific Emission Unit Evaluation

District Permit	Process	Pollutant subject to Limitation or Standard	Uncontrolled PTE (tpy)	Uncontrolled PTE greater than 100% of Major Source Threshold	Unit uses a control device	CAM Applicable	Exempt from CAM	CAM Plan Required	CAM Specifics
B001009	Primary & Secondary Crushing System	PM_{10}	389	Yes	Yes	Yes	No	Yes	Rule 401 Monitoring See FOP, Part II, Section A, Item 14
B001011	Crushing, Stockpiling, and Pre-Blending System	PM_{10}	266	Yes	Yes	Yes	No	Yes	Rule 401 Monitoring See FOP, Part II, Section A, Item 14

Pollutant	Major Source Threshold (tons per year)
NO_X	25
VOC	25
CO	100
PM_{10}	100
SO_X	100
Single HAP	10
Combination of HAP	25

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D. Comment Period and Notifications

1. Public Comment

This preliminary determination will be publicly noticed on May 23, 2019, allowing for public comment until June 24, 2019. Please see Appendix C for noticing details.

2. Notifications

The preliminary determination was submitted to USEPA and CARB pursuant to District Rule 1207 for a forty-five (45) day review period on May 20, 2019. The final modified FOP shall be issued on or about July 8, 2019.

All correspondence as required by District Rules 1302 and 1207 were forwarded to electronically to the following recipients:

Director, Office of Air Division
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
R9airpermits_AV_MD@epa.gov

Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
permits@arb.ca.gov

David M. Rib
Environmental Manager
Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356-9691
drib@mitsubishicement.com

Appendix A
Application

MITSUBISHI CEMENT CORPORATION
5808 STATE HIGHWAY 18, LUCERNE VALLEY, CA 92356-9691
TELEPHONE (760) 248-7373 FAX (760) 248-5139

March 22, 2019

Ms. Sherri Haggard
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392

Subject: Mitsubishi Cement Corporation (MCC), Facility # 011800001,
Permit application for Roll Press system and Dust Collector modifications

Dear M. Haggard,

Mitsubishi Cement Corporation (MCC) will be replacing the roll press, which is part of the system covered in PTO permit B002405. This will be a change of equipment description only. There will be no change in function or throughput. We will be adding a dust collector to the conveyer belt that carries material to the roll press (5-BC-41), to improve dust control. That will result in a small increase in permitted particulate emissions.

We are also replacing the sweep dust collector for finish mill #2. This dust collection function has been shared between two dust collectors, 5-DC-6 and 5-DC-7, both on permit C001000. Only one of those two operate at a time. We will remove both those dust collectors and install one new dust collector, with the same air flow design, but with newer filter elements will achieve lower emissions. This will result in a reduction in particulate emissions, well in excess of the increase from the other new dust collector. Thus, this permit modification will result in a net emission decrease.

Additional Rule Compliance Considerations:

- FM4 is the only finish mill at the Cushenbury Plant that has a roll press. The FM4 roll press is a separate permit unit from the finish mill itself, but there is no storage between the roller press and the finish mill. Therefore, the throughput for the roll press is the same as for the FM4 permit unit, and the FM4 permit specifies an annual throughput limit.
- The investment in the FM4 roller press project is far less than 50% of the investment that would be required to install an entirely new finish mill system.
- There is an increase from 1200 to 1400 HP associated with the crushing portion of the roll press unit. However, this HP increase does not translate into a potential increase in hourly rated throughput for the FM4 roll press its annual throughput is limited by the FM4 annual throughput limitation.
- Both the FM4 and the FM4 roll press were included in the 2006 NSR permitting action (prepared by Geomatrix), and hence these emissions are considered previously offset.

- Therefore, there is no emission increase associated with this roll press project, because the post-project potential to emit is equal to or below the pre-project potential to emit, which was established in the 2006 NSR action as a previously offset level.
- The FM4 roll press project does not involve any debottlenecking with respect to the combined operation of the FM4 roller press and the FM4 permit unit itself. The permitted annual throughput of the FM4 permit unit effectively controls both the FM4 roller press and the FM4 finish mill itself. This annual throughput limit was established following new source review, and will not increase as a result of this project.

The following sections are attached:

- Attachment A: MDAQMD forms for permit applications and Title V modification
- Attachment B: Markups of the current PTO permits
- Attachment C: Emission calculations and supporting documents
- Attachment D: Pages from the equipment specification documents

There are three permit requests proposed at $288 per application. Please let me know any other fees for processing this request, and I will then get that paid promptly. Please contact me at (760) 248-5184 or at drib@mitsubishicement.com if you have any questions or need more information.

Sincerely,

David M. Rib
Environmental Manager
Mitsubishi Cement Corporation

Attachment A

MDAQMD forms for permit application and Title V modification

Mojave Desert Air Quality Management District

TITLE V – PERMIT AMENDMENT / MODIFICATION

I. PERMIT ACTION (Check appropriate box)

☐ ADMINISTRATIVE AMENDMENT ☐ MINOR MODIFICATION X SIGNIFICANT MODIFICATION

☐ OFF-PERMIT CHANGE

1. FACILITY NAME: Mitsubishi Cement Corporation Cushenbury Plant

2. FACILITY ID: 0001

3. TITLE V PERMIT NO: 11800001

4. TYPE OF ORGANIZATION: X Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility

5. COMPANY NAME: Mitsubishi Cement Corporation

6. COMPANY MAILING/BILLING ADDRESS:

STREET/P.O. BOX: 5808 State Highway 18

CITY: Lucerne Valley STATE: CA 9-DIGIT ZIP CODE: 92356-8179

7. FACILITY ADDRESS:

STREET: (same)

CITY: STATE: 9-DIGIT ZIP CODE:

PROPOSED DATE OF INSTALLATION: TBD

8. DISTANCES (FEET AND DIRECTION) TO CLOSEST:

FENCELINE: 500 RESIDENCE: 5000 BUSINESS: 5000 SCHOOL: 15000

9. GENERAL NATURE OF BUSINESS: Cement manufacture

10. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE
(include Permit #'s if known, and use additional sheets if necessary)
- Replace the Roll Press, which is one item on equipment list of PTO B002405
- Add a new dust collector 5-DC-? on conveyer 5-BC-41, which brings clinker into the roll press
- Modify/replace dust collector 5-DC-6/7 PTO C001000 in Finish Mill #2 system B001036, with new dust collector 5-DC-6

11. PERSON TO CONTACT FOR INFORMATION ON THIS APPLICATION:

NAME: David Rib PHONE NUMBER: 760-248-5184

TITLE: Environmental Manager EMAIL: drib@mitsubishicement.com

II. COMPLIANCE CERTIFICATION (Read each statement carefully and check all for confirmation):

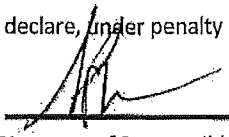
X Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

X Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

X Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

X Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



Signature of Responsible Official

3/22/19

Date

Austin Marshall

Name of Responsible Official (please print)

Plant Manager

Title of Responsible Official (please print)

For AQMD Use Only:

DATE STAMP		
	DISTRICT PERMIT APPLICATION NO:	*COMPANY /FACILITY ID:*

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
BRAD POIRIEZ, *EXECUTIVE DIRECTOR*
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: **engineering@mdaqmd.ca.gov**
www.MDAQMD.ca.gov • @MDAQMD

General Application Form

Remit **$288.00** with this document *(**$164.00** for change of owner)*

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): Mitsubishi Cement Corporation			b. Federal tax ID #: 33-0278414
c. Mailing/billing address (for above company name) *include city, state and zip code:* 5808 State Highway 18 Lucerne Valley, CA 92356			
d. Facility or business license name (for equipment location): Cushenbury Plant			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long): UTM (Km) 489E / 3863N
f. Contact name: David Rib	Title: Environmental Manager	Email address: drib@mitsubishicement.com	Phone: 760-248-5184
General nature of business: Cement Manufacture			Company NAICS: 327310

Type of Organization
☐ Individual owner ☐ Partnership ☑ Corporation ☐ Utility ☐ Local agency ☐ State agency
☐ Federal agency

Section 2: Nature of application

Application is hereby made for the following equipment:
Roll Press replacement-in-kind

Application is for what type of permit:	For modification or change of owner:
☐ New construction ☑ Modification ☐ Change of owner	B002405 Current Permit Number

Do you claim Confidentiality of Data? ☐ No ☐ Yes (attach explanation; specify which information provided is confidential)

Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process):
Roll Press replacement, which is part of the Finish Mill #4 system

Manufacturer: KHD Model: RP 7 120/63 Serial number:

Add-on air pollution control equipment? ☐ Yes ☑ No (Note: *most APCE require a separate application*)

If yes: Manufacturer: Model: Serial #: CARB EO#:

Type (specify):

Stack data Exhaust stack height from ground: feet Exhaust stack diameter: feet

Stack is: ☐ horizontal ☐ vertical ☐ open ☐ weather cap

Vent data: Exhaust temp. °F Maximum exhaust rate (CFM):

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
Paid PCR	48129/MD10404	B002405	116/1

Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____

☐ Manufacturer ☐ Source test ☑ MDAQMD default ☐ USEPA AP-42

☐ Other (please specify): _____

Emissions data: Fugitive emissions only, no chance from current equipment. See emissions calculations table in application package

Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO_x				
NMHC				
CO				
PM_{10}				
SO_x				

Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.

Section 5: Operation information

Fuel Consumption: N/A at max rated load ☐ gal/hour ☐ SCF/hour ☐ MMBtu/hr

Typical load: _____

Facility annual operation by quarters (percent):
☑ Uniform OR _____ % Jan-Mar _____ % Apr-Jun
_____ % Jul-Sep _____ % Oct-Dec

Expected operating hours of equipment
24 Hrs/day 7 Days/wk 50 Wk/yr
Total annual hours 8000

Section 6: Receptor information

Distance (feet) and direction to the property line of closest: 5000 residence _____ business 15000 school

Name of closest school (K-12) Mountain View Alternative High School (Lucerne Valley)

If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)

***Please note:** *District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.*

Section 7: Certification

I hereby certify that all information contained herein is true and correct.

David Rib	Environmental Manager	David M Rib	3/22/19
Name of responsible official	Official title	Signature of responsible official	Date signed

Phone: 760-248-5184 Email: drib@mitsubishicement.com

Application submission instructions:

1) Submit completed application to Engineering@mdaqmd.ca.gov

2) Pay the corresponding application fee of $288 per permit for new or modified permit (or $164 for change of owner) via check or credit card.

Payment by check:
Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:
Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at http://www.mdaqmd.ca.gov
Click *"Pay Fees"*
Please note: ***a surcharge applies for all credit card payments.***

3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov

Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at **engineering@mdaqmd.ca.gov**

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
BRAD POIRIEZ, *EXECUTIVE DIRECTOR*
14306 Park Avenue, Victorville, CA 92392-2310
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Email: **engineering@mdaqmd.ca.gov**
www.MDAQMD.ca.gov • @MDAQMD

Application for air pollution control equipment only

Remit **$288.00** with this document *(**$164.00** for change of owner)*

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): Mitsubishi Cement Corporation			b. Federal tax ID #: 33-0278414
c. Mailing/billing address (for above company name) *include city, state and zip code:* 5808 State Highway 18 Lucerne Valley, CA 92356			
d. Facility or business license name (for equipment location): Cushenbury Plant			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): (same)			Equip. coordinates (lat/long): UTM (Km) 489E / 3863N
f. Contact name: David Rib	Title: Environmental Manager	Email address: drib@mitsubishicement.com	Phone: 760-248-5184
General nature of business: cement manufacture			Company NAICS: 327310

Type of Organization
☐ Individual owner ☐ Partnership ☑ Corporation ☐ Utility ☐ Local agency ☐ State agency
☐ Federal agency

Section 2: Nature of application

Application is hereby made for the following equipment:
New dust collector for conveyer 5-BC-41 in the Roll Press system

Application is for what type of permit:	For modification or change of owner:
☑ New construction ☐ Modification ☐ Change of owner	_____ Current Permit Number

Do you claim Confidentiality of Data? ☐ No ☐ Yes (attach explanation; specify which information provided is confidential)

Section 3: Equipment information — *Complete sections A-G as applicable*

Note: Each control unit requires a separate application

A. Adsorption units:

Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer: _____	Model: _____	Serial No.: _____
Adsorbent: ☐ Activated charcoal: type _____		☐ Other: specify _____
Adsorbate(s): _____		
Number of beds: _____		Weight of adsorbent per bed: _____
Dimensions of bed: thickness: _____	surface area: _____	
Inlet temperature: _____ °F		Pressure drop across unit: _____ inches H_2O
Regeneration: ☐ Replacement ☐ Steam ☐ Other, specify: _____		
Regeneration method: ☐ shut down ☐ alternate use, specify: _____		☐ other, specify: _____
Minimum control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
MDIN 20095	48129/MDI0404		118/1

B. Afterburner units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Combustion chamber dimensions: length: _____ in. Cross sectional area: _____ sq. in.		
Fuel: ☐ natural gas ☐ propane ☐ CARB diesel ☐ other, specify: _____		
Number and rating of burners: _____	Operating temperature of combustion chamber in °F: _____	
Inlet temperature: _____ °F	Pressure drop across unit: _____ inches H_2O	
Gas flow rate: _____ dscfm		
Catalyst used: ☐, please describe: _____		
Heat exchanger used: ☐, please describe: _____		
Minimum control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

C: Condenser units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Heat exchange area: _____ ft^2		
Coolant rate: _____ units _____ type: ☐ water ☐ air ☐ CARB diesel ☐ other, specify: _____		
Gas flow rate: _____ dscfm	Coolant temp.: inlet _____ °F outlet _____ °F	Gas temp.: inlet _____ °F outlet _____ °F
Minimum control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

D. Electrostatic precipitator units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Collecting electrode area: _____ ft^2		
Gas flow rate: _____ dscfm		
Describe method to monitor control efficiency and breakthrough:		

E. Filter units

Flow diagram of emissions source and control unit: ☑ included	Manufacturer specifications/guarantee: ☑ included	
Manufacturer: Parker BHA	Model: _____	Serial No.: _____
Filtering material: polyester	Filtering area: 900 sqft	
Number and dimension of filters: 20 filers 6.13" x 79"		
Cleaning method: ☐ shaker ☐ reverse air ☐ pulse air ☑ pulse jet ☐ other, specify: _____		
Gas flow rate: 2500 dscfm		
Unit measured with a manometer gauge? ☑ yes ☐ no	Manufacturer's specified pressure differential range: 0-8 inches H2O	
Control efficiency: _____ % _____ ppmv 0.005 gr/dscf mg/m^3		
Motor size: 7.5 bhp Fan size: _____ inches		
Describe method to monitor control efficiency and breakthrough: manometer and visual observation		

F. Scrubber units

Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer: _____	Model: _____	Serial No.: _____
Type of scrubber: ☐ high energy, gas stream pressure drop: _____ inches H_2O ☐ packed: packing type _____ packing size _____ packing material height _____ ☐ spray: number of nozzles _____ nozzle pressure _____ PSIG ☐ other, specify: _____		
Flow type: ☐ concurrent ☐ countercurrent ☐ crossflow		
Scrubber dimensions: length in direction of gas flow _____ in. cross sectional area _____ sq. in.		
Scrubbant: _____ Scrubbant flow rate: _____ dscfm		
Control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

G. Other types:

Equipment description: _____		
Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer: _____	Model: _____	Serial No.: _____
Gas flow rate: _____ dscfm		
Control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____

☑ Manufacturer ☐ Source test ☐ MDAQMD default ☐ USEPA AP-42

☐ Other (please specify): _____

Emissions data: _____

Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO_x				
NMHC				
CO				
PM_{10}			0.005	gr/dscf
SO_x				

Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.

Section 5: Operation information

Fuel Consumption: _____ at max rated load ☐ gal/hour ☐ SCF/hour ☐ MMBtu/hr

Typical load: _____

Facility annual operation by quarters (percent): ☐ Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment _____ Hrs/day _____ Days/wk _____ Wk/yr Total annual hours _____

Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	5000	residence	5000	business	15000 school
Name of closest school (K-12)	Mountain View Alternative High School (Lucerne Valley)				

If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.*

Section 7: Certification

I hereby certify that all information contained herein is true and correct.

David Rib	Environmental Manager		03/22/2019
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-248-5184		Email: drib@mitsubishicement.com	

Application submission instructions:

1) Submit completed application to Engineering@mdaqmd.ca.gov

2) Pay the corresponding application fee of $288 per permit for new or modified permit (or $164 for change of owner) via check or credit card.

Payment by check:
Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:
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Victorville, CA 92392

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Please note: ***a surcharge applies for all credit card payments.***

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MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
BRAD POIRIEZ, *EXECUTIVE DIRECTOR*
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: **engineering@mdaqmd.ca.gov**
www.MDAQMD.ca.gov • @MDAQMD

Application for air pollution control equipment only

Remit **$288.00** with this document *(**$164.00** for change of owner)*

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): Mitsubishi Cement Corporation			b. Federal tax ID #: 33-0278414
c. Mailing/billing address (for above company name) *include city, state and zip code:* 5808 State Highway 18 Lucerne Valley, CA 92356			
d. Facility or business license name (for equipment location): Cushenbury Plant			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): (same)			Equip. coordinates (lat/long): UTM (Km) 489E / 3863N
f. Contact name: David Rib	Title: Environmental Manager	Email address: drib@mitsubishicement.com	Phone: 760-248-5184
General nature of business: cement manufacture			Company NAICS: 327310

Type of Organization
☐ Individual owner ☐ Partnership ☑ Corporation ☐ Utility ☐ Local agency ☐ State agency
☐ Federal agency

Section 2: Nature of application

Application is hereby made for the following equipment:
Replacement of dust collectors 5-DC-6 and 5-DC-7 with a single new dust collector, using the existing exhaust vent

Application is for what type of permit:	For modification or change of owner:
☐ New construction ☑ Modification ☐ Change of owner	C001000 Current Permit Number

Do you claim Confidentiality of Data? ☐ No ☐ Yes (attach explanation; specify which information provided is confidential)

Section 3: Equipment information — *Complete sections A-G as applicable*

Note: Each control unit requires a separate application

A. Adsorption units:

Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer:	Model:	Serial No.:
Adsorbent: ☐ Activated charcoal: type		☐ Other: specify
Adsorbate(s):		
Number of beds:		Weight of adsorbent per bed:
Dimensions of bed: thickness:	surface area:	
Inlet temperature: °F		Pressure drop across unit: inches H_2O
Regeneration: ☐ Replacement ☐ Steam ☐ Other, specify:		
Regeneration method: ☐ shut down ☐ alternate use, specify:		☐ other, specify:
Minimum control efficiency: %	ppmv	mg/m^3
Describe method to monitor control efficiency and breakthrough:		

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
Paid POR	48130/MD10405	C001000	118/1

B. Afterburner units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Combustion chamber dimensions: length: _____ in. Cross sectional area: _____ sq. in.		
Fuel: ☐ natural gas ☐ propane ☐ CARB diesel ☐ other, specify: _____		
Number and rating of burners: _____	Operating temperature of combustion chamber in °F: _____	
Inlet temperature: _____ °F	Pressure drop across unit: _____ inches H_2O	
Gas flow rate: _____ dscfm		
Catalyst used: ☐, please describe: _____		
Heat exchanger used: ☐, please describe: _____		
Minimum control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

C: Condenser units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Heat exchange area: _____ ft^2		
Coolant rate: _____ units _____ type: ☐ water ☐ air ☐ CARB diesel ☐ other, specify: _____		
Gas flow rate: _____ dscfm	Coolant temp.: inlet _____ °F outlet _____ °F	Gas temp.: inlet _____ °F outlet _____ °F
Minimum control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

D. Electrostatic precipitator units:

Flow diagram of emissions source and control unit: ☐ included	Manufacturer specifications/guarantee: ☐ included	
Manufacturer: _____	Model: _____	Serial No.: _____
Collecting electrode area: _____ ft^2		
Gas flow rate: _____ dscfm		
Describe method to monitor control efficiency and breakthrough:		

E. Filter units

Flow diagram of emissions source and control unit: ☑ included	Manufacturer specifications/guarantee: ☑ included	
Manufacturer: Parker BHA	Model: _____	Serial No.: _____
Filtering material: polyester with PTFE membrane	Filtering area: 10,560 sqft	
Number and dimension of filters: 240 filers 6.25" x 2 meters		
Cleaning method: ☐ shaker ☐ reverse air ☐ pulse air ☑ pulse jet ☐ other, specify: _____		
Gas flow rate: 20000 dscfm		
Unit measured with a manometer gauge? ☑ yes ☐ no	Manufacturer's specified pressure differential range: 0-8 inches H2O	
Control efficiency: _____ % _____ ppmv 0.005 gr/dscf mg/m^3		
Motor size: 150 bhp Fan size: _____ inches		
Describe method to monitor control efficiency and breakthrough: manometer and visual observation		

F. Scrubber units

Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer: _____	Model: _____	Serial No.: _____
Type of scrubber: ☐ high energy, gas stream pressure drop: _____ inches H_2O ☐ packed: packing type _____ packing size _____ packing material height _____ ☐ spray: number of nozzles _____ nozzle pressure _____ PSIG ☐ other, specify: _____		
Flow type: ☐ concurrent ☐ countercurrent ☐ crossflow		
Scrubber dimensions: length in direction of gas flow _____ in. cross sectional area _____ sq. in.		
Scrubbant: _____ Scrubbant flow rate: _____ dscfm		
Control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

G. Other types:

Equipment description: _____		
Flow diagram of emissions source and control unit: ☐ included		Manufacturer specifications/guarantee: ☐ included
Manufacturer: _____	Model: _____	Serial No.: _____
Gas flow rate: _____ dscfm		
Control efficiency: _____ % _____ ppmv _____ mg/m^3		
Describe method to monitor control efficiency and breakthrough:		

Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____

☑ Manufacturer ☐ Source test ☐ MDAQMD default ☐ USEPA AP-42
☐ Other (please specify): _____

Emissions data: _____

Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO_x				
NMHC				
CO				
PM_{10}			0.005	gr/dscf
SO_x				

Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.

Section 5: Operation information

Fuel Consumption: _____ at max rated load ☐ gal/hour ☐ SCF/hour ☐ MMBtu/hr

Typical load: _____

Facility annual operation by quarters (percent): ☐ Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment _____ Hrs/day _____ Days/wk _____ Wk/yr Total annual hours _____

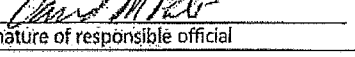
Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	5000	residence	5000	business	15000 school
Name of closest school (K-12)	Mountain View Alternative High School (Lucerne Valley)				
If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)					

***Please note:** *District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.*

Section 7: Certification

I hereby certify that all information contained herein is true and correct.

David Rib	Environmental Manager		03/22/2019
Name of responsible official	Official title	Signature of responsible official	Date signed

Phone: 760-248-6184	Email: drib@mitsubishicement.com

Application submission instructions:

1) Submit completed application to Engineering@mdaqmd.ca.gov

2) Pay the corresponding application fee of $288 per permit for new or modified permit (or $164 for change of owner) via check or credit card.

Payment by check:
Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:
Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at **http://www.mdaqmd.ca.gov**
Click *"Pay Fees"*
Please note: ***a surcharge applies for all credit card payments.***

3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov

Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at **engineering@mdaqmd.ca.gov**

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
BRAD POIRIEZ, *EXECUTIVE DIRECTOR*
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: **engineering@mdaqmd.ca.gov**
www.MDAQMD.ca.gov • @MDAQMD

RECEIVED
MDAQMD
19 MAY 15 PM 4:07

Application for internal combustion engine (I.C.E.) only

Remit **$288.00** with this document ***($164.00 for change of owner)***

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name):			b. Federal tax ID #:
Mitsubishi Cement Corporation			33-0278414
c. Mailing/billing address (for above company name) *include city, state and zip code:*			
5808 State Highway 18 Lucerne Valley, CA 92356			
d. Facility or business license name (for equipment location):			
Mitsubishi Cement Corporation Cushenbury Plant			
e. Facility Address — Location of equipment (if same as for company, enter "Same"):			Equip. coordinates (lat/long):
same			E513.5683, N3801.604
f. Contact name:	Title:	Email address:	Phone:
David Rib	Environmental Manager	drib@mitsubishicement .com	760-248-5184
General nature of business:			Company NAICS:
Cement manufactring			327310

Type of Organization
☐ Individual owner ☐ Partnership ☑ Corporation ☐ Utility ☐ Local agency ☐ State agency
☐ Federal agency

Section 2: Nature of application

Application is hereby made for the following equipment:
Portable welder ID 725-049 transition to low-use at <200 hr/yr as of 1/1/2020

Application is for what type of permit:
☐ New construction ☑ Modification ☐ Change of owner

For modification or change of owner:
B009466 Current Permit Number

Do you claim Confidentiality of Data? ☐ No ☑ Yes (attach explanation; specify which information provided is confidential)

Section 3: Equipment information

Engine function: ☐ Prime ☐ Emergency (check one) ☑ Low-use (<80 hr/yr) ☐ Portable ☐ Stand-by (as defined in Rule 301[E][10]) (check all that apply)

Engine manufacturer: Perkins | Engine model: 2049/1700 | Engine serial number: 588264

Engine year of manufacture: 2004 | Date installed: N/A

Rating (BHP): 71 | Speed (RPM): 1700 | Number of cylinders: 4

Fuel type: ☑ CARB diesel ☐ Natural gas ☐ Propane/LPG ☐ Gasoline ☐ Digester gas ☐ Landfill gas
☐ Other (specify): _____ Alternative fuel/back-up fuel, if applicable (specify): _____

Engine meter: ☑ Hour meter ☐ Dedicated fuel meter ☐ None

Cycle type: ☐ two cycle ☑ four cycle | Combustion type: ☐ Rich burn ☐ Lean burn

Check all that apply: ☑ Naturally aspirated ☐ Turbocharged ☐ Aftercooled ☐ Intercooled ☐ Air-to-fuel ratio controller
☐ Smoke puff limiter ☐ Electronic control module ☐ Direct fuel injection ☐ Pre-combustion chamber ☐ Piston scavenging
☐ Other(s) (specify): _____

Add-on emission control technology: ☐ Yes ☑ No (if applicable, attach manufacturer's specifications and CARB certification or source test results)

If yes: Manufacturer: _____ Model: _____ Serial No.: _____ CARB EO#: _____

Type: ☐ SCR ☐ Non-SCR ☐ Particulate trap ☐ EGR ☐ Oxidation catalyst ☐ Other (specify): _____

Stack data Exhaust stack height from ground: 8 feet Exhaust stack diameter: 1.5 feet

Stack is: ☐ horizontal ☑ vertical ☑ weather cap Vent data: Exhaust temp. _____ °F Maximum exhaust rate (ACFM): _____

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:

Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____

USEPA family name 3PKXL04.2AR1 CARB family name _____

☐ Manufacturer ☐ Source test ☐ MDAQMD default ☐ USEPA AP-42

☐ Other (please specify): _____

Emissions data: _____

Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO_x				
NMHC				
CO				
PM_{10}				
SO_x				

Toxic pollutants --- Please include a list of all toxic air pollutants and their emission rates if known.

Section 5: Powered Item

This ICE is used to power: ☐ Electrical generator ☐ Compressor ☐ Pump ☐ Paint spray gun ☐ Conveyor or drive

☐ Fire pump ☑ Other (specify): Welder

PERP registration (if applicable): _____

Manufacturer: _____ Model: _____ Serial No.: _____ Type/size/rating: _____

Section 6: Operation information

Fuel Consumption: _____ at max rated load ☐ gal/hour ☐ SCF/hour ☐ MMBtu/hr

Typical load: _____

Facility annual operation by quarters (percent):
☑ Uniform OR _____ % Jan-Mar _____ % Apr-Jun
_____ % Jul-Sep _____ % Oct-Dec

Expected operating hours of equipment
_____ Hrs/day _____ Days/wk _____ Wk/yr
Total annual hours <200

Section 7: Receptor information

Distance (feet) and direction to the property line of closest: 5000 residence 5300 business 15000 school

Name of closest school (K-12) Mountain View Alternative High School (Lucerne Valley)

If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)

***Please note:** *District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.*

Section 8: Certification

I hereby certify that all information contained herein is true and correct.

David M. Rib	Environmental Manager		5/7/2019
Name of responsible official	Official title	Signature of responsible official	Date signed

Phone: 760-248-5184 Email: drib@mitsubishicement.com

Application submission instructions:

1) Submit completed application to Engineering@mdaqmd.ca.gov

2) Pay the corresponding application fee of $288 per permit for new or modified permit (or $164 for change of owner) via check or credit card.

Payment by check:
Make check payable to *Mojave Desert AQMD*
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Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at http://www.mdaqmd.ca.gov
Click *"Pay Fees"*
Please note: *a surcharge applies for all credit card payments.*

3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov

Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at **engineering@mdaqmd.ca.gov**

California Environmental Protection Agency AIR RESOURCES BOARD	PERKINS ENGINES COMPANY LTD.	EXECUTIVE ORDER U-R-022-0044 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2003	3PKXL04.2AR1	4.232	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection	Tractor and Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37≤KW<75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	8.8	--	--	--	7	13	13

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 24TH day of December 2002.

Raphael Susnowitz

for Allen Lyons, Chief
Mobile Source Operations Division

Attachment B
PTO Permit markups

engineering principles.

2. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permit C002406 (5-DC-41), and (new dust collector)

3. The owner/operator (o/o) shall limit the annual process throughput to 1,138,800 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B002405

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: APRIL 2019

OWNER OR OPERATOR (Co.#118)

Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

EQUIPMENT LOCATION (Fac.#1)

Mitsubishi/Cushenbury Plant
5808 Highway 18
Lucerne Valley, CA 92356

Description:
FINISH MILL NO. 4 ROLLER PRESS SYSTEM consisting of: For Clinker to 5-FM-4 Finish Grinding.

EQUIPMENT

Capacity	Equipment Description
3	5-BC-41 Belt Conveyor, 30" x 38'6"
15	5-BE-41 Bucket Elevator, 2' x 54'6"
5	5-BC-42 Belt Conveyor, 36" x 43'
1	5-MGC-1 Magnet Catcher, 24" x 4'
~~1200~~ 1700	5-RP-1 (a) Roller Press, ~~1150~~ 1200 mm dia. X 630 mm W, dual motor drive @ ~~800~~ 700 hp ea.
~~2~~	~~5-RP-1 (b) Oil Pump for gear reducer, 2 @ 1 hp ea.~~
0.4 5.5	5-RP-1 (c) ~~Grease~~ Pump for bearing
8 10	5-RP-1 (d) Hydraulic Oil Pump
5	5-BC-43 Belt Conveyor, 30" x 35'
20	5-BE-42 Bucket Elevator, 2' x 35'
2	5-BE-42 (a) Screw Conveyor, Dust Return
1	5-RV-41 Rotary Valve on Dust Return

0.5 Bearing Seal Grease Pump
0.5 Bearing Lubrication Recirc Pump
0.25 Bearing Lubrication Stirrer

CONDITIONS:

1. Equipment shall be operated/maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound

Fee Schedule: 1 (d) | Rating: 1257.4 bhp | SIC: 3241 | SCC: 30502006 | Location/UTM(Km): 514E/3802N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

By: Brad Poiriez
Air Pollution Control Officer

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

new CXXXXX
~~C012740~~

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: APRIL 2019

OWNER OR OPERATOR (Co.#118)
Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

EQUIPMENT LOCATION (Fac.#1)
Mitsubishi/Cushenbury Plant
5808 Highway 18
Lucerne Valley, CA 92356

Description:
DUST COLLECTOR FOR ~~FINISH MILL~~ Roll Press ? 2 (5-DC-~~52~~) consisting of: Dust collection system manufactured by ~~BHA, Model HZ-05-18-5,~~ Parker with an airflow of ~~2,400~~ 25000 acfm, cloth area ~~851~~ 900 sq. ft., and an air to cloth ratio of ~~6.28:1.~~ 2.8:1 Fan motor (5-FA-~~52~~ ?) rated at 7.5 hp.

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

2. The owner/operator shall maintain a record of repairs and maintenance on this equipment and submit it to the District upon request. The record shall be retained for a minimum period of five (5) years.

3. This air pollution control device shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be maintained below 6 inches or water column.

4. The owner/operator shall maintain on-site, as a minimum, an inventory of replacement bags/filters that assures compliance these conditions.

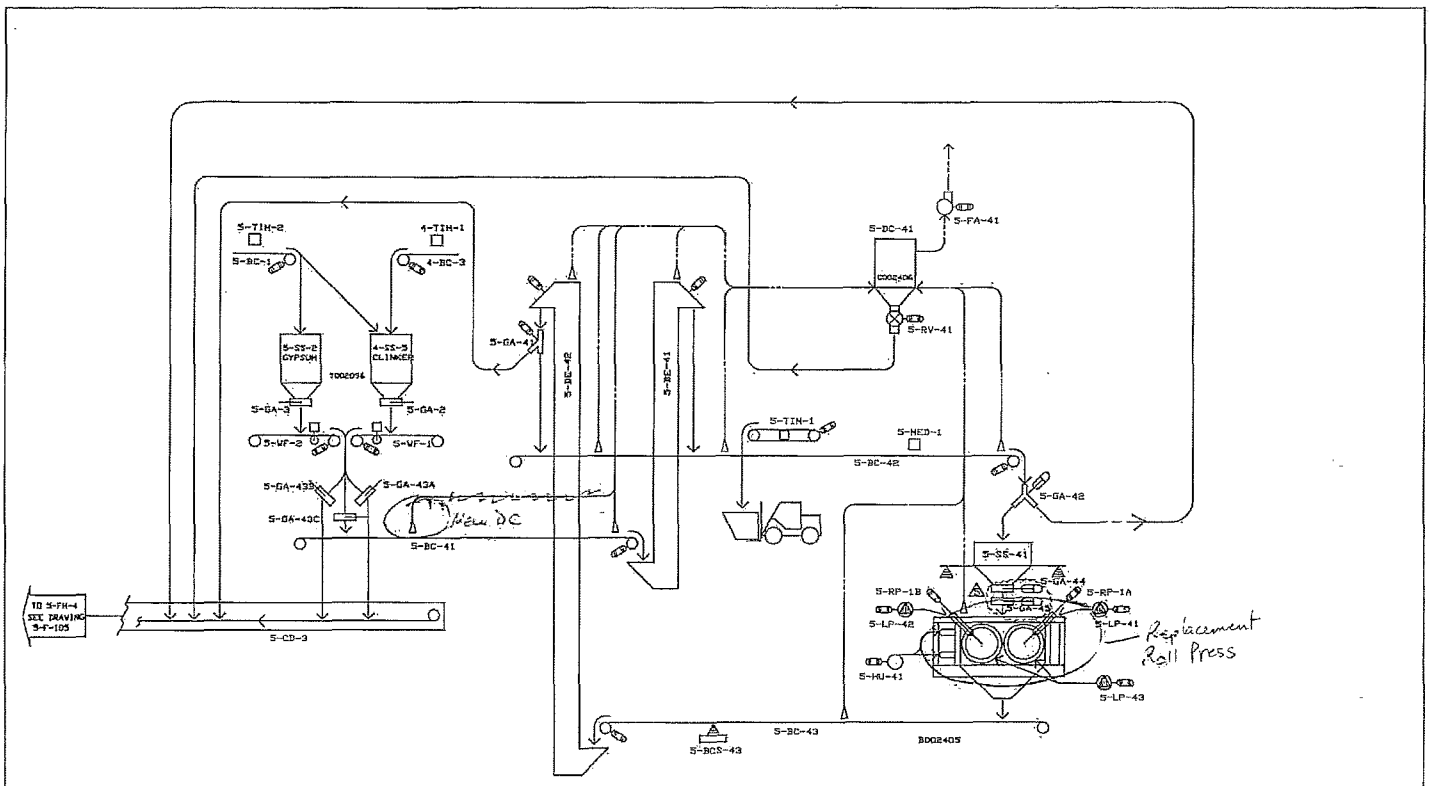
Fee Schedule: 7 (h)	Rating: 1 device	SIC: 3241	SCC: 30500699	Location/UTM(Km): 514E/3802N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

By: Brad Poiriez
Air Pollution Control Officer

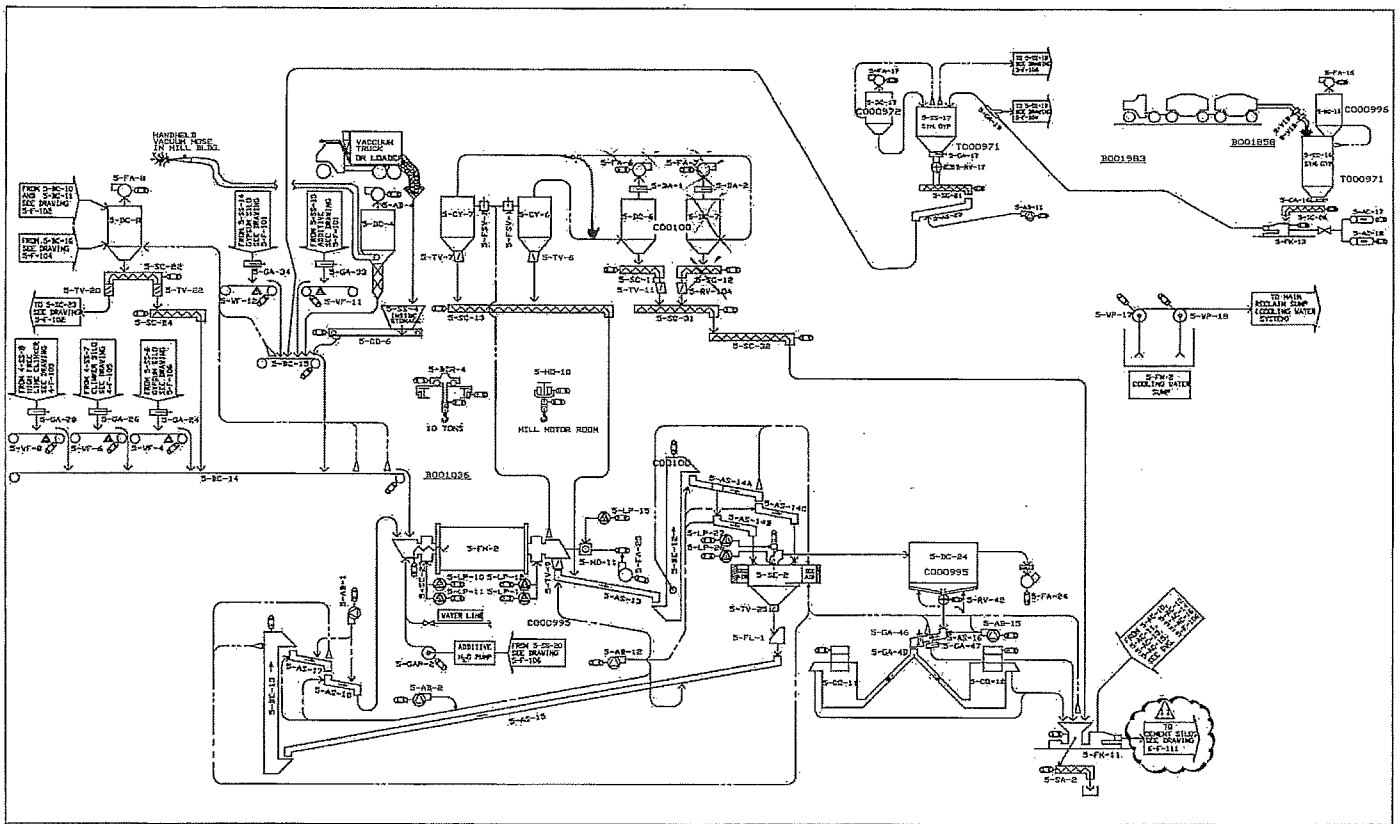
Permit: C012740 Issue Date: 04/24/2018



NO	DATE	REVISION	BY	CK'D	APP'D	NUMBER	REFERENCE DRAWINGS
6	8/05	REVISED DRAWING TITLE	PF	LT	LT		
5	1/03	ADDED 5-GA-45	PF				
4	6/98	GENERAL REVISION SET	PD				
3	1/96	ADDED MINOR I.D. NOS.				RAK	
2	1/94	GENERAL REVISION SET	KS	VB			
1	8/91	GENERAL REVISION SET	JS	VB			

MITSUBISHI CEMENT CORPORATION — CUSHENBURY PLANT, LUCERNE VALLEY, CALIF.

SCALE DIAGRAMMATIC	DATE	5-RP-1 ROLL PRESS
DRAWN ED	6/1	
CHECKED		
DESIGN/APPD		
CONSTR/APPD		
JOB NO.	DWG. NO. 5-F-109	REVISION 6



NO	DATE	REVISION	DSN	CHK	APP	NUMBER	REFERENCE DRAWINGS
11	6/03	REV DWG TITLE, POINTER	CE	LT	LT		
10	5/03	ADDED S-GA-47, S-RV-2	CE				
9	8/02	CHANGE SGA4 TO SGV4	CE				
8	3/00	ADD PERMIT No'S	CE				
7	2/99	ADD SGA46 TO SAS16	CE				
6	8/98	CHANGE SGV10 TO STV10A	CE				

MITSUBISHI CEMENT CORPORATION CUSHENBURY PLANT LUCERNE VALLEY, CALIF.

SCALE DIAGRAMMATIC	DATE 5/98	FINISH MILL #2 PROCESS
DRAWN ED		
CHECKED		
DESIGN/APPD		
CONSTR/APPD		
JOB NO.	DWG. NO. S-F-103.	REVISION 11

Capacity	Equipment Description
5	5-SC-31 Screw Conveyor
10	5-SC-32 Screw Conveyor
2	5-SC-14 Screw Conveyor
3	5-SC-11 Screw Conveyor
3	5-SC-12 Screw Conveyor
150	5-SE-01 O-SEPA Separator, (New in 1998 per application 98001627)
1	5-WF-17 Weigh Feeder
5	5-BC-15 Belt Conveyor
2	5-WF-12 Weigh Feeder

CONDITIONS:

1. All covers, lids, gaskets and other devices and/or equipment which ensures this system's air tight integrity shall be maintained to preclude and/or minimize fugitive particulate emissions.

2. This system shall not be operated unless it is vented wholly to the following particulate emissions controls, which are operating under valid District permits: C001000 (5-DC-6 ~~&-7~~) and C005164 (5-DC-24).

3. The owner/operator (o/o) shall limit the annual process throughput to 963,600 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This air pollution control device shall operate concurrently with the loading of feed to the Finish Mill 2 under District Permit B001036.

6. This air pollution control device shall discharge no more than ~~0.21~~ 0.11 pounds per hour of PM10 at a maximum concentration of ~~0.04~~ 0.005 grains/dscf at the operating conditions given in the above description. To demonstrate compliance with this condition, the owner/operator shall maintain the manufacturer's data guaranteeing the grain loading of this dust collector.
[District Rule 1303]

7. This air pollution control device shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. This equipment does not require a regularly scheduled emission compliance test.
However, emission compliance testing may be required at the discretion of the District.
[District Rule 1303]

9. The owner/operator shall conduct periodic opacity monitoring per 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry.

10. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B001036

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: APRIL 2019

OWNER OR OPERATOR (Co.#118)
Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

EQUIPMENT LOCATION (Fac.#1)
Mitsubishi/Cushenbury Plant
5808 Highway 18
Lucerne Valley, CA 92356

Description:
FINISH MILL NO. 2 SYSTEM (5-FM-2) consisting of:

EQUIPMENT

Capacity	Equipment Description
5.5	5-WF-4,6,8 Weigh Feeders @ 1.5, 2 and 2 hp respectively
5	5-BC-14 Belt Conveyor
50	5-SC-27 Screw Conveyor
4400	5-MD-11 Motor Drive for the Mill
25	5-MG-11 Generator for Mill
15	5-FA-11 Air Fan
15	5-AB-12 Air Blower for 5-AS-13, 14, 15, 16, 17, and 18.
0	5-CY-6 and 7: Cyclones
7.5	5-SC-13 Screw Conveyor
50	5-BE-12 Bucket Elevator
40	5-BE-13 Bucket Elevator
600	5-SE-2 Air Separator
60	5-CO-11 Cement Cooler
60	5-CO-12 Cement Cooler
200	5-FK-11 Fuller Pump
200	5-AC-15 Air Compressor
200	5-AC-16 Air Compressor

Fee Schedule: 1 (d) Rating: 6114 bhp SIC: 3241 SCC: 30502006 Location/UTM(Km): 514E/3802N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

By: Brad Poiriez
Air Pollution Control Officer

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

C001000

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: APRIL 2019

OWNER OR OPERATOR (Co.#118)
Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

EQUIPMENT LOCATION (Fac.#1)
Mitsubishi/Cushenbury Plant
5808 Highway 18
Lucerne Valley, CA 92356

Description:
BAGHOUSE FOR FINISH MILL NO. 2 (5-DC-6,7) consisting of: ~~Two~~ dust collector baghouse~~s~~, serving finish mill 5-FM-2 through cyclones 5-CY-6,7 under permit B001036. ~~The two dust collectors are ducted together (in parallel):~~
~~5-DC-6,7 Baghouses~~, ~~Northern Blower model AT, A/C ratio 1.04:1~~, 20,000 dscfm, cloth area ~~9,903~~ sq. ft. for 5-DC-6 ~~and 9,495 sq. ft for 5-DC-7~~. Parker BHA A/C ratio 1.4:1 18,560
5-FA-6 Blower, ~~100 hp~~ 150 hp
~~5-FA-7 Blower, 100 hp~~

CONDITIONS:

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of five years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable

Fee Schedule: 7 (h)	Rating: 1 device	SIC: 3241	SCC: 30502006	Location/UTM(Km): 514E/3802N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

By: Brad Poiriez
Air Pollution Control Officer

Permit: C001000 Issue Date: 04/24/2018

Rules of District Regulation IV.

5. This baghouse shall discharge no more than ~~1.74~~ 0.9 pounds per hour of PM10 at a maximum concentration of ~~0.01~~ 0.005 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

Yorke
ENGINEERING, LLC
www.YorkeEngr.com

MCC Permit Application February 2019 Calculation Tables - Table of Contents

Attachment C
Emission calculations and supporting documents

Yorke
ENGINEERING, LLC
www.YorkeEngr.com

Table 1 - MCC Permit Application February 2019 - MCC Permit Application February 2019 - Emissions Summary

		PM10
Unit	**Permit #**	**Emissions Change from Proposed Unit (tpy)**
FM4 Roller Press	B002405	0.00
New FM2 Dust Collector, x-DC-x	Cxxxxxx	3.75
New Dust Collector for Conveyor, y-DC-y	Cyyyyyy	0.47
FM2 Dust Collector, 5-DC-6,7	C001000	-7.51
Total		**-3.29**
Offsets Needed?		**No**

The project is to do a functionally identical replacement of the FM4 Roller Press, replace the FM2 dust collector to improve dust collection, and install a new dust collector to control a conveyor.

Yorke
ENGINEERING, LLC
www.YorkeEngr.com

Table 2 - MCC Permit Application February 2019 - Criteria Pollutant Calculations

FM4 Roller Press, B002405, Functionally Identical Replacement Criteria Pollutant Calculations

FM4 Roller Press (B002405) PM10 Emission Calculations	Annual Throughput (tons)[1]	Maximum Hourly Throughput (tons)[2]	# Transfer Points[3]	# Crushers[3]	# Screens[3]	Control Efficiency[4]	Controlled Emission Factor (lb/ton)[5]	PM10 Emissions (lb/hr)	PM10 Emissions (ton/year)
Roller Press (pre-replacement)	1,138,800	130	6	0	0	98.0%	1.64E-03	0.213	0.934
Roller Press (post-replacement)	1,138,800	130	6	0	0	98.0%	1.64E-03	0.213	0.934

Dust Collector Permitting Actions

Dust Collector PM10 Emission Calculations	Grain Loading, gr/dscf	Permitted DSCFM	Hours	PM10 Emissions (lb/hr)	PM10 Emissions (ton/yr)
5-DC-6,7 (C001000), To Be Removed	0.01	20,000	8760	1.71	7.509
x-DC-x (Cxxxxxx), To Be Added	0.005	20,000	8760	0.86	3.754
y-DC-y (Cyyyyyy), To Be Added	0.005	2,500	8760	0.11	0.469

Summary

PM10 Increases

Roller Press (post-replacement) (ton/yr)	0.934
x-DC-x (Cxxxxxx), To Be Added (ton/yr)	3.754
y-DC-y (Cyyyyyy), To Be Added (ton/yr)	0.469

PM10 Decreases

Roller Press (pre-replacement) (ton/yr)	0.934
5-DC-6,7 (C001000), To Be Removed (ton/yr)	7.509
Change in PM10 Emissions (ton/yr)	**-3.285**

1. Annual throughput is the limit in the Title V permit for B002405.
2. Maximum hourly throughput is from the EY2017 CEIR.
3. Number of transfer points, crushers, and screens are from the EY2017 CEIR.
4. Control efficiency is for equipment with special pickup features. Used value for "baghouse with single pickup (partial enclosure)" from the MDAQMD emission inventory guidance for mineral handling and processing industries.
5. AP-42 13.2.4 Equation 1, transfer point uncontrolled EF:

$$E_{uc} = k(0.0032) * \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$

Equation element	Symbol	Value used	Notes
Mean wind speed (mph)	U	7.7	Conservative Estimate: MDAQMD Emission Inventory Guidance pg 13
Moisture, uncontrolled (%)	M	0.5	Table 13.2.4-1, crushed limestone
Particle size multiplier for PM_{10} (-)	k	0.35	EPA AP-42, Chapter 13.2.4-4
PM_{10} emission factor, uncontrolled (lb/ton)	E_f	0.014	Per transfer point

Table 3 - MCC Permit Application February 2019 - Prioritization Score Summary

-	Change Planned	Change in Dust PM10 Emissions (tpy)	Cancer Priority	Chronic Noncancer Priority	Acute Noncancer Priority
2018 Facility Total (Includes Existing Unit)	-	-	8.79E+00	3.03E-01	1.32E-01
Increase for New Roller Press Relative to Old Roller Press	Functionally Identical Replacement	0.00E+00	0.00E+00	0.00E+00	0.00E+00
x-DC-x, (Cxxxxxx)	Addition	3.75E+00	1.04E-01	6.30E-04	1.63E-04
y-DC-y, (Cyyyyyy)	Addition	4.69E-01	1.30E-02	4.03E-05	2.04E-05
5-DC-6,7 (C001000)	Removal	-7.51E+00	-2.08E-01	-1.26E-03	-3.26E-04
Total	-	-3.29E+00	8.70E+00	3.02E-01	1.32E-01

Table 4 - MCC Permit Application February 2019 - Prioritization Scores Calculation

Projects with Emission Increases

Equipment	CAS	Compound	Emission Rates Annual (lbs/yr)	Emission Rates Chronic[2] (lbs/hr)	Emission Rates Hourly (lbs/hr)	Cancer Unit Risk ($\mu g/m^3)^{-1}$	Reference Exposure Level (REL) Chronic ($\mu g/m^3$)	Reference Exposure Level (REL) Acute ($\mu g/m^3$)	Cancer Priority[3]	Chronic Noncancer Priority[4]	Acute Noncancer Priority[5]
Roller Press (post-replacement) (ton/yr)	7440360	Antimony	2.34E-04	2.67E-08	2.67E-08	0	0	0	NA	NA	NA
	7440382	Arsenic	1.87E-02	2.13E-06	2.13E-06	0.0033	0.015	0.2	4.75E-04	2.13E-05	1.60E-05
	7440417	Beryllium	6.54E-04	7.47E-08	7.47E-08	0.0024	0.007	0	1.21E-05	1.60E-06	NA
	7440439	Cadmium	5.79E-04	6.61E-08	6.61E-08	0.0042	0.02	0	1.87E-05	4.96E-07	NA
	18540299	Chromium, hexavalent	3.55E-02	4.05E-06	4.05E-06	0.15	0.2	0	4.10E-02	3.04E-06	NA
	7440473	Chromium, total	6.96E-02	7.95E-06	7.95E-06	0	0	0	NA	NA	NA
	7440508	Copper	2.43E-02	2.77E-06	2.77E-06	0	0	100	NA	NA	4.16E-08
	7439921	Lead	3.92E-02	4.48E-06	4.48E-06	0.000012	0	0	3.63E-06	NA	NA
	7439965	Manganese	4.95E-01	5.65E-05	5.65E-05	0	0.09	0	NA	9.42E-05	NA
	7439976	Mercury	1.87E-05	2.13E-09	2.13E-09	0	0.03	0.6	NA	1.07E-08	5.33E-09
	7440020	Nickel	2.62E-02	2.99E-06	2.99E-06	0.00026	0.014	0.2	5.24E-05	3.20E-05	2.24E-05
	7782492	Selenium	1.08E-03	1.24E-07	1.24E-07	0	20	0	NA	9.28E-10	NA
	7440622	Vanadium	7.10E-02	8.11E-06	8.11E-06	0	0	30	NA	NA	4.05E-07
	7440666	Zinc	4.67E-01	5.33E-05	5.33E-05	0	0	0	NA	NA	NA
	1175	Crystalline silica	1.91E-01	2.18E-05	2.18E-05	0	3	0	NA	1.09E-06	NA
	CHANGE IN PRIORITIZATION SCORE								**4.16E-02**	**1.54E-04**	**3.88E-05**
x-DC-x (Cxxxxxx), To Be Added (ton/yr)	7440360	Antimony	9.39E-04	1.07E-07	1.07E-07	0	0	0	NA	NA	NA
	7440382	Arsenic	8.26E-02	9.43E-06	9.43E-06	0.0033	0.015	0.2	2.10E-03	9.43E-05	7.07E-05
	7440417	Beryllium	3.45E-03	3.94E-07	3.94E-07	0.0024	0.007	0	6.38E-05	8.45E-06	NA
	7440439	Cadmium	8.26E-03	9.43E-07	9.43E-07	0.0042	0.02	0	2.67E-04	7.07E-06	NA
	18540299	Chromium, hexavalent	8.76E-02	1.00E-05	1.00E-05	0.15	0.2	0	1.01E-01	7.50E-06	NA
	7440473	Chromium, total	2.12E-01	2.42E-05	2.42E-05	0	0	0	NA	NA	NA
	7440508	Copper	1.05E-01	1.20E-05	1.20E-05	0	0	100	NA	NA	1.80E-07
	7439921	Lead	3.75E-01	4.29E-05	4.29E-05	0.000012	0	0	3.47E-05	NA	NA
	7439965	Manganese	1.99E+00	2.27E-04	2.27E-04	0	0.09	0	NA	3.79E-04	NA
	7439976	Mercury	1.20E-03	1.37E-07	1.37E-07	0	0.03	0.6	NA	6.86E-07	3.43E-07
	7440020	Nickel	1.05E-01	1.20E-05	1.20E-05	0.00026	0.014	0.2	2.10E-04	1.29E-04	9.00E-05
	7782492	Selenium	7.28E-03	8.31E-07	8.31E-07	0	20	0	NA	6.24E-09	NA
	7440622	Vanadium	2.93E-01	3.34E-05	3.34E-05	0	0	30	NA	NA	1.67E-06
	7440666	Zinc	1.80E+00	2.06E-04	2.06E-04	0	0	0	NA	NA	NA
	1175	Crystalline silica	7.66E-01	8.74E-05	8.74E-05	0	3	0	NA	4.37E-06	NA
	CHANGE IN PRIORITIZATION SCORE								**1.04E-01**	**6.30E-04**	**1.63E-04**
y-DC-y (Cyyyyyy), To Be Added (ton/yr)	7440360	Antimony	1.17E-04	1.34E-08	1.34E-08	0	0	0	NA	NA	NA
	7440382	Arsenic	1.03E-02	1.18E-06	1.18E-06	0.0033	0.015	0.2	2.62E-04	1.18E-05	8.84E-06
	7440417	Beryllium	4.32E-04	4.93E-08	4.93E-08	0.0024	0.007	0	7.98E-06	1.06E-06	NA
	7440439	Cadmium	1.03E-03	1.18E-07	1.18E-07	0.0042	0.02	0	3.34E-05	8.84E-07	NA
	18540299	Chromium, hexavalent	1.10E-02	1.25E-06	1.25E-06	0.15	0.2	0	1.26E-02	9.38E-07	NA
	7440473	Chromium, total	2.65E-02	3.03E-06	3.03E-06	0	0	0	NA	NA	NA
	7440508	Copper	1.31E-02	1.50E-06	1.50E-06	0	0	100	NA	NA	2.25E-08
	7439965	Manganese	4.69E-02	5.36E-06	5.36E-06	0	0.09	0	NA	8.93E-06	NA
	7439921	Lead	2.49E-01	2.84E-05	2.84E-05	0.000012	0	0	2.30E-05	NA	NA
	7439976	Mercury	1.50E-04	1.71E-08	1.71E-08	0	0.03	0.6	NA	8.57E-08	4.29E-08
	7440020	Nickel	1.31E-02	1.50E-06	1.50E-06	0.00026	0.014	0.2	2.63E-05	1.61E-05	1.13E-05
	7782492	Selenium	9.10E-04	1.04E-07	1.04E-07	0	20	0	NA	7.79E-10	NA
	7440622	Vanadium	3.66E-02	4.18E-06	4.18E-06	0	0	30	NA	NA	2.09E-07
	7440666	Zinc	2.25E-01	2.57E-05	2.57E-05	0	0	0	NA	NA	NA
	1175	Crystalline silica	9.57E-02	1.09E-05	1.09E-05	0	3	0	NA	5.46E-07	NA
	CHANGE IN PRIORITIZATION SCORE								**1.30E-02**	**4.03E-05**	**2.04E-05**

Table 4 - MCC Permit Application February 2019 - Prioritization Scores Calculation

Projects with Emission Decreases

Equipment	CAS	Compound	Emission Rates			Cancer Unit Risk	Exposure Level (REL)		Cancer Priority[3]	Chronic Noncancer Priority[4]	Acute Noncancer Priority[5]
			Annual	Chronic[2]	Hourly		Chronic	Acute			
			(lbs/yr)	(lbs/hr)	(lbs/hr)	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$			
Roller Press (pre-replacement) (ton/yr)	7440360	Antimony	2.34E-04	2.67E-08	2.67E-08	0	0	0	NA	NA	NA
	7440382	Arsenic	1.87E-02	2.13E-06	2.13E-06	0.0033	0.015	0.2	4.75E-04	2.13E-05	1.60E-05
	7440417	Beryllium	6.54E-04	7.47E-08	7.47E-08	0.0024	0.007	0	1.21E-05	1.60E-06	NA
	7440439	Cadmium	5.79E-04	6.61E-08	6.61E-08	0.0042	0.02	0	1.87E-05	4.96E-07	NA
	18540299	Chromium, hexavalent	3.55E-02	4.05E-06	4.05E-06	0.15	0.2	0	4.10E-02	3.04E-06	NA
	7440473	Chromium, total	6.96E-02	7.95E-06	7.95E-06	0	0	0	NA	NA	NA
	7440508	Copper	2.43E-02	2.77E-06	2.77E-06	0	0	100	NA	NA	4.16E-08
	7439921	Lead	3.92E-02	4.48E-06	4.48E-06	0.000012	0	0	3.63E-06	NA	NA
	7439965	Manganese	4.95E-01	5.65E-05	5.65E-05	0	0.09	0	NA	9.42E-05	NA
	7439976	Mercury	1.87E-05	2.13E-09	2.13E-09	0	0.03	0.6	NA	1.07E-08	5.33E-09
	7440020	Nickel	2.62E-02	2.99E-06	2.99E-06	0.00026	0.014	0.2	5.24E-05	3.20E-05	2.24E-05
	7782492	Selenium	1.08E-03	1.24E-07	1.24E-07	0	20	0	NA	9.28E-10	NA
	7440622	Vanadium	7.10E-02	8.11E-06	8.11E-06	0	0	30	NA	NA	4.05E-07
	7440666	Zinc	4.67E-01	5.33E-05	5.33E-05	0	0	0	NA	NA	NA
	1175	Crystalline silica	1.91E-01	2.18E-05	2.18E-05	0	3	0	NA	1.09E-06	NA
	CHANGE IN PRIORITIZATION SCORE								**4.16E-02**	**1.54E-04**	**3.88E-05**
5-DC-6,7 (C001000), To Be Removed (ton/yr)	7440360	Antimony	1.88E-03	2.14E-07	2.14E-07	0	0	0	NA	NA	NA
	7440382	Arsenic	1.65E-01	1.89E-05	1.89E-05	0.0033	0.015	0.2	4.20E-03	1.89E-04	1.41E-04
	7440417	Beryllium	6.91E-03	7.89E-07	7.89E-07	0.0024	0.007	0	1.28E-04	1.69E-05	NA
	7440439	Cadmium	1.65E-02	1.89E-06	1.89E-06	0.0042	0.02	0	5.34E-04	1.41E-05	NA
	18540299	Chromium, hexavalent	1.75E-01	2.00E-05	2.00E-05	0.15	0.2	0	2.02E-01	1.50E-05	NA
	7440473	Chromium, total	4.25E-01	4.85E-05	4.85E-05	0	0	0	NA	NA	NA
	7440508	Copper	2.10E-01	2.40E-05	2.40E-05	0	0	100	NA	NA	3.60E-07
	7439921	Lead	7.51E-01	8.57E-05	8.57E-05	0.000012	0	0	6.94E-05	NA	NA
	7439965	Manganese	3.98E+00	4.54E-04	4.54E-04	0	0.09	0	NA	7.57E-04	NA
	7439976	Mercury	2.40E-03	2.74E-07	2.74E-07	0	0.03	0.6	NA	1.37E-06	6.86E-07
	7440020	Nickel	2.10E-01	2.40E-05	2.40E-05	0.00026	0.014	0.2	4.21E-04	2.57E-04	1.80E-04
	7782492	Selenium	1.46E-02	1.66E-06	1.66E-06	0	20	0	NA	1.25E-08	NA
	7440622	Vanadium	5.86E-01	6.69E-05	6.69E-05	0	0	30	NA	NA	3.34E-06
	7440666	Zinc	3.60E+00	4.11E-04	4.11E-04	0	0	0	NA	NA	NA
	1175	Crystalline silica	1.53E+00	1.75E-04	1.75E-04	0	3	0	NA	8.74E-06	NA
	CHANGE IN PRIORITIZATION SCORE								**2.08E-01**	**1.26E-03**	**3.26E-04**

TOTAL FACILITY RISK	Cancer Priority	Chronic Noncancer Priority	Acute Noncancer Priority
EY2018 FACILITY PRIORITIZATION SCORE	8.79E+00	3.03E-01	1.32E-01
TOTAL CHANGE IN PRIORITIZATION SCORE	-9.09E-02	-5.89E-04	-1.43E-04
PRIORITIZATION SCORE AFTER PERMITTING ACTIONS	8.70E+00	3.02E-01	1.32E-01

Parameter	Symbol	Value	Description
Receptor Proximity Adjustment Factor	RP	0.001	receptor, 2000m
Cancer normalization factor	NFca	7,700	constant
Chronic normalization factor	NFcnc	150	constant
Acute normalization factor	NFanc	1,500	constant

Notes:
[1] Facility scored according to CAPCOA Facility Prioritization Guidelines, August 2016, Air Toxics and Risk Managers Committee Air Pollution Control Officers Association (CAPCOA); Emissions and Potency Procedure.
[2] Annual emission rates (lbs/yr) converted to lbs/hr by dividing by 8760 hrs/yr (365 days/yr x 24 hr/day).
[3] Cancer Priority = Annual Emission Rate (lbs/yr) x Cancer Unit Risk $(ug/m^3)^{-1}$ x RP x NFca
[4] Chronic Non-cancer Priority = Chronic Emission Rate (lbs/hr) / Chronic REL (ug/m^3) x RP x NFcnc
[5] Acute Non-cancer Priority = Hourly Emission Rate (lbs/hr) / Acute REL (ug/m^3) x RP x NFanc
NA = not applicable
NL = Not listed as an air toxic requiring quantification of emissions
"0" = Toxicity criteria is not available

Table 5 - MCC Permit Application February 2019 - TAC Calculations

FM4 Roller Press (B002405) Functionally Identical Replacement. Dust processed by the FM4 Roller Press: Clinker Process Mate

Metal	Concentration (mg metal/kg PM)	Emission Factor for Metal (lb metal/ton)	Before and After, Hourly Emissions (lbs/hr)	Before and After, Annual Emissions (lbs/yr)	Change (lb/hr)	Change (lb/yr)
Antimony	0.13	2.05E-10	2.67E-08	2.34E-04	0.00E+00	0.00E+00
Arsenic	10.00	1.64E-08	2.13E-06	1.87E-02	0.00E+00	0.00E+00
Beryllium	0.35	5.74E-10	7.47E-08	6.54E-04	0.00E+00	0.00E+00
Cadmium	0.31	5.09E-10	6.61E-08	5.79E-04	0.00E+00	0.00E+00
Chromium VI	19.00	3.12E-08	4.05E-06	3.55E-02	0.00E+00	0.00E+00
Chromium (total)	37.25	6.11E-08	7.95E-06	6.96E-02	0.00E+00	0.00E+00
Copper	13.00	2.13E-08	2.77E-06	2.43E-02	0.00E+00	0.00E+00
Lead	21.00	3.45E-08	4.48E-06	3.92E-02	0.00E+00	0.00E+00
Manganese	265.00	4.35E-07	5.65E-05	4.95E-01	0.00E+00	0.00E+00
Mercury	0.01	1.64E-11	2.13E-09	1.87E-05	0.00E+00	0.00E+00
Nickel	14.00	2.30E-08	2.99E-06	2.62E-02	0.00E+00	0.00E+00
Selenium	0.58	9.52E-10	1.24E-07	1.08E-03	0.00E+00	0.00E+00
Vanadium	38.00	6.24E-08	8.11E-06	7.10E-02	0.00E+00	0.00E+00
Zinc	250.00	4.10E-07	5.33E-05	4.67E-01	0.00E+00	0.00E+00
Crystalline silica	102.00	1.67E-07	2.18E-05	1.91E-01	0.00E+00	0.00E+00

Constants:	Before	After
Throughput (tons/yr) =	1,138,800	1,138,800
PM Emission Factor (lb PM/ton throughput) =	1.64E-03	1.64E-03
Maximum Hourly Throughput (tons/hr) =	130	130

Table 5 - MCC Permit Application February 2019 - TAC Calculations

Dust Collector x-DC-x (Cxxxxxx), To Be Added. Dust processed by x-DC-x: Cement

Metal	Concentration in Cement (mg metal/kg PM)	Emission Factor for Metal (lb metal/hr runtime)	Annual Emissions (lbs/yr)
Antimony	0.13	1.07E-07	9.39E-04
Arsenic	11.00	9.43E-06	8.26E-02
Beryllium	0.46	3.94E-07	3.45E-03
Cadmium	1.10	9.43E-07	8.26E-03
Chromium VI	11.67	1.00E-05	8.76E-02
Chromium (total)	28.29	2.42E-05	2.12E-01
Copper	14.00	1.20E-05	1.05E-01
Lead	50.00	4.29E-05	3.75E-01
Manganese	265.00	2.27E-04	1.99E+00
Mercury	0.16	1.37E-07	1.20E-03
Nickel	14.00	1.20E-05	1.05E-01
Selenium	0.97	8.31E-07	7.28E-03
Vanadium	39.00	3.34E-05	2.93E-01
Zinc	240.00	2.06E-04	1.80E+00
Crystalline silica	102.00	8.74E-05	7.66E-01

Constants:

Throughput (hrs/yr) =	8760
PM Emission Factor(lb PM/hr runtime) =	0.86

Table 5 - MCC Permit Application February 2019 - TAC Calculations

Dust Collector y-DC-y (Cyyyyyy), To Be Added. Dust processed by y-DC-y: Cement

Metal	Concentration in Cement (mg metal/kg PM)	Emission Factor for Metal (lb metal/hr runtime)	Annual Emissions (lbs/yr)
Antimony	0.13	1.34E-08	1.17E-04
Arsenic	11.00	1.18E-06	1.03E-02
Beryllium	0.46	4.93E-08	4.32E-04
Cadmium	1.10	1.18E-07	1.03E-03
Chromium VI	11.67	1.25E-06	1.10E-02
Chromium (total)	28.29	3.03E-06	2.65E-02
Copper	14.00	1.50E-06	1.31E-02
Lead	50.00	5.36E-06	4.69E-02
Manganese	265.00	2.84E-05	2.49E-01
Mercury	0.16	1.71E-08	1.50E-04
Nickel	14.00	1.50E-06	1.31E-02
Selenium	0.97	1.04E-07	9.10E-04
Vanadium	39.00	4.18E-06	3.66E-02
Zinc	240.00	2.57E-05	2.25E-01
Crystalline silica	102.00	1.09E-05	9.57E-02

Constants:

Throughput (hrs/yr) =	8760
PM Emission Factor(lb PM/hr runtime) =	0.11

Table 5 - MCC Permit Application February 2019 - TAC Calculations

Dust Collector 5-DC-6,7 (C001000), To Be Removed. Dust processed by 5-DC-6,7: Cement

Metal	Concentration in Cement (mg metal/kg PM)	Emission Factor for Metal (lb metal/hr runtime)	Annual Emissions (lbs/yr)
Antimony	0.13	2.14E-07	1.88E-03
Arsenic	11.00	1.89E-05	1.65E-01
Beryllium	0.46	7.89E-07	6.91E-03
Cadmium	1.10	1.89E-06	1.65E-02
Chromium VI	11.67	2.00E-05	1.75E-01
Chromium (total)	28.29	4.85E-05	4.25E-01
Copper	14.00	2.40E-05	2.10E-01
Lead	50.00	8.57E-05	7.51E-01
Manganese	265.00	4.54E-04	3.98E+00
Mercury	0.16	2.74E-07	2.40E-03
Nickel	14.00	2.40E-05	2.10E-01
Selenium	0.97	1.66E-06	1.46E-02
Vanadium	39.00	6.69E-05	5.86E-01
Zinc	240.00	4.11E-04	3.60E+00
Crystalline silica	102.00	1.75E-04	1.53E+00

Constants:

Throughput (hrs/yr) =	8760
PM Emission Factor(lb PM/hr runtime) =	1.71

Supporting Table 1 -
2018 CEIR Table 5

TABLE 5

CONCENTRATION OF METALS IN VARIOUS RAW MATERIALS

Laboratory Analysis Results (mg/kg)[1]

	Main Feed Materials		Additional Feed Materials					Fuel		Products									
Metals	Low Grade Limestone Process Material	Low Grade Limestone Stockpile	Red Bauxite	Low Iron Bauxite	Mill Scale	Lime[5]	Iron Ore	Coal Process Material	Coal Stockpile	Clinker Process Material	Clinker Stockpile	Clinker Cooler	Gypsum	Cement	Kiln Exhaust Baghouse Dust[6]	Raw Material Blend[2]	Acton Clay	Silica	Settling Pond
Sample ID	M2	SP3	SP4	A-3	12020312	N/A	SP5	M3	SP6	M4	SP7	M7	SP8	M5	M6	--			
Antimony	0.25	0.13	0.25	na	1.5	3	0.69	0.13	0.13	0.13	0.15	0.13	0.13	0.13	1.00	0.26	0.13	0.21	0.13
Arsenic	6.0	3.8	1.6		15.6	5	71.7	1.30	0.38	10	12.0	11.0	0.83	11	11.0	7.5	0.39	6.6	4.0
Beryllium	0.24	0.26	0.13		0.25	2	0.31	0.13	0.13	0.35	0.42	0.38	0.13	0.46	0.30	0.24	0.13	0.20	0.13
Cadmium	1.2	0.65	0.13		3.64	2.5	3.1	1.1	0.13	0.31	2.2	0.13	0.26	1.1	8.50	1.19	0.13	0.26	0.56
Chromium VI	0.10	0.10	0.10		-	0.10	0.10	0.16	0.10	19	6.1	14.3	0.10	12	0.8	0.10	0.10	0.10	0.10
Total Chromium	8.4	6.4	86.5		147	50	2.6	6.0	2.8	37	42.1	37.7	1.1	28	17.0	9.3	1.10	9.0	9.0
Copper	7.1	5.0	1.13		399	650	77.0	4.1	2.7	13	14.3	14.0	1.8	14	2.9	8.7	14.0	21	10
Lead	120	22.0	7.5		5.06	7.5	113	30	1.2	21	101	20	10.5	50	24	118	1.30	23	31
Manganese[7]	530	530	530	530	530	530	530	100	100	265	265	265	530	265	530	530	530	530	530
Mercury	0.02	0.010	0.02		0.07	1	0.01	0.04	0.02	0.01	0.01	0.01	0.17	0.16	250.00	0.02	0.70	0.38	0.52
Nickel	8.9	10.0	1.5		57.8	1.1	2.5	3.3	1.5	14	12.0	14.0	1.1	14	86.0	9.6	2.3	6.2	6.9
Selenium	0.68	1.2	0.13		0.5	25	0.13	2.4	0.69	0.58	1.5	0.66	0.13	0.97	2.2	0.68	0.13	0.13	0.19
Vanadium	15	4.8	54.3		36.9	2.4	18.3	6.4	4.4	38	33.1	40.0	2.4	39	14.0	15.6	27.0	14.0	9.5
Zinc	73	39.0	2.0		88.7	76.5	637	12.0	2.3	250	234	290	76.5	240	1.8	85.8	22.0	30.0	36.0
Crystalline silica[3] - Total in bulk	61000	203000	19700		80000	15000	14000	500	500	500	500	500	500	500	79000	59300	500	5000	--
Crystalline silica[4] - Respirable (PM_4)	12444	41412	4019	0	16320	3060	2856	102	102	102	102	102	102	102	16116	12097	102	1020	--
								(ND)	(ND)	(ND) clinker	(ND) clinker	(ND) clinker	(ND)	(ND) clinker&gypsum			(ND)	sand	

Notes:

1. Concentrations generally represent averages of samples collected between July and November 2008; historical samples were sampled previously and presented in the 2006 CEIR. When the chemical is not detected at or above the reporting limit,
2. Calculated as a blend of other raw materials at the following percentages:

Limestone	96.1%
Red Bauxite	1.2%
Aluminum Hydroxide	0.2%
Iron	2.4%

3. Not all materials were analyzed for crystalline silica. For those materials, the following surrogates (in parentheses) were used: cement (clinker&gypsum), silica (sand), aluminum hydroxide (red bauxite), and unpaved and paved dust (sand). Crystalline silica results for sand and clinker were analyzed in 2005. Other crystalline silica results were analyzed by Xray Diffraction by RJ Lee Group, Inc. and reported September 16, 2008.
4. Concentration used to quantify emissions; health effects are based on this size fraction considered respirable.
   The concentration of crystalline silica (CS) as particulate matter less than 4 millimeters (PM_4) = bulk material concentration x ratio of PM_4 to PM_{10} [0.48] x ratio of PM_4 CS fraction to bulk material CS fraction [0.425];
   -- = not applicable
5. Lime metals data based on EPA acceptable drinking water limits and solubility of 2g/L, per conversation with Jim Miles from Lhoist. If no drinking water limits, value from Gypsum used.
6. Kiln Exhaust Baghouse Dust from the Dust Shuttling System permit application
7. Manganese concentration in all categories except coal, clinker, and cement, are from SDAPCD Aggregate Transfer Points Rule 1993. Coal Concentrations are from "Coal Processing and Pollution Control", Chapter "2 - Coal Deposits and Properti

Supporting Document 1 - 2018 CEIR Prioritization Report

File name: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2\MCC PS Rpt_2-27-2019.rtf

HARP Facility Prioritization Report

HARP EIM Version: 2.1.1

Reporting Year: 2018
Project Path: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2
Project Database: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2\5.mdb
CEIDARS Utility Database: C:\HARP2\Tables\CEIDARSTables022016.mdb
HARP Health Talbe: HEALTH201808
Sorting Order: DIS, AB, CO, TS, FACID
Date Created: 2/27/2019 5:15:46 PM
Operator: HRW

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POLLUTANT HEALTH VALUES FROM HARP HEALTH DATABASE:

POLLUTANT ID	POLLUTANT	CANCERURF(INH) (ug/m^3)^-1	ACUTEREL ug/m^3	CHRONICREL(INH) ug/m^3
71556	1,1,1-TCA	N/A	6.80E+04	1.00E+03
79005	1,1,2TriClEthan	1.60E-05	N/A	N/A
75343	1,1-DiClEthane	1.60E-06	N/A	N/A
120821	1,2,4TriClBenz	N/A	N/A	N/A
95501	1,2-DiClBenzene	N/A	N/A	N/A
540590	1,2-DiClEthylen	N/A	N/A	N/A
78875	1,2-DiClPropane	N/A	N/A	N/A
106990	1,3-Butadiene	1.70E-04	6.60E+02	2.00E+00
541731	1,3-DiClBenzene	N/A	N/A	N/A
542756	1,3-DiClPropene	N/A	N/A	N/A
57653857	1-3,6-8HxCDD	3.80E+00	N/A	4.00E-04
57117449	1-3,6-8HxCDF	3.80E+00	N/A	4.00E-04
40321764	1-3,7,8PeCDD	3.80E+01	N/A	4.00E-05
57117416	1-3,7,8PeCDF	1.10E+00	N/A	1.30E-03
19408743	1-3,7-9HxCDD	3.80E+00	N/A	4.00E-04
72918219	1-3,7-9HxCDF	3.80E+00	N/A	4.00E-04
35822469	1-4,6-8HpCDD	3.80E-01	N/A	4.00E-03
67562394	1-4,6-8HpCDF	3.80E-01	N/A	4.00E-03
39227286	1-4,7,8HxCDD	3.80E+00	N/A	4.00E-04
70648269	1-4,7,8HxCDF	3.80E+00	N/A	4.00E-04
55673897	1-4,7-9HpCDF	3.80E-01	N/A	4.00E-03
3268879	1-8OctaCDD	1.10E-02	N/A	1.30E-01
39001020	1-8OctaCDF	1.10E-02	N/A	1.30E-01
1746016	2,3,7,8-TCDD	3.80E+01	N/A	4.00E-05
51207319	2,3,7,8-TCDF	3.80E+00	N/A	4.00E-04
60851345	2-4,6-8HxCDF	3.80E+00	N/A	4.00E-04
57117314	2-4,7,8PeCDF	1.10E+01	N/A	1.30E-04
91576	2MeNaphthalene	N/A	N/A	N/A
56495	3-MeCholanthren	6.30E-03	N/A	N/A
57976	7,12-DB[a]anthr	7.10E-02	N/A	N/A
83329	Acenaphthene	N/A	N/A	N/A
208968	Acenaphthylene	N/A	N/A	N/A
75070	Acetaldehyde	2.70E-06	4.70E+02	1.40E+02
107028	Acrolein	N/A	2.50E+00	3.50E-01

120127	Anthracene	N/A	N/A	N/A
7440360	Antimony	N/A	N/A	N/A
7440382	Arsenic	3.30E-03	2.00E-01	1.50E-02
56553	B[a]anthracene	1.10E-04	N/A	N/A
50328	B[a]P	1.10E-03	N/A	N/A
205992	B[b]fluoranthen	1.10E-04	N/A	N/A
192972	B[e]pyrene	N/A	N/A	N/A
191242	B[g,h,i]perylen	N/A	N/A	N/A
207089	B[k]fluoranthen	1.10E-04	N/A	N/A
7440393	Barium	N/A	N/A	N/A
71432	Benzene	2.90E-05	2.70E+01	3.00E+00
100447	Benzyl Chloride	4.90E-05	2.40E+02	N/A
7440417	Beryllium	2.40E-03	N/A	7.00E-03
7440439	Cadmium	4.20E-03	N/A	2.00E-02
56235	CCl4	4.20E-05	1.90E+03	4.00E+01
76131	CFC-113	N/A	N/A	N/A
108907	Chlorobenzn	N/A	N/A	1.00E+03
67663	Chloroform	5.30E-06	1.50E+02	3.00E+02
7440473	Chromium	N/A	N/A	N/A
218019	Chrysene	1.10E-05	N/A	N/A
42101	CO	N/A	N/A	N/A
7440484	Cobalt	N/A	N/A	N/A
7440508	Copper	N/A	1.00E+02	N/A
18540299	Cr(VI)	1.50E-01	N/A	2.00E-01
53703	D[a,h]anthracen	1.20E-03	N/A	N/A
25321226	DiClBenzenes	N/A	N/A	N/A
75718	DiClDiFlmethane	N/A	N/A	N/A
9901	DieselExhPM	3.00E-04	N/A	5.00E+00
106934	EDB	7.10E-05	N/A	8.00E-01
107062	EDC	2.10E-05	N/A	4.00E+02
100414	Ethyl Benzene	2.50E-06	N/A	2.00E+03
75003	Ethyl Chloride	N/A	N/A	3.00E+04
206440	Fluoranthene	N/A	N/A	N/A
86737	Fluorene	N/A	N/A	N/A
50000	Formaldehyde	6.00E-06	5.50E+01	9.00E+00
9910	GasolExhPM	N/A	N/A	N/A
7647010	HCl	N/A	2.10E+03	9.00E+00
87683	HexaClButadiene	N/A	N/A	N/A
110543	Hexane	N/A	N/A	7.00E+03
193395	In[1,2,3-cd]pyr	1.10E-04	N/A	N/A
7439921	Lead	1.20E-05	N/A	N/A
7439965	Manganese	N/A	N/A	9.00E-02
1634044	Me t-ButylEther	2.60E-07	N/A	8.00E+03
7439976	Mercury	N/A	6.00E-01	3.00E-02
74839	Methyl Bromide	N/A	3.90E+03	5.00E+00
74873	Methyl Chloride	N/A	N/A	N/A
108383	m-Xylene	N/A	2.20E+04	7.00E+02
91203	Naphthalene	3.40E-05	N/A	9.00E+00
7440020	Nickel	2.60E-04	2.00E-01	1.40E-02
42603	NOX	N/A	N/A	N/A
95476	o-Xylene	N/A	2.20E+04	7.00E+02
1336363	PCBs	5.70E-04	N/A	N/A
106467	p-DiClBenzene	1.10E-05	N/A	8.00E+02
127184	Perc	6.10E-06	2.00E+04	3.50E+01
198550	Perylene	N/A	N/A	N/A
85018	Phenanthrene	N/A	N/A	N/A
7723140	Phosphorus	N/A	N/A	N/A
11101	PM	N/A	N/A	N/A
85101	PM10	N/A	N/A	N/A

88101	PM25	N/A	N/A	N/A
129000	Pyrene	N/A	N/A	N/A
7782492	Selenium	N/A	N/A	2.00E+01
1175	Silica, Crystln	N/A	N/A	3.00E+00
7440224	Silver	N/A	N/A	N/A
42401	SOX	N/A	N/A	N/A
100425	Styrene	N/A	2.10E+04	9.00E+02
79016	TCE	2.00E-06	N/A	6.00E+02
79345	TetraClEthane	5.80E-05	N/A	N/A
7440280	Thallium	N/A	N/A	N/A
43101	TOG	N/A	N/A	N/A
108883	Toluene	N/A	3.70E+04	3.00E+02
37871004	TotalHeptaCDD	N/A	N/A	N/A
38998753	TotalHeptaCDF	N/A	N/A	N/A
34465468	TotalHexaCDD	N/A	N/A	N/A
55684941	TotalHexaCDF	N/A	N/A	N/A
36088229	TotalPentaCDD	N/A	N/A	N/A
30402154	TotalPentaCDF	N/A	N/A	N/A
41903575	TotalTetraCDD	N/A	N/A	N/A
55722275	TotalTetraCDF	N/A	N/A	N/A
75694	TriClFluorMetha	N/A	N/A	N/A
25551137	TriMeBenzns	N/A	N/A	N/A
7440622	Vanadium	N/A	3.00E+01	N/A
75014	Vinyl Chloride	7.80E-05	1.80E+05	N/A
75354	Vinylid Chlorid	N/A	N/A	7.00E+01
43104	VOC	N/A	N/A	N/A
1330207	Xylenes	N/A	2.20E+04	7.00E+02
7440666	Zinc	N/A	N/A	N/A

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PRIORITIZATION SCORE SUMMARY:

Facility Name
Proximity Method
Optional Factors

FACID	CO	AB	DIS	Emission and Potency Procedure Cancer	Acute	Chronic	NonCancer	Dispersion Adjustment Procedure Cancer	Acute	Chronic	NonCancer	Highest Score
MITSUBISHI CEMENT 2018												
Proximity Method:												
Annual Operating Hours 8760												
11800001	36	MD	MOJ	8.79	0.13	0.30	0.35	8.39	0.13	0.30	0.34	8.79

Attachment D
Pages from the equipment specification documents

Humboldt Wedag, Inc.
400 Technology Parkway
Norcross, GA 30092-3406 (USA)
Tel: +1 (770) 810 - 7358
Fax: +1 (770) 810 - 7343
www.khd.com

July 18, 2018

Mitsubishi Cement

VIA E-MAIL

Attention: Mr. Steve Tyrell

Subject: Roller Press Replacement Project
KHD Proposal T.01.0034.1.001, Rev. 0

Dear Mr. Tyrell:

We are pleased to present our proposal T.01.0034.1.001, for a new Roller Press, RP 7 120/63, to replace your existing Roller Press in a clinker pre-grinding circuit. As requested, we have included hydraulic drives.

Please note, we have included a preliminary layout drawing to show how the new roller press, which is a slightly different size, will fit into the existing system. You will notice that some chute modifications will be required and we have included the supply of the modified chutes. We believe our layout requires the least amount of building modification possible, however, we did not include the modification to the building in our scope of supply.

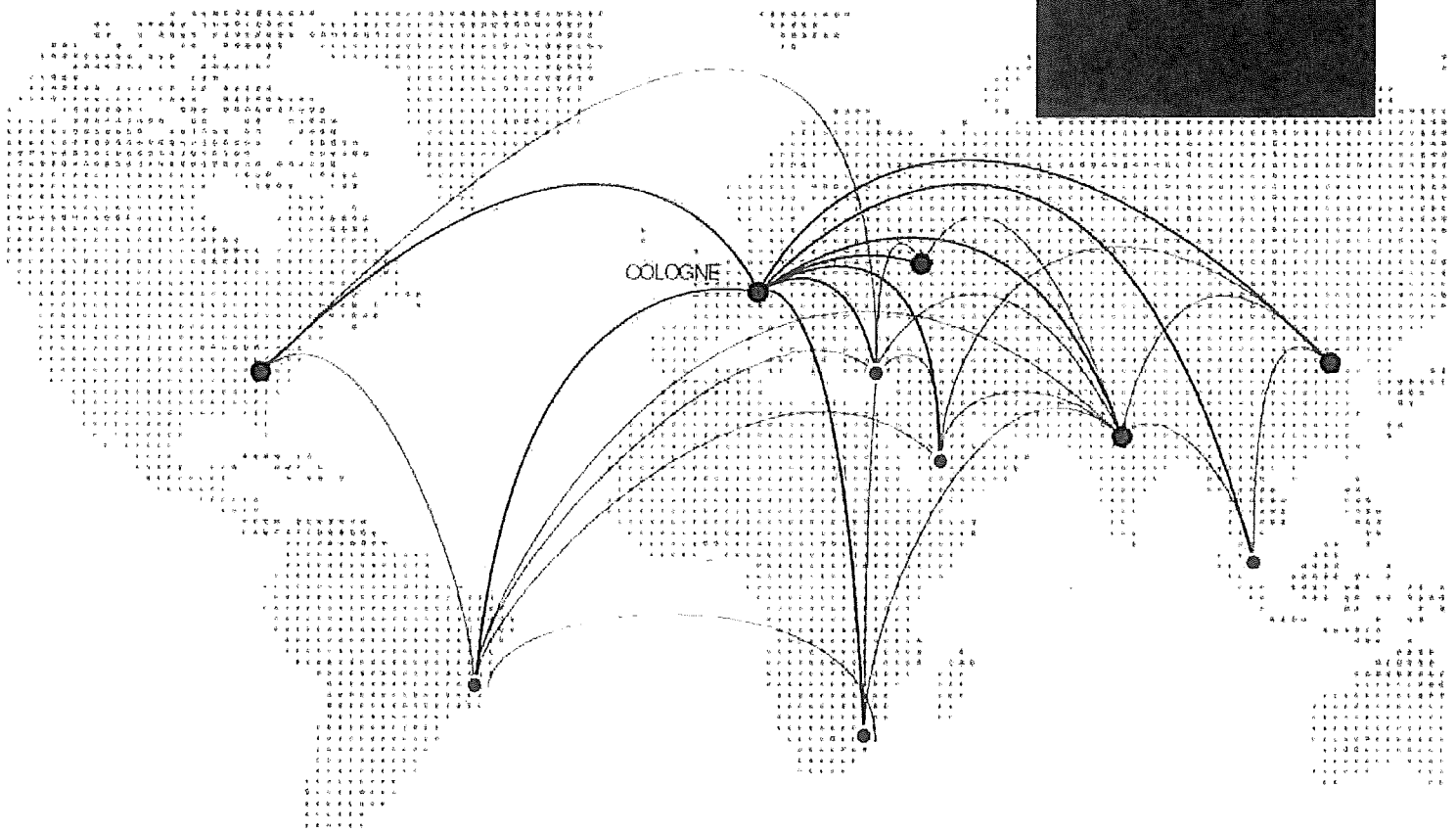
We hope that this gives you the information you need. However, please let us know if you have any questions or require anything else. We look forward to working with you on this project.

Best regards,

R. Dwayne Holland, PE
Director
Sales and Business Development

CC: Mr. Rick Cusick rick.cusick@khd.com
Mr. Steven Yan steven.yan@khd.com

Attachments: KHD Proposal T.01.0034.1.001, Rev 0, dated July 18, 2018



Mitsubishi Cement

Roller Press Replacement

Proposal No. T.01.0034.1.001

Rev. 0
July 18, 2018

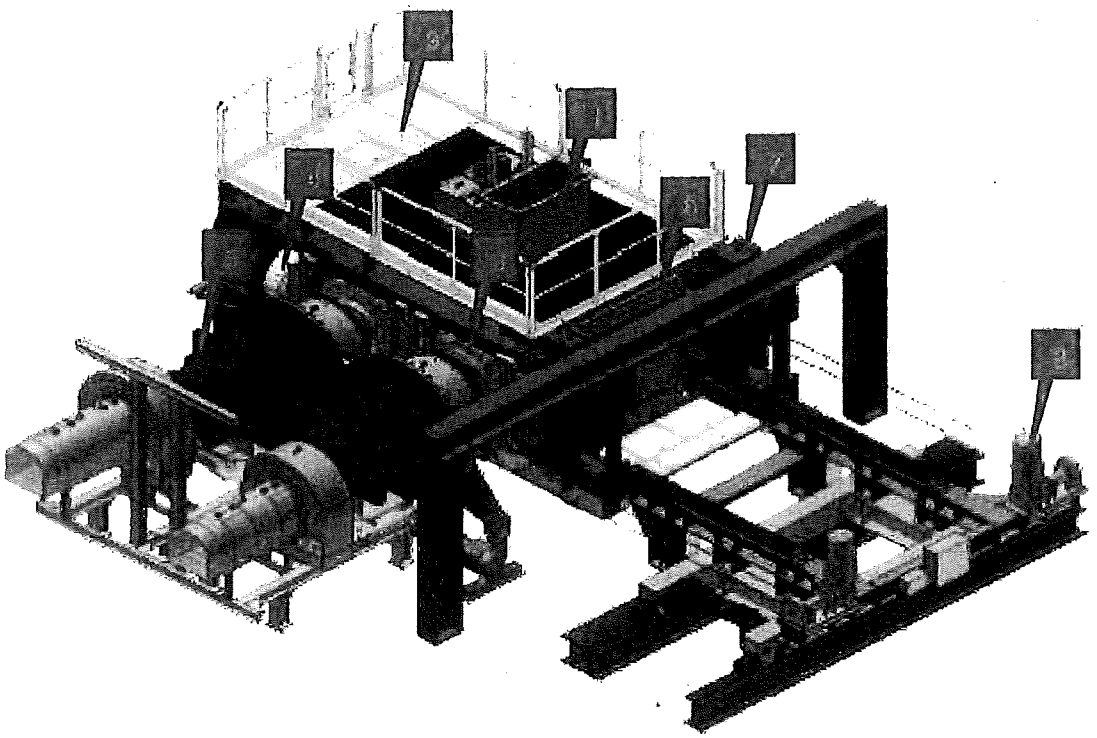
Specifications

Major Equipment Specifications

ROLLER PRESS

Major components of the KHD Roller Press

1. Feed chute with control gates
2. Rollers with stud Lining
3. Cylindrical roller bearings
4. Hydraulic cylinder
5. Drive
6. Inspection doors
7. Machine frame
8. Roller Removal System
9. Operation platform



Machine frame

The machine frame comprises several welded elements connected among them with screws and bolts. The rollers with support, one of them designed as floating roller with hydraulic support, the other one as fixed roller, are floatingly guided in the frame at low friction. The closed frame takes over the pressing forces in radial and axial direction. On the fixed roller side, the frame can be easily and rapidly opened so that the rollers with support can be slid into an off the frame over the sliding paths (rapid roller change). Pressing cylinder, feeding device, roller lining and other components are arranged at the frame.

Roller support, grease lubricated

On each roller side, one four-line cylindrical roller bearing is installed. On the fixed bearing side (opposite side to the drive), two axial self-aligning roller bearings are arranged in X-shape for taking the axial forces. The axial forces are directed over the outer guidance on the bearing housings into the machine frame. An axial displacement of the roller upon heat expansion and in oblique position is possible in the floating bearing (drive side) between inner bearing ring and friction body.

Roller support grease lubricated, sealing

Effective sealing realized by radial shaft sealing rings with grease labyrinths. In addition, on the dust-laden inner bearing side towards the roller V-rings and dust labyrinths are integrated.

The bearings are sealed on either side with radial shaft seals. On the outer side of the bearing, seals avoid that grease can emerge. On the inner sides, the seals permit that grease emerges to the outside.

The roller bearings are continuously lubricated via an automatic central grease lubrication system.

Excessive grease emerges on the outer sides between the seals via the lantern ring. Through a tube element at the bearing cover, the grease is directed into the grease collection box.

On their outer sides, the labyrinth gaps are completely enclosed in a dust-tight manner and are, therefore, not lubricated.

On the inner side of the roller support towards the roller, where the influence of dirt can be higher than on the outer side, a V-ring seal is integrated into the labyrinth and an additional labyrinth lubrication connector installed. A continuous grease supply into the gaps in front of the radial sealing rings forms an effective seal against the ingress of dirt into the labyrinth gap seal. Excessive grease is scraped off and collected in the grease collection boxes provided for that purpose.

In front of this grease-lubricated labyrinth, a dust labyrinth is connected as primary seal.

Negative pressure in the inner space of the enclosure caused by a sucking phenomenon underneath the roller enclosure generates a continuous air flow through defined gaps between enclosure and roller and avoids that dust can emerge from the enclosure to the outside.

The avoiding of heavy dust loads at the inner labyrinth is the essential task of this execution.

Central grease lubrication of the bearings and of the inner labyrinths

The central lubrication continuously supplies the progressive distributors via the barrel pump. From there, according to the grease volumes required for the antifriction bearings and labyrinths, the grease is reliably distributed to the individual lubricating points.

Central grease lubrication of the bearings and of the inner labyrinths

The grease barrel pump is installed in a closed low-dust room (service room) directly underneath the roller press together with the hydraulic set and the oil circulation set.

The electrically monitored and controlled automatic central grease lubrication essentially comprises:

- the grease lubrication pump with barrel,
- the pump elements,
- the progressive distributors,
- the hose lines with connection screw unions and the quick-acting couplings for a more rapid dismantling and mounting.
- Wall-mounted crane for lifting the barrel pump upon a change of the grease barrel.
- Electrical monitoring of the lubricant flow and of the barrel filling level

Accompanying heating for the central lubrication of the labyrinths

The accompanying heating for the central lubrication comprises the:

- Barrel bottom heating.
- For the barrel bottom heating, a heat source is mounted underneath the barrel.
- Pipeline heating.
- For the pipeline heating, heating cables are fastened to the pipelines to warm up the lubrication line.

Suitable monitoring systems and temperature sensors to control the temperature are included in this sub-assembly. The necessary insulation of the heated piping is made **by the customer**

Barrel head heating system for grease barrel

The grease barrel head is heated.

Rollers

Two solid rolls made of high-quality tempering steel will be used. The roll surfaces have been provided with a complete hard-faced (CHF) surface.

Hydraulic system

Together with the hydraulic accumulators (reservoirs), one horizontally arranged flat cylinder, each, forms an enclosed hydro-pneumatic resilient system. Here, the pressing forces of the movable roller taken by the flat cylinders are transmitted as pressure to the hydraulic accumulators or their internal reservoir being under gas pressure. Application of the necessary comminution forces as well as a displacement of the floating roller upon too high forces in the gap are the main characteristics.

The pressing device essentially comprises

- the flat cylinders with guided pistons to be turned into any direction
- the control blocks with reservoirs directly bolted to the cylinders
- the hydraulic set
- the hydraulic starting system
- the intermediate tank

- the pressure switching circuit

If the oil pressure (system pressure) should rise above the value set at the pressure regulating valve e.g. by inadmissible load (e.g. due to foreign bodies passing), this valve is opened. The oil existing in the flat cylinders is now directed into the intermediate tank via a return line. The intermediate tank offers the advantage that the cartridge valves may drain the entire oil volume within very short time which results in a direct relief in the roller gap.

After the quick-relief, the flat cylinders are moved again into their original position by shortly connecting the hydraulic pump via the way valves (under normal conditions, the hydraulic pump always remains disconnected). The safety measure may be separately carried out from the left as well as from the right flat cylinder. Due to the hydraulic circuit, however, both flat cylinders are retracted at the same time. All hydraulic components are easily accessible and simply to maintain.

The hydraulic set is installed in a closed low-dust room directly underneath the roller press and together with the barrel pump and the oil circulation set. Installation and maintenance of the hydraulic cylinder do not require the dismantling of the frame structure. The pressing cylinders can be dismantled without having to dismantle the roller press.

Feed material guiding

The chute with frame is connected to the supply elements of the plant.

The wear-protected lateral walls and lateral wall tips cover the front area of the two rollers rotating opposite to each other. With the regulating gate or dosing gate, the feed material guiding is influenced and, thus, an optimal flake thickness set.

The feeding device arranged above the roller gap essentially comprises:

- the housing and the chute,
- the lateral walls for covering the front sides of the rollers,
- the lateral wall tips,
- the suspensions of the resiliently supported lateral walls with lateral tips

The replaceable lateral walls cover the front area of the two rollers rotating opposite to each other. Considering the material friction, the lateral walls and the chute are lined with low-wear sheets.

The lateral wall tips are fitted with hard metal and can also be replaced.

The movably suspended lateral walls are resiliently supported and horizontally deviate when setting the floating roller to an oblique position.

Feeding device with installed electrically adjustable dosing gate

With the dosing gate, the feed material guiding is influenced and, thus, an optimal flake thickness set.

This gate ensures the optimal venting of the fine-grained material in the material inlet zone, it permits a change of the material feeding rate and regulates the flake thickness. This vertical gate can be moved upwards and downwards in the material flow. This also changes the drawing-in angle and, as a function, the flake thickness.

Roller enclosure

The rollers are enclosed by a sheet casing. Doors at the front side permit to check the roller surface and to measure the roller wear upon a standstill of the machine.

Attachment A: Parker Hannifin Corporation
BHA Altair LLC Filter Bag Performance Guarantee for Order #10173155

BHA Altair LLC (BHA) proposes this Performance Guarantee for the following products:

Quantity	Description
240	BHA 6.25" x 2 Meter Pulsepleat Filter Element, 100% Spunbond Polyester with Preveil ePTFE membrane, DSS Style top, 45 square feet of filterable media per filter

The guarantees for BHA's products are summarized below. BHA is committed to its products and believes it is important for BHA and Mitsubishi Cement to understand the assumptions upon which the guarantees are based relating to Mitsubishi Cement's specific application, equipment and operating conditions and the limitations on BHA's guarantees. These assumptions and limitations are described in detail in this proposal. BHA offers the following guarantees:

- Emission guarantee of a maximum of 0.005 grains per dry standard cubic foot of filterable particulate exhaust gas through the filter media for 24 months (See Section II, A, 1 for details).

For easy review, we have organized this proposal into the following sections:

Section I. Operating Specifications

Section II. Terms and Conditions, Including Guarantees

Section I. Operating Specifications

Our proposal is based on obtaining the following operating specifications to be supplied by Mitsubishi Cement to BHA for review and confirmation prior to any agreed upon performance guarantees:

General Information:	
Fabric Filter OEM: ★	Parker BHA
Application: ★	Finish Mill
Particulate Collected: ★	Finish Cement
Cleaning Style: ★	Pulse Jet
On-Line or Off-Line Cleaning: ★	On Line
Historical Bag Life and Reason for Changing Out: ★	NA – New Baghouse
Detailed Fabric Filter Application Data:	
Normal Operating Temperature: ★	225F
Maximum Temperature Spikes and Duration: ★	265F < 2 Hours
Normal Operating Gas Volume (ACFM): ★	20,000
Maximum Gas Volume (ACFM): ★	23,000
Fixed or Variable Speed Fan: ★	Variable
Cleaning on Time or Differential Pressure (What are the Differential Pressure Set Points): ★	Differential Pressure
Filter Bag Size and Air-to-Cloth Ratio:	
Total Number of Filter Bags: ★	240
Number of Bags per Compartment: ★	240
Filter Bag Dimensions (Inches or Millimeters): ★ (Diameter or Flat Width x Length):	6.25 x 2 Meter
Total Filtration Area in ft^2 or m^2: ★	10,560
Gross Air-to-Cloth Ratio: ★	1.9:1
Net Air-to-Cloth Ratio: ★	1.9:1
Net Net Air-to-Cloth Ratio: ★	NA
Compartment Dimensions: ★ (Length x Width)	203"x117"
Pulse-Jet Specific Information:	
Pulse Valve Size: ★	1.5"
Number of Bags per Valve (Row): ★	12
Normal Pulse Pressure: ★	75psi
Can Velocity: ★	176fpm
Particulate Information:	
Normal Grain Loading: ★	175 gr/acf
Average Blaine Size	Buyer To Provide
Gas Stream Chemistry Information:	

Percentage of Moisture in the Gas Stream: ★	Buyer To Provide

★These operating specifications are critical to the long-term operation of the filter media. Exceeding the values described above may void any guarantees. Mitsubishi Cement will be responsible for compliance with the Operating Specifications. Failure to provide all required information acceptable to BHA may void any guarantees.

Section II. Terms and Conditions, Including Guarantees

A. Guarantees and Remedies. All Guarantees and remedies are subject to the "Conditions Applicable to All Guarantees and Remedies" described below. Failure to comply with any of such conditions or other conditions stated in this proposal shall cause all guarantees to be null and void. Mitsubishi Cement's remedies are limited as stated below and in the attached Terms and Conditions. BHA offers the following guarantees:

1. Emission Guarantee. BHA warrants that the maximum particulate emissions through the filter media will not exceed a maximum of 0.005 grains per dry standard cubic foot of filterable particulate exhaust gas for a period of 24 months. The guarantee period shall begin when the bags are installed or 60 days after shipment, whichever occurs first. Mitsubishi Cement shall select an independent testing company approved by BHA to perform the required test. Mitsubishi Cement shall be responsible for all testing company fees, charges, and expenses. Tests shall be conducted only during normal operating conditions and not during any upset conditions. Test procedures shall be industry accepted and mutually agreed upon in writing. If the warranted efficiency is not attained on the first test, BHA will be given a reasonable period of time in which to bring the emission levels into conformity with the guaranteed efficiency.

B. Conditions Applicable to All Guarantees and Remedies.

1. All of Mitsubishi Cement's equipment that is attached to or associated in any manner with the goods furnished by BHA hereunder must be operated within the operating specifications set forth in Section I, in accordance with normal industry practice, maintained in accordance with the manufacturer's operations manuals and instructions and operated consistently with current operation of system as presented to Seller. Mitsubishi Cement must maintain adequate records to allow verification of actual operation and maintenance.

2. All goods furnished hereunder must be installed and operated in accordance with all drawings, operations manuals and instructions furnished to Mitsubishi Cement by BHA and Mitsubishi Cement must maintain adequate records to allow verification of such operation.

3. Mitsubishi Cement must operate the system in accordance with the following:

- System operation of the process equipment must be sufficiently above the dew point (acid, sulfate, water, etc.) to prevent condensation prior to or in the baghouse;
- A Visolite® Leak Detection System test will be performed at Mitsubishi

Cement's expenses upon completion of the installation and prior to the startup of the unit;

- The tubesheets must be maintained free of particulate and rust scale throughout the life of the filter bags. In the event particulate or rust scale accumulates on the tubesheet due to normal wear and tear or improper installation of the filter bags, these materials must be vacuumed or removed in a timely manner in order to avoid damage to the other filter bags.
- The filter bags must be properly coated with an initial control layer of Neutralite® Powder (or agreed upon equivalent) at Mitsubishi Cement's expense prior to the system going into operation; this initial control layer must be maintained until the system has been run for a period of time that allows pressure drop to rise to a normal operating level;
- Mitsubishi Cement must remove from service, any failed filter bag within four (4) hours or a reasonable amount of time after a pre-alarm indication from an operational bag leak detection system.
- during any cleaning cycle.
- The filter bags must be pulsed in accordance with BHA's recommendations. Pulse pressure should be maintained at 70 psi or less, unless greater pressure is required, in which case BHA shall be notified within seventy-two (72) hours. Bags must be pulsed "on-demand, per differential pressure" rather than on a timed pulsing basis.
- Bag cleaning shall be staggered in accordance to the following:
  A. For single compartment units, bags are to be cleaned starting with the first row, then proceeding to the fourth row, the seventh row, etc. until the sequence has moved across the baghouse. During the next cycle, the second row is pulsed, then the fifth row, then the eighth row, etc. Cycle continues until all rows are cleaned.
  B. For multiple compartment units, compartments are simultaneously cleaned as indicated above, starting with the first row in all compartments, then the fourth row in all compartments, etc.
- Further, the total number of cleaning cycles per filter is limited to 50,000 cleaning cycles over the guaranteed period.
  - A cycle counter must be installed. The number of cycles per 24 hour period must be reported to BHA A LLC on an agreed upon frequency.
  - 98% of the pulse valves must be operational at all times.

4. Damages to filter bags or failure to meet the specified guarantees due to items outside of BHA 's control are specifically excluded from this guarantee, including but not limited to:

- Abrasion/erosion caused by the inlet gas/dust flow; abrasion/erosion caused by bag-to-bag or bag-to-baghouse contact;
- Mishandling or abuse;
- Inadequate dust collector maintenance including failure to react to a pre-alarm indication from an operational bag leak detection system;
- Improper start up or shut down procedures;
- Dust levels in the hopper exceeding design hopper level;
- Exothermic reactions, fire, or excess temperature;
- Moisture or oil in the compressed air cleaning system;
- Bag blinding caused by unburned hydrocarbons, CaCl2 or ZnCl;
- Chemical attack or corrosion of the filter bags caused by the gas stream

chemistry;

- Hydrogen fluoride or other halogen concentrations in excess of 40 ppm;
- Faulty operation of the equipment connected to the baghouse (incomplete incineration, failure of the lime injection or other scrubbing systems);
- Mixing of filter bags made by another manufacturer together with the BHA filter bags.

5. BHA will be notified at least one (1) week prior to any testing and may inspect and adjust the baghouse prior to testing. BHA has the right to be present during testing and will be provided with a full copy of all tests including raw data and calculations.

6. Mitsubishi Cement shall be solely responsible for installation of any replacement goods furnished under any remedy. If Mitsubishi Cement advises BHA of a problem with the goods or services furnished hereunder and BHA determines that the problem was not caused by a breach of guarantee but was caused by an act or omission of Mitsubishi Cement, Mitsubishi Cement agrees to reimburse BHA for BHA's time and expenses incurred in responding to the problem.

7. Mitsubishi Cement and BHA agree that any liquidated damages remedy contained in this Proposal is reasonable, Mitsubishi Cement will have substantial difficulty proving the amount of the actual loss, and it will not be convenient or feasible to otherwise obtain an adequate remedy.

8. As an allowance for normal wear and tear, the remedies provided hereunder shall not apply until more than five (5%) of all bags furnished hereunder have failed. The remedies provided hereunder shall apply to that percentage of the total number of all bags furnished hereunder that have failed, less the five percent (5%) allowance for wear and tear.

C.

Mitsubishi Cement's Remedy for Breach of Any Guarantee. MITSUBISHI CEMENT'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THE ANY GUARANTEE MADE BY BHA HEREUNDER SHALL BE THE RIGHT TO REQUIRE BHA TO REPAIR THE DEFECTIVE GOODS AT MITSUBISHI CEMENT'S SITE OR, AT BHA 'S OPTION, PROVIDE REPLACEMENT GOODS ON A BAG-BY-BAG BASIS UP TO THE VALUE OF THE PRORATED CREDIT DESCRIBED BELOW FOR ANY DEFECTIVE GOODS, F.O.B. PLACE OF SHIPMENT. If BHA determines that repair or replacement of the defective goods on a bag-by-bag basis is an ineffective remedy, Mitsubishi Cement's sole and exclusive additional remedy shall be to receive a credit to its account as described below. Upon receipt of the replacement bags or credit, the guarantee shall be deemed extinguished and shall be of no further force and effect.

If credit is applicable, BHA shall credit to Mitsubishi Cement's account as liquidated damages (but not as a penalty) the following:

(1) During the first 12 months of the 24 month guarantee term, an amount equal to 100% of the original purchase price of the replaced filter bags.

(2) During the balance of the guarantee term, an amount equal to the product of (a) the original purchase price for the filter bags, and (b) the fraction obtained by

dividing the number of months remaining in the applicable guarantee term by the number of months constituting the original guarantee term.

If the liquidated damage remedy described above arises from a breach of the or Emissions Guarantee, Mitsubishi Cement's remedy is further limited by multiplying the liquidated damage credit provided above by the percentage that the actual value exceeds the warranted value.

In the event BHA determines the filter media selected is not suitable for the application, any replacement bags will be of a conventional filter media most closely suited to the application as determined by BHA.

D. Liability of BHA. The total liability of BHA is limited as stated in the attached PARKER-HANNIFIN CORPORATION – Industrial Gas Filtration and Generation OFFER OF SALE.

E. Cancellation of Custom Goods. Mitsubishi Cement acknowledges that all goods manufactured or otherwise produced pursuant to this Proposal are custom goods or goods that have been built to Mitsubishi Cement's specifications. Therefore, Mitsubishi Cement agrees that if it cancels any order, in whole or in part, Mitsubishi Cement shall pay to BHA an amount equal to the sum of (i) the actual expense incurred by BHA in connection with the canceled order; (ii) all expenses to which BHA has become committed in connection with the canceled order; and (iii) a reasonable profit on the canceled order.

G. Terms and Conditions. The PARKER-HANNIFIN CORPORATION – Industrial Gas Filtration and Generation OFFER OF SALE form a part of the Proposal as if set forth fully in this Proposal. If a provision of the Terms and Conditions attached hereto directly conflicts with a provision in this Proposal, the provision in this Proposal shall control.

Parker Hannifin Corporation
BHA ALTAIR, LLC
Industrial Gas Filtration and Generation Division
11501 Outlook Street, Suite 100
Overland Park, KS 66211 USA
Office 800 821 2222
Fax 816 356 8400

February 6, 2019

Proposal Information

Title

Proposals for One Horizontal Collector for venting a discharge on a 32" conveyor belt width.

Proposal Number

19-OS-0206-05

Buyer

Mitsubishi Cement
Lucerne Valley, California

Seller

Parker Industrial Air
BHA Group
11501 Outlook Stree, Suite 100
Oveland Park, KS 66211 USA

Seller's Technical Solution

Seller is submitting a proposal to furnish Seller's a horizontal style pulse-jet dust unit for 2,500 acfm. The collector will be similar to ones supplied by Seller before.

This horizontal collector design utilizes horizontal mounted filter elements and is the same type design that Seller has furnished numerous other plants for successfully venting conveyor belts. The dust collector has a compact height that allows it to be installed within an overhead restriction that is no lower than 6' above the belt enclosure.

The collectors can be installed with the fan at the tail or at the front of the unitary base. This will allow the installation in some areas where there is some overhead restriction. It is imperative that the damper must be set as close as possible to avoid over drafting and no be able to control the delta P across the filters. Enclosing the entire belt is also mandatory to allow the dust collector to work properly. Additionally, Buyer must assure that the maximum operating temperature will NOT exceed 265F.

This dust collector is complete with PulsePleat® filter elements, pulse-jet cleaning system and a fan. Buyer will need to properly enclose the discharge chute onto the conveyor belt and enclose the conveyor belt with an enclosure that is at least 24" high. The belt enclosure must include a support structure with a support flange to match the bottom flange of our dust collector. The belt enclosure must comply with the guidelines of the Industrial Ventilation manual, and the appropriate page from this manual is enclosed for Buyer's reference. The dust collector will be furnished either as a one-piece housing or in panel sections sized so that they can be carried by personnel to the conveyor belt for bolted assembly on site; whichever Buyer prefers.

- Low Profile – The collector can fit in low headroom clearances typical with belt conveyor installation
- Eliminates Costly Ductwork – Ductwork is difficult to design, costly to install, high maintenance, and difficult to maintain a system balance. The CFS collector requires no ductwork.
- Easy to Install – The CFS collector can be shipped fully assembled if spaces allows at Buyer's facility, and the CFS dust collector can simply be lifted off the truck and onto the belt enclosure.
- Simple to Maintain
- Efficient – Lower energy consumption with less static pressure on the fan and no material handling equipment.
- No Material Handling Equipment – The CFS dust collector pulse cleans the collected dust back onto the belt conveyor eliminating the need for hoppers, airlocks, pneumatic conveyors, screw conveyors, and etc.

Technical Description of Collector

Description	Value
Design Airflow Rate (ACFM)	2,500
Design Operating Temperature (°F)	120
Max. Rated Filter Temperature (°F)	265
Rows of Filter Elements	5
Total Number of Filter Elements	20
Filter Element Material	Spun bonded Poleyter
Total Filtration Area (sq. ft.)	1,
Air to Cloth Ratio	2.8
Filter Element Diameter (in)	6.13
Filter Element Length (in)	79
Norm. Est. Comp. Air Req,d (SCFM)	6
Max. Est. Comp. Air Req,d. (SCFM)	20

Collector Dimensions	Value
Length* (in.)	~149
Width* (in.)	34
Height (excluding handrails)* (in.)	46
Housing Material Thickness (gauge)	12
Tubesheet Thickness (in.)	3/16
Housing Pressure Rating (in. w.c.)	-15
Approx. Wt. Of Collector w/o Fan (lbs.)	2,000

*Dimensions & Weight are Preliminary and subject to Final Engineering

Seller's Scope of Supply

All electrical equipment defined in this scope of supply will be in accordance with NEMA and UL requirements. All steel shapes defined in this scope of supply will be in accordance of ASTM.

Filter Elements

Spun Bonded Elements

The filter elements are constructed of a filter media with a wide pleat spacing that provides excellent filtration efficiency and dust cake release. The collector will have access to the filter element thru a side mounted door, and the filters are connected onto bag cups installed on the dirty air side of the tubesheet; using clamps that are included. The built-in metal support core eliminates the need for a separate support cage; thus eliminating multiple parts and minimizing labor expenses while providing an effective seal. It can work up to 265F.

Pulse-Jet Cleaning System

The pulse-jet cleaning system is comprised of a pulse-on-demand controller, air header tank, pulse valves, blowpipes, and solenoids within enclosures. On-line pulse-jet cleaning removes collected material from the filters by directing a pulse of compressed air down the center of each filter. The pulse creates an on-line "shock" that efficiently dislodges the material on the outside of the filter element, allowing the unit to operate at higher air-to-cloth ratios than other systems. This also reduces maintenance costs, avoids airflow fluctuation and increases filter life.

Pulse-On-Demand Controller

A pulse-on-demand controller in a NEMA 4 enclosure will be provided by the Seller to regulate the cleaning system by monitoring the pressure drop across the filter elements. This controller provides an LED display of differential pressure. This pulse-on-demand controller regulates the cleaning system by monitoring the pressure drop across the filter elements and activating cleaning only when necessary to maintain the differential pressure across the filter elements within the desired span. This avoids over cleaning the filter elements that can result in dust blinding of the filters and minimizes wear on the filter elements, valves and diaphragms. It also saves a significant amount of compressed air in comparison to a simple sequential timer type controller.

Air Filter Kit with Regulator & Auto Drain

A compressed air filter/pressure regulator/auto drain combination unit will be supplied to reduce contaminants in the compressed air cleaning system, provide a means to control the air pressure to the cleaning system and minimize moisture reaching the air header. The unit is to be field mounted at the connection of the compressed air supply to the air header.

Blowpipes

Seller's blowpipes are built of 1" schedule-40 carbon steel using specially developed fixtures to ensure the blowpipe holes align with the filter centerline. The blowpipes will be welded into the clean air plenum.

Pulse Valves with pulse valves incorporated

A 1" single diaphragm pulse valve will be used to clean each row of filter elements. The controlled air consumption results in a decreased number of times the valve fires to effectively clean the filter bags, resulting in compressed air savings and longer filter element life.

Air Header Tank Design

The 6" carbon steel air header tank is sized to store sufficient compressed air to properly fire the pulse valves. The air header assembly includes an automatic purge drain valve to help purge any moisture build-up in the air header before corrosion and filter media damage can occur. The pulse controller system activates the drain valve automatically.

Clean Air Plenum

The Clean Air Plenum is the housing module that includes the tubesheet and the pulse-jet cleaning system.

Precision Tubesheet Fabrication
The tubesheet is stiffened to resist warpage in fabrication and operation. The hole fabrication is in accordance with Seller's strict tolerances ensuring an excellent tubesheet-to-filter fit. The tubesheet will be installed in the clean air plenum housing to ensure no particulate can bypass the filter elements. Bag cups are bolted to the dirty air side of the tubesheet for the filter elements to be installed onto and secured using the clamps that are included.

Dirty Air Plenum
The Dirty Air Plenum is the housing module that contains the filter access door and the filter elements, and contains support bars for the bottom end of the filter elements.

Side-Load Access Door
The lift-off side mounted door for filter access is installed in the dirty air plenum housing and secured with adjustable closure latches and door seal to ensure a proper seal.

Paint System
Enamel on the exterior and primer on the interior of the dust collectors.

Fan Assembly and Motor

The fan assembly NYB Series 20, Size 19 with a 7.5 HP motor, 1800rpm, severe duty, integral, premium efficiency, arrangement 10 with 2273 rpm and will be sized to move 2,500 ACFM at 8" static pressure and at 120°F operating temperature. The wheel is dynamically balanced before final assembly to ensure smooth operation. The fan includes a manual controlled outlet damper, inlet and outlet flanges, drain, and constant V-belt drive. A silencer is included. Noise level with silencer is about 72 dBA. Motor starter is not included.

Operating and Maintenance Manual
The O&M Manual is provided for proper installation; startup and maintenance of the equipment supplied and will be issued in English.

Buyer's Scope of Supply

The following are the responsibility of the Buyer:

- All tools, labor, equipment, and supervision for install/start-up of proposed dust collector equipment.
- Confirm the dust collector will fit within the space available.
- Provide Seller all relevant plant site drawings, if available.
- Determine mounting location and install the pulse controller. Provide 110 VAC power supply, and furnish and install all wiring from power supply to controller and from controller to each of the solenoids.
- Modify the existing enclosure on the belt conveyor, if needed to be in accordance with the guidelines of the Industrial Ventilation manual. It must include a support flange to mate with the mounting flange on the Seller's dust collector and include necessary support structure for the collector. Seller recommends the enclosure for the belt conveyor discharge include the head puller entirely and extend down

the conveyor slightly past the first roller after the belt scraper so the dust and material that emits from this can be collected.

- Furnish and install compressed air from a relatively clean and oil-free source In accordance with the section "Technical Description of Collector". A minimum size of 1" compressed air line to the collector is recommended.
- Furnish the desired dust collector and fan orientations and the fan rotation direction.
- Motor starter and start/stop station as required for all electrical components.
- Any equipment not specifically listed in section "Seller's Scope of Supply".
- Evaluation and specification of any special paint and fabrication materials, if required due to gas stream chemistry or atmospheric environment. If special requirements are needed It can be provided at additional price.
- All required country, territory or local engineering and building approvals, licenses, permits, certificates, tariffs, taxes, stamps and any other governmental requirements necessary for completion of the project.
- One project coordinator to work with Seller's project manager.
- Once an order is pending Seller will submit to Buyer "Customer Information Requirement" sheet(s) to provide Seller necessary information for design of the equipment. If Buyer specifies modifications to the equipment design and/or scope of supply described in this proposal Seller will quote to Buyer any resultant revision in the price of the equipment.

Commercial Terms and Price List

Scope of Supply

The Seller's scope of supply is subject to the relevant standards listed in the section "Seller's Scope of Supply." Seller's scope of supply is described in detail in Section "Seller's Scope of Supply" all other items outside this defined scope is the responsibility of the buyer.

Seller's offer does not include:

- All required local authority or government approvals, licenses, permits, certificates, tariffs, taxes, stamps for completion of the project
- Any labor or materials not specifically stated in this proposal

Schedule

The expected time for shipment for the Seller's scope of supply as listed is 8-10 weeks after receipt and acceptance of a written purchase order and all technical information. Partial deliveries to be permitted.

Price Summary

Item	Description	Price (US $)
1	One 2,500 Dust Collectors with fan assembly and motor and silencer for a 32" belt width, as Described in this Proposal	23,223.00

Price Basis and Validity

The above prices are exclusive of applicable taxes, freight, and crating, and are FCA USA Seller's facility. Customer to specify preferred freight carrier. The equipment will be shipped Freight Collect, or if Customer requests it can be shipped Prepay & Add plus 5% added for freight bill handling fee. Price quoted herein is subject to Seller Terms & Condition of Sale which are incorporated by reference.

Payment Terms

Seller's offer is based on the following cash payment terms:
Net 30 after shipment of equipment

Sincerely,

Oscar Lijap
Sales Engineer
CLARCOR Industrial Air
P 816-313-4315

cc: Tim Stark, Sales Director
Neal Young, Sales Supervisor

Appendix B
HARP Prioritization Score/CEIR Data

File name: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2\MCC PS Rpt_2-27-2019.rtf

HARP Facility Prioritization Report

HARP EIM Version: 2.1.1

Reporting Year: 2018
Project Path: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2
Project Database: C:\Users\HarryWilfong\Yorke Engineering\Mitsubishi - 472 - CEIR\2019 CEIR 001-13\Working\HARP2\5.mdb
CEIDARS Utility Database: C:\HARP2\Tables\CEIDARSTables022016.mdb
HARP Health Talbe: HEALTH201808
Sorting Order: DIS, AB, CO, TS, FACID
Date Created: 2/27/2019 5:15:46 PM
Operator: HRW

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POLLUTANT HEALTH VALUES FROM HARP HEALTH DATABASE:

POLLUTANT ID	POLLUTANT	CANCERURF(INH) (ug/m^3)^-1	ACUTEREL ug/m^3	CHRONICREL(INH) ug/m^3
71556	1,1,1-TCA	N/A	6.80E+04	1.00E+03
79005	1,1,2TriClEthan	1.60E-05	N/A	N/A
75343	1,1-DiClEthane	1.60E-06	N/A	N/A
120821	1,2,4TriClBenz	N/A	N/A	N/A
95501	1,2-DiClBenzene	N/A	N/A	N/A
540590	1,2-DiClEthylen	N/A	N/A	N/A
78875	1,2-DiClPropane	N/A	N/A	N/A
106990	1,3-Butadiene	1.70E-04	6.60E+02	2.00E+00
541731	1,3-DiClBenzene	N/A	N/A	N/A
542756	1,3-DiClPropene	N/A	N/A	N/A
57653857	1-3,6-8HxCDD	3.80E+00	N/A	4.00E-04
57117449	1-3,6-8HxCDF	3.80E+00	N/A	4.00E-04
40321764	1-3,7,8PeCDD	3.80E+01	N/A	4.00E-05
57117416	1-3,7,8PeCDF	1.10E+00	N/A	1.30E-03
19408743	1-3,7-9HxCDD	3.80E+00	N/A	4.00E-04
72918219	1-3,7-9HxCDF	3.80E+00	N/A	4.00E-04
35822469	1-4,6-8HpCDD	3.80E-01	N/A	4.00E-03
67562394	1-4,6-8HpCDF	3.80E-01	N/A	4.00E-03
39227286	1-4,7,8HxCDD	3.80E+00	N/A	4.00E-04
70648269	1-4,7,8HxCDF	3.80E+00	N/A	4.00E-04
55673897	1-4,7-9HpCDF	3.80E-01	N/A	4.00E-03
3268879	1-8OctaCDD	1.10E-02	N/A	1.30E-01
39001020	1-8OctaCDF	1.10E-02	N/A	1.30E-01
1746016	2,3,7,8-TCDD	3.80E+01	N/A	4.00E-05
51207319	2,3,7,8-TCDF	3.80E+00	N/A	4.00E-04
60851345	2-4,6-8HxCDF	3.80E+00	N/A	4.00E-04
57117314	2-4,7,8PeCDF	1.10E+01	N/A	1.30E-04
91576	2MeNaphthalene	N/A	N/A	N/A
56495	3-MeCholanthren	6.30E-03	N/A	N/A
57976	7,12-DB[a]anthr	7.10E-02	N/A	N/A
83329	Acenaphthene	N/A	N/A	N/A
208968	Acenaphthylene	N/A	N/A	N/A
75070	Acetaldehyde	2.70E-06	4.70E+02	1.40E+02
107028	Acrolein	N/A	2.50E+00	3.50E-01

120127	Anthracene	N/A	N/A	N/A
7440360	Antimony	N/A	N/A	N/A
7440382	Arsenic	3.30E-03	2.00E-01	1.50E-02
56553	B[a]anthracene	1.10E-04	N/A	N/A
50328	B[a]P	1.10E-03	N/A	N/A
205992	B[b]fluoranthen	1.10E-04	N/A	N/A
192972	B[e]pyrene	N/A	N/A	N/A
191242	B[g,h,i]perylen	N/A	N/A	N/A
207089	B[k]fluoranthen	1.10E-04	N/A	N/A
7440393	Barium	N/A	N/A	N/A
71432	Benzene	2.90E-05	2.70E+01	3.00E+00
100447	Benzyl Chloride	4.90E-05	2.40E+02	N/A
7440417	Beryllium	2.40E-03	N/A	7.00E-03
7440439	Cadmium	4.20E-03	N/A	2.00E-02
56235	CCl4	4.20E-05	1.90E+03	4.00E+01
76131	CFC-113	N/A	N/A	N/A
108907	Chlorobenzn	N/A	N/A	1.00E+03
67663	Chloroform	5.30E-06	1.50E+02	3.00E+02
7440473	Chromium	N/A	N/A	N/A
218019	Chrysene	1.10E-05	N/A	N/A
42101	CO	N/A	N/A	N/A
7440484	Cobalt	N/A	N/A	N/A
7440508	Copper	N/A	1.00E+02	N/A
18540299	Cr(VI)	1.50E-01	N/A	2.00E-01
53703	D[a,h]anthracen	1.20E-03	N/A	N/A
25321226	DiClBenzenes	N/A	N/A	N/A
75718	DiClDiFlmethane	N/A	N/A	N/A
9901	DieselExhPM	3.00E-04	N/A	5.00E+00
106934	EDB	7.10E-05	N/A	8.00E-01
107062	EDC	2.10E-05	N/A	4.00E+02
100414	Ethyl Benzene	2.50E-06	N/A	2.00E+03
75003	Ethyl Chloride	N/A	N/A	3.00E+04
206440	Fluoranthene	N/A	N/A	N/A
86737	Fluorene	N/A	N/A	N/A
50000	Formaldehyde	6.00E-06	5.50E+01	9.00E+00
9910	GasolExhPM	N/A	N/A	N/A
7647010	HCl	N/A	2.10E+03	9.00E+00
87683	HexaClButadiene	N/A	N/A	N/A
110543	Hexane	N/A	N/A	7.00E+03
193395	In[1,2,3-cd]pyr	1.10E-04	N/A	N/A
7439921	Lead	1.20E-05	N/A	N/A
7439965	Manganese	N/A	N/A	9.00E-02
1634044	Me t-ButylEther	2.60E-07	N/A	8.00E+03
7439976	Mercury	N/A	6.00E-01	3.00E-02
74839	Methyl Bromide	N/A	3.90E+03	5.00E+00
74873	Methyl Chloride	N/A	N/A	N/A
108383	m-Xylene	N/A	2.20E+04	7.00E+02
91203	Naphthalene	3.40E-05	N/A	9.00E+00
7440020	Nickel	2.60E-04	2.00E-01	1.40E-02
42603	NOX	N/A	N/A	N/A
95476	o-Xylene	N/A	2.20E+04	7.00E+02
1336363	PCBs	5.70E-04	N/A	N/A
106467	p-DiClBenzene	1.10E-05	N/A	8.00E+02
127184	Perc	6.10E-06	2.00E+04	3.50E+01
198550	Perylene	N/A	N/A	N/A
85018	Phenanthrene	N/A	N/A	N/A
7723140	Phosphorus	N/A	N/A	N/A
11101	PM	N/A	N/A	N/A
85101	PM10	N/A	N/A	N/A

88101	PM25	N/A	N/A	N/A
129000	Pyrene	N/A	N/A	N/A
7782492	Selenium	N/A	N/A	2.00E+01
1175	Silica, Crystln	N/A	N/A	3.00E+00
7440224	Silver	N/A	N/A	N/A
42401	SOX	N/A	N/A	N/A
100425	Styrene	N/A	2.10E+04	9.00E+02
79016	TCE	2.00E-06	N/A	6.00E+02
79345	TetraClEthane	5.80E-05	N/A	N/A
7440280	Thallium	N/A	N/A	N/A
43101	TOG	N/A	N/A	N/A
108883	Toluene	N/A	3.70E+04	3.00E+02
37871004	TotalHeptaCDD	N/A	N/A	N/A
38998753	TotalHeptaCDF	N/A	N/A	N/A
34465468	TotalHexaCDD	N/A	N/A	N/A
55684941	TotalHexaCDF	N/A	N/A	N/A
36088229	TotalPentaCDD	N/A	N/A	N/A
30402154	TotalPentaCDF	N/A	N/A	N/A
41903575	TotalTetraCDD	N/A	N/A	N/A
55722275	TotalTetraCDF	N/A	N/A	N/A
75694	TriClFluorMetha	N/A	N/A	N/A
25551137	TriMeBenzns	N/A	N/A	N/A
7440622	Vanadium	N/A	3.00E+01	N/A
75014	Vinyl Chloride	7.80E-05	1.80E+05	N/A
75354	Vinylid Chlorid	N/A	N/A	7.00E+01
43104	VOC	N/A	N/A	N/A
1330207	Xylenes	N/A	2.20E+04	7.00E+02
7440666	Zinc	N/A	N/A	N/A

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PRIORITIZATION SCORE SUMMARY:

Facility Name
Proximity Method
Optional Factors

FACID	CO	AB	DIS	Emission and Potency Procedure Cancer	Acute	Chronic	NonCancer	Dispersion Adjustment Procedure Cancer	Acute	Chronic	NonCancer	Highest Score
MITSUBISHI CEMENT 2018												
Proximity Method:												
Annual Operating Hours 8760												
11800001	36	MD	MOJ	8.79	0.13	0.30	0.35	8.39	0.13	0.30	0.34	8.79

Appendix C
Public Notice

Noticing Methods include the following, per District Rule 1207 (A)(1)(a) and District Rule 1302(D)(2)and(3):

- Published in newspapers of general circulation - *Riverside Press Enterprise* (Riverside County) and the *Daily Press* (San Bernardino County) on Thursday, May 23, 2019.
- Mailed and/or emailed to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in this Appendix) on Thursday, May 20, 2019.
- Posted on the MDAQMD Website at the following link: http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry

NOTICE OF TITLE V PERMIT SIGNIFICANT MODIFICATION PRELIMINARY DETERMINATION

NOTICE IS HEREBY GIVEN THAT Mitsubishi Cement Corporation - Cushenbury Plant (MCC), located at 5808 State Highway 18, Lucerne Valley, CA 92356 has submitted an application to modify their Federal Operating Permit (13300611) pursuant to the provisions of the Mojave Desert Air Quality Management District (MDAQMD) Regulation XII to replace the roll press associated with Finish Mill No. 4; add a new dust collector to the conveyor belt that carries material to the roll press associated with Finish Mill No. 4; replace a dust collector for Finish Mill No. 2; and modify a portable, diesel-fired IC engine powering a welder (permit unit B009466) to commit unit as a "Low-Use Engine" pursuant to the CARB's *Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater*. This proposed permitting action constitutes a Significant Permit Modification to their Federal Operating Permit (FOP 11800001) pursuant to MDAQMD Regulation XII. MCC is a Portland Cement manufacturing facility which includes the mining and processing of limestone, excavation, conveying, calcining, crushing, screening, storage, and transporting of materials including their primary product, cement. This proposed action will not result in a net increase in regulated air pollutants.

REQUEST FOR COMMENTS: Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed modification to MCC's Federal Operating Permit. If you submit written comments, you may also request a public hearing on the proposed renewal of the Federal Operating Permit. To be considered, comments, documents and requests for public hearing must be submitted no later than 5:00 P.M. on June 24, 2019, to the MDAQMD, at the address listed below.

PETITION FOR REVIEW: Federal Operating Permits are also subject to review and approval by USEPA. If USEPA has not objected to a proposed permit, and the MDAQMD has not addressed a public comment in a satisfactory manner, the public may petition USEPA, Region IX, Operation Permits Section at 75 Hawthorne Street, San Francisco, CA 94105 within 60 days after the end of the USEPA review period for USEPA to reconsider its decision not to object to the permit.

AVAILABILITY OF DOCUMENTS: The proposed Federal Operating Permit, as well as the application and other supporting documentation are available for review at the MDAQMD offices, 14306 Park Avenue, Victorville, CA 92392. In addition, these documents are available on the MDAQMD website and can be viewed at following link:
http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry
Please contact Sheri Haggard, Supervising Air Quality Engineer at the address above, or (760) 245-1661, extension 1864, or at shaggard@mdaqmd.ca.gov with additional questions pertaining to this action and/or corresponding documents. **Traducción en español esta disponible por solicitud. Por favor llame: (760) 245-1661 x1864**

Appendix D
CAM Analysis

CAM Stepwise Analysis, Updated Dec. 3, 2014:

The following is a list of steps involved in evaluating CAM requirements for MCC emission units:

1) Define units to be evaluated for CAM applicability:
   - Make a current list of all B & T solid material handling units at the plant (including kiln, clinker cooler, raw mill, finish mills, other affected sources under NESHAP, coal mill, sand plant, and all other solid material handling equipment), and associated control devices.
   - Also list all other types of units at plant (per category list discussed below).
   - Identify inactive units, assumed to be exempt from CAM.

2) Check whether the unit has an emission limitation or standard and uses a control device to achieve compliance, in which case the unit is potentially subject to CAM:
   - For all B&T units, divide solid material handling (**SMH**) units into the following NSPS and NESHAP applicability groups and CAM status of these units is evaluated below (**assume** that all solid material handling units included in CAM table have emission standards and use a control device with the two exceptions as stated below under #4):
     - NSPS Y (coal mill)
     - NSPS OOO (sand plant)
     - NESHAP kiln
     - NESHAP clinker cooler
     - NESHAP raw mill and finish mills
     - NESHAP other affected sources
     - Other solid material handling units not subject to NSPS and NESHAP
   - For emergency generators (stationary), the CAM status of these units is evaluated below.
   - For other types of units (other than solid material handling and emergency generators), assume not subject to CAM because these units have low uncontrolled emissions:
     - Waste oil storage tanks and gasoline dispensing
     - Portable generators
     - Space heating (unpermitted)
     - Other units (TBD)

3) Evaluate whether the SMH unit is exempt from CAM because the unit is subject to an NSPS or NESHAP that was promulgated after November 11, 1990—the following are exempt from CAM:
   - SMH units subject to NESHAP LLL (Portland Cement) are exempt from CAM
   - Emergency generators subject to NESHAP ZZZZ (RICE) are exempt from CAM
   - SMH units subject to NSPS Y and NSPS OOO are not exempt from CAM
   - Other SMH units not subject to either NSPS and NESHAP are not exempt from CAM

4) If an SMH unit is potentially subject to CAM based on #3 (i.e., not exempt, i.e. NSPS Y/OOO, non-NESHAP), compare the unit's uncontrolled emissions to the 100 ton/year PM major source threshold.

- Uncontrolled emissions are based on fugitive emissions of the B & T units, with 0% control (***see CAM table on the following pages***). For kiln, since no fugitive emissions, use 100X emissions (i.e. 99% control).
- For the primary & secondary crusher and the pre-blending system, these units are over 100 tons/year uncontrolled emissions and are subject to CAM.

5) For two SMH units that are subject to CAM, a CAM plan was prepared for each unit per the required format (***see Appendix B***)

B001009 – Primary & Secondary Crushing System

- Control devices: C001013

B001011 – Crushing, Stockpiling, and Pre-blending System

Control devices: C001336, C001337, C001339, C001014, C001016, C001017, and C001335

Permit No.	Permit Description	Controlled Transfer Points	Unenclosed Transfer Points	Screens	Crushers	Material Type	Emission Factor (lb/ton)	Throughput (tons/year)[1]	Annual Emissions (tons/yr)	Maximum Hourly Throughput (tons/hr)	Maximum Hourly Emissions (lbs/hr)	Applicable Regulation	CAM Potentially Applicable
B000975	Gypsum Unloading to Storage	2	0	0	0	Gypsum	2.8E-02	65,439	0.92	400	11.20	Non-NESHAP/NSPS	-
B000983	Clinker Transfer and Inside Storage	2	0	0	0	Clinker	2.8E-02	309,755	4.34	250	7.00	NESHAP LLL	-
B000989	South Cement Loadout - Truck	1	0	0	0	Cement	1.4E-02	736,113	5.15	350	4.90	NESHAP LLL	-
B000991	South Cement Loadout - Rail	2	0	0	0	Cement	2.8E-02	1,144	0.0160	200	5.60	NESHAP LLL	-
B000993	Unit No. 1 - Cement Packing	5	0	0	0	Cement	7.0E-02	67	0.0023	40	2.80	NESHAP LLL	-
B001007	Railroad Car Coal Unload and Storage	2	0	0	0	Coal	2.8E-02	151,024	2.11	400	11.20	NSPS Y	-
B001009	Primary and Secondary Crushing System	3	5	1	2	Limestone	3.7E-01	2,108,979	389.11	1,975	728.78	Non-NESHAP/NSPS	Yes (Under investigation)
B001010	Clay Delivery, Crushing, and Storage System	2	0	0	0	Red Bauxite	2.8E-02	60,182	0.84	732	20.50	Non-NESHAP/NSPS	-
B001011	Crushing, Stockpiling, and Pre-Blending System	7	0	2	1	Limestone	2.5E-01	2,108,979	265.73	786	198.07	Non-NESHAP/NSPS	Yes (Under investigation)
B001012	Raw Additive Delivery to Storage	4	0	0	0	Raw Material Blend	5.6E-02	2,255,594	63.16	732	40.99	Non-NESHAP/NSPS	-
B001019	Raw Grinding and Blending	10	0	1	2	Raw Material Blend	4.0E-01	2,255,594	447.74	425	168.73	NESHAP LLL	-
B001032	Clinker Transfer to Storage	6	0	0	0	Clinker	8.4E-02	1,092,475	45.88	400	33.60	NESHAP LLL	-
B001033	Mill No. 4 - Finish (5-FM-4) System	5	0	1	1	Clinker	2.1E-01	662,597	68.58	130	26.91	NESHAP LLL	-
B001034	Mill No. 1 - Finish (5-FM-1) System	13	0	0	1	Clinker	3.0E-01	137,101	20.70	30	9.06	NESHAP LLL	-
B001035	Mill No. 3 - Finish (5-FM-3) System	8	0	0	1	Clinker	2.3E-01	172,654	20.03	30	6.96	NESHAP LLL	-
B001036	Finish Mill No. 2 System (5-FM-2)	10	0	1	1	Clinker	2.8E-01	554,076	76.74	110	30.47	NESHAP LLL	-
B001039	Coal Reclaim System	4	0	0	0	Coal	5.6E-02	151,024	4.23	335	18.76	NSPS Y	-
B001857	Blending Operation for Kiln Feed	8	0	0	0	Clinker	1.1E-01	2,255,594	126.31	496	55.55	NESHAP LLL	-
B001858	Gypsum Silo to Bin Storage	1	0	0	0	Gypsum	1.4E-02	0	0.00	50	0	NESHAP LLL	-
B001859	Gypsum Unloading	7	0	0	0	Gypsum	9.8E-02	8,633	0.423	300	29.40	Non-NESHAP/NSPS	-
B001864	North Cement Loadout - Truck	2	0	0	0	Cement	2.8E-02	674,016	9.44	350	9.80	NESHAP LLL	-
B001865	Cement Loadout Transfer	3	0	0	0	Cement	4.2E-02	1,410,129	29.61	500	21.00	NESHAP LLL	-
B001866	Unit No. 2 - Cement Packing	4	0	0	0	Cement	5.6E-02	67	0.0019	40	2.24	NESHAP LLL	-
B001868	Mill No. 4 - Coal Grinding (7-CM-4)	3	0	0	1	Coal	1.6E-01	90,614	7.34	30	4.86	NSPS Y	-
B001871	Cement Truck Loadout No. 1 - Station	1	0	0	0	Cement	1.4E-02	6,701	0.04691	100	1.40	NESHAP LLL	-
B001872	Cement Truck Loadout No. 2 - Station	1	0	0	0	Cement	1.4E-02	11,538	0.0808	100	1.40	NESHAP LLL	-
B001979	Clay Dome Reclaim System	1	0	0	0	Red Bauxite	1.4E-02	0	0.00	100	0	Non-NESHAP/NSPS	-
B001983	Fly Ash Silo Transfer	1	0	0	0	Gypsum	1.4E-02	0	0.00	50	0	NESHAP LLL	-
B001984	Kiln Bypass System - Alkali Dust	1	0	0	0	Clinker	1.4E-02	0	0.00	25	0	NESHAP LLL	-
B001985	Unit No. 3 - Cement Packing	1	0	0	0	Cement	1.4E-02	0	0.00	40	0	NESHAP LLL	-
B001986	Auxiliary Coal Transport to Kiln	1	0	0	0	Coal	1.4E-02	15,102	0.106	30	0.42	NSPS Y	-
B002087	Unload Gypsum or ADMX	3	0	0	0	Gypsum	4.2E-02	0	0.00	100	0	Inactive, Not in App A	-

B002089	Cement Unload Equipment	2	0	0	0	Cement	2.8E-02	121,497	1.70	500	14.00	NESHAP LLL	-
B002109	Cement Truck Loadout No. 3 Station	1	0	0	0	Cement	1.4E-02	53,059	0.37	200	2.80	NESHAP LLL	-

B002137	Clinker Cooling & Transfer	3	0	0	0	Clinker	4.2E-02	1,424,885	29.92	250	10.50	NESHAP LLL	-
B002138	Clinker Cooling Exhaust Dust Reclaim System Transfer [2]	26	0	0	0	Clinker	3.6E-01	60,000	10.92	10	3.64	NESHAP LLL	-
B002405	Roller Press System	6	0	0	0	Clinker	8.4E-02	458,530	19.26	130	10.92	NESHAP LLL	-
B002784	Mill No. 3 - Coal Grinding (7-CM-3)	2	0	0	1	Coal	1.5E-01	90,614	6.71	30	4.44	NSPS Y	-
B004694	Biosolids handling system (does not operate)	-	-	-	-	-	-	-	-	-	-	New (Non-NESHAP/NSPS)	-
B009582	Clinker storage dome	2	0	0	0	Clinker	2.8E-02	313,910	4.39	59	1.65	New (NESHAP LLL)	-
B010041	Wood chip system [3]	20	0	1	1	Wood	4.2E-02	26,632	0.56	5	0.21	New (Non-NESHAP/NSPS)	-
B010042	Bauxite unloading hopper [4]	1	0	0	0	Red Bauxite	1.8E-03	34,015	0.03	6	0.011	New (Non-NESHAP/NSPS)	-
B010724	Tire chip system (not constructed yet)	8	0	0	0	Tires	-	-	-	-	-	New (Non-NESHAP/NSPS)	-
B011738	Slurry lime injection (not yet constructed)	-	-	-	-	-	-	-	-	-	-	New (Non-NESHAP/NSPS)	-
T000971	Fly Ash Truck Unload	1	0	0	0	Gypsum	1.4E-02	0	0.00	100	0	NESHAP LLL	-
T000985	South Cement Storage, Silos 19 & 21	1	0	0	0	Cement	1.4E-02	736,113	5.15	350	4.90	NESHAP LLL	-
T000987	North Cement Storage, Silo 20, 22 & H	1	0	0	0	Cement	1.4E-02	674,016	4.72	500	7.00	NESHAP LLL	-
T001030	Alkali Dust Truck Loadout System	1	0	0	0	Cement Kiln Dust	1.4E-02	0	0.00	30	0	NESHAP LLL	-
T001031	Clinker Storage to FM-4	1	0	0	0	Clinker	1.4E-02	662,597	4.64	300	4.20	NESHAP LLL	-
T001869	Cement Storage	1	0	0	0	Cement	1.4E-02	121,497	0.85	500	7.00	NESHAP LLL	-
T002090	Raw Mix Blending Storage	1	0	0	0	Raw Material Blend	1.4E-02	2,255,594	15.79	425	5.95	NESHAP LLL	-
T002091	Raw Additive Storage	1	0	0	0	Raw Material Blend	1.4E-02	2,255,594	15.79	500	7.00	Non-NESHAP/NSPS	-
T002092	Silo Storage-Gypsum to Finish Mills	1	0	0	0	Gypsum	1.4E-02	15,488	0.1084	50	0.70	Non-NESHAP/NSPS	-
T002093	Clinker Storage from 4RK-1 Cooler System	1	0	0	0	Clinker	1.4E-02	1,092,475	7.65	502	7.03	NESHAP LLL	-
T002094	Clinker Storage	1	0	0	0	Clinker	1.4E-02	554,076	3.88	300	4.20	NESHAP LLL	-
T002095	Silo, Gypsum & Clay Storage	1	0	0	0	Gypsum	1.4E-02	0	0.00	150	0	Non-NESHAP/NSPS	-
T002096	Gypsum Storage	1	0	0	0	Gypsum	1.4E-02	65,439	0.458	150	2.10	Non-NESHAP/NSPS	-
T002097	Silo Storage for Reclaim Coal	1	0	0	0	Coal	1.4E-02	151,024	1.057	150	2.10	NSPS Y	-
T002110	Cement Storage (Plastic) Truck Loadout #3	1	0	0	0	Cement	1.4E-02	53,059	0.371	150	2.10	NESHAP LLL	-
T002139	Gypsum Storage for Finishing Mills #1 & 3	1	0	0	0	Gypsum	1.4E-02	15,488	0.1084	150	2.10	Non-NESHAP/NSPS	-
T002228	Clinker Holding Tank for Bypass	1	0	0	0	Clinker	1.4E-02	176,065	1.232	250	3.50	NESHAP LLL	-
T003212	Storage tanks for waste oil (inactive)	-	-	-	-	-	-	-	-	-	-	-	-
T003213	Storage tanks for waste oil (inactive)	-	-	-	-	-	-	-	-	-	-	-	-

T003235	Railroad Cement Loadout	1	0	0	0	Cement	1.4E-02	48,921	0.342	192	2.69	NESHAP LLL	-
T005181	Storage tank for waste oil	-	-	-	-	-	-	-	No emissions	-	No emissions	Waste Oil Tank	-
T010019	Limestone silo for finish mill	4	0	0	0	Limestone	5.6E-02	59,617	1.67	11	0.63	New (Non-NESHAP/NSPS)	-
B001025	Kiln	-	-	-	-	-	-	-	4,765.56	-	-	NESHAP LLL	-

Note: Assume that the kiln PM emissions (measured from source tests) are currently controlled at 99%. Uncontrolled emissions multiplies the controlled emissions by 100.

Calculation Factors

0.014	lb/ton; PM_{10} uncontrolled emission factor for material transfer points
0.017	lb/ton; PM_{10} uncontrolled emission factor for dry crushing
0.12	lb/ton; PM_{10} uncontrolled emission factor for dry screening
0%	control efficiency of baghouse for transfer points, crushing, and screens
0%	control efficiency of enclosed transfer points
0%	control efficiency for hoods and foggers
0%	control efficiency for clinker dome storage

Assumptions:

Clinker Dust = Cement Kiln Dust

Clinker, Gypsum Limestone = Gypsum

Risk value for Bauxite Clay has been calculated using risk values for Low Iron Bauxite

Bauxite, Limestone, Iron = Raw Material Blend

Note:

1. 2012 throughput data provided by David Rib in various reports provided in 2013.

2. Throughput data provided by Dave Rib, 5/13/2012.

3. Due to the size and moisture of wood chips, assumed a factor of 0.1 was applied to the EF for the wood system. Also applied the 75% control for hoods and foggers.

4. This unit decreases loader handling of bauxite. Assume 75% control in the first stockpile material handling step is allocated to this B010042

Appendix E
Prior NSR Action

Preliminary Decision/Determination (PDD):
Enclosed Product Storage Dome Project
For Mitsubishi Cement Corporation
Located in Lucerne Valley, CA

A. Introduction

1. Application and Setting

The Mojave Desert Air Quality Management District (MDAQMD) received an application from Geomatrix Consultants, Inc. (Geomatrix) on behalf of Mitsubishi Cement Corporation (MCC) on approximately March 20, 2006, requesting authorization to commence a modification to the MCC facility located in Lucerne Valley, CA.

The modification requires a New Source Review, Title V Permit Modification (Federal Operating Permit Number: 11800001), as well as new District permits and/or modification to existing District permits. Emission changes will be entirely offset with simultaneous emission reductions, (SER's); analysis actually indicates a net reduction in PM-10 emissions of 0.14 tpy.

MCC is involved with the manufacture of Portland Cement, which includes the mining and processing of limestone, excavation, conveying, calcining, crushing, screening, storage, and transporting of materials including their primary product, cement.

This facility is an existing Major Source of the criteria air pollutant, PM-10, and therefore, as required by Regulation XIII, this facility requires a New Source Review (NSR) analysis prior to the commencement of any modification. In the following sections, NSR compliance, and other applicable air quality requirements are discussed in detail.

The requested modification includes various material throughput increases, new Dust collectors, and material storage Domes, as well as adjustments to existing permits, which will enable MCC to accomplish this project using simultaneous emission reductions (SER's).

Pursuant to District Rule 1302(D)(1), the District is issuing this preliminary decision determination document. In this document, the proposed changes will be reviewed, maximum potential to emit air quality impacts will be evaluated, and any control technology requirements will be established, including related air quality permit conditions. This document represents the preliminary pre-modification compliance review of the proposed project to determine whether post project operation of the affected process will comply with all applicable State, Federal, and District, rules and regulations.

Proposed Project Summary

The proposed project can be summarized as changes or additions to seven key sub-processes. MCC is proposing to construct material storage Domes, eliminate outside storage of material (other than the existing storage areas connected to B1034 and B1035), except in emergency situations, improve the operating efficiency of various existing bag houses as well as add new bag houses, in order to increase and establish throughput limits and improve material storage capabilities without increasing emissions.

A summary of the proposed project is described herein:

Project	Key Features of Application
FM4 OSEPA (#1a) District Permit: B001033	-Modifications to FM4 to incorporate OSEPA system. -New OSEPA dust collector (DC) to be permitted with 0.005 grains per dry standard cubic feet (gr/dscf) limit, and stack flow rate of 75,000 dscfm; New District Permit, C009579 -Existing mill DC reduced in size, flow rate reduced from 40,000 to 20,000 dscfm, with permit condition grain loading limit of 0.01 gr/dscf; District Permit affected, C001037 -FM4 system modification includes throughput increase from 85 to 130 tons per hour (tph) and annual throughput limit of 1,138,800 tons per year (tpy) (130 tph X 8760 hours per year (hpy)) Results: Net emission reduction due to modification to existing Dust Collector; a result of reduced flow rate, and reduced grain loading; District Permit affected, C001037
FM4 Roll Press (#1b) District Permit: B002405	-Grain loading limit of 0.01 gr/dscf, and flow rate of 10,600 dscfm, for roll press Dust Collector, District Permit affected, C002406 -FM4 roll press system modification includes throughput increase from 85 to 130 tph; annual throughput limit of 1,138,800 tpy
FM2 OSEPA (#2) District Permit: B001036	-Grain loading limit of 0.005 gr/dscf, and flow rate of 61,000 dscfm, for FM2 OSEPA DC; District Permit affected, C005164 -Grain loading limit of 0.01 gr/dscf, flow rate reduced from 38,000 dscfm to 20,000 dscfm, mass emission rate limit of no more than 1.71 lbs/hr; District Permit affected, C001000 -FM2 system modification includes throughput increase from 85 to 110 tons per hour; annual throughput limit of 963,600 tpy

	Results: Net emission reduction due to modification to existing DC, C001000
Sand Plant (#3) District Permit: B003948	-Grain loading limit of 0.01 gr/dscf, and operating hour limit of 6,000 hours per year applied to all associated DC's; District Permit's affected: C003949, C004289, C004290, C008145, C008146, C008147, C008148, C008149, C008150, C008151 -Annual throughput for Sand Silo & Bagging, limited to 1,200,000 tpy; District Permit affected, T004299 -Annual throughput for Sand Plant limited to 1,200,000 tpy; District Permit affected, B003948
Type III Cement Loadout (#4)	-Grain loading limit of 0.01 gr/dscf, mass emission rate limit of no more than 0.24 lbs/hr; District Permit affected, C003236 -Annual throughput for Cement Loadout, limited to 2,365,200 tpy; District Permit affected, T003235
Block Cement Loadout (#5)	-Grain loading limit of 0.01 gr/dscf, mass emission rate limit of no more than 0.34 lbs/hr; District Permit affected, C002111 -Annual throughput for Cement Truck Loadout, limited to 1,489,200 tpy; District Permit affected, B002109 -Annual throughput for Cement Storage and Transfer, limited to 1,489,200 tpy; District Permit affected, T002110
New Clinker Dome (#6) New District Permit, B009582	-Existing clinker outdoor stockpiles to be removed -Annual throughput for Clinker Dome throughput limited to 800,000 tpy; New District Permit, B009582 Several New DC's associated with New Clinker Dome: Grain loading limit of 0.01 gr/dscf shall be applied to all new DC's; flow rate's of 600 dscfm, and 3,000 dscfm as indicated: New District Permits — Flow Rate, dscfm C009583 — 3,000 C009584 — 600 C009585 — 3,000 C009586 — 600 C009587 — 3,000

B. Criteria and Toxics New Source Review Analysis

1. Simultaneous Emissions Reductions (SER's)

SER's will result primarily from reduction in fugitive emissions as a result of the addition of an enclosed Clinker Storage Dome and the elimination of the corresponding existing outside storage. In addition, but to a lesser extent, SER's will result from modifications and additions of baghouse type duct collectors. These proposed SER's are discussed in greater detail below, and quantified in Table 1.

SER's from existing dust collectors consist of equipment modifications that result in decreased ventilation requirements without a reduction in capture efficiency and corresponding reductions in capacities of existing dust collectors previously permitted under MDAQMD NSR rules and meeting the criteria of being "previously offset."

These units were issued valid permits from approximately 1980 to 1995, and therefore after New Source Review rules went into effect, including the requirement to offset net emission increases.

Based on the timing of the initial permit application and in the absence of records to the contrary, the units are assumed to have been, "previously offset in a documented prior permitting action." Consistent with Rule 1304(D)(2)(a)(iv), and because the SER projects are based on equipment previously offset, the SER calculation for the affected DC's is based on potential to emit.

MCC has proposed several sources for SER's as described:

Part of the SER's will result from equipment modifications due to decreased ventilation requirements and corresponding reductions in dust collector flow rates.

FM4 mill and FM2 mill dust collectors will be modified to reduce the dust collector flow rates, and grain loading will be reduced from 0.02 gr/dscf to 0.01 gr/dscf, resulting in a significant reduction in point source emissions.

A portion of the SER's will be from the clinker dome project, which will result in significant reductions in fugitive emissions previously reported in the Comprehensive Emissions Inventory (CEI).

The dust collector modifications and clinker dome project meet the requirements for SER's because:

- The emission changes are real, enforceable, permanent, and quantifiable.
- The reduced emissions are surplus because the modifications resulting in these emission reductions have not been mandated by any existing regulation, regulation in public workshop, or regulation contained in the State Implementation Plan (SIP).
- The SER projects are simultaneous because permit modifications to add enforceable permit limits will be made at the same time as the permit modifications allowing

increases and/or the permit conditions limiting such increases consistent with the quantity of SER's provided.

Therefore, the proposed SER project will meet all requirements for SER's, and all PM-10 offsets.

Geomatrix Consultants, Inc. (Geomatrix) on behalf of Mitsubishi Cement Corporation (MCC) provided spreadsheets summarizing the potential emission impact from the proposed changes.

Geomatrix utilized emission factors consistent with the requirements of the Mojave Desert AQMD (MDAQMD), specifically emission factors from the "Emissions Inventory Guidance (EIG)" document, dated April 10, 2000, and AP-42 for Crushed Stone Processing (section 11.19.2), dated 08/04, for those factors not available from the guidance document.

Pursuant to regulation XIII, the MDAQMD reviewed the spreadsheets, checked all emission factors and control efficiencies, and determined the analysis to be accurate.

In conclusion, the project will result in a net decrease of 0.14 tons per year of PM-10 when complete, and the MDAQMD agrees with the methodology and result.

Table 1, Simultaneous Emission Reduction's Quantified

Project No.	Name/ Description	Emission Increase due to Modification	Emission Decrease due to Modification	Net Change from this Project
		(tons/year)	(tons/year)	(tons/year)
1a	FM4 OSEPA	16.12	-22.53	**-6.41**
1b	FM4 Roll Press	6.37		**6.37**
2	FM2 OSEPA	-8.06		**-8.06**
3	Sand Plant	17.64		**17.65**
4	Type III Loadout	1.88		**1.88**
5	Block Cement Loadout	2.54		**2.54**
6	Clinker Dome	4.05	-18.17	**-14.11**
Subtotal		**40.55**	**-40.69**	**-0.14**

This table summarizes SER's pursuant to the requirements of District Rule 1304(C), Emissions Calculations.

2. Best Available Control Technology (BACT) Analysis

Pursuant to MDAQMD Rule 1303 (A)(3), BACT is required for all modified PM-10 sources where the post-modification emissions are over 25 lbs per day and for all new PM-10 sources at facilities that are major sources of PM-10. Since MCC is a major source of PM-10, the proposed

new solid material handling equipment is subject to BACT, and will meet BACT. In most instances, BACT will be met by enclosure of all sources to maximize capture of fugitive emissions and subsequent venting through a baghouse. In other instances, BACT will be met by other control measures with equivalent control efficiency.

In general, cement plant emission sources will be completely enclosed and ducted to dust collector(s). For the sand plant sources, the equipment utilizes other types of controls, which includes some conveyor transfer points that are completely or partially enclosed, depending on type of material and equipment configuration, but not ducted to a control device. Others are completely enclosed and ducted to a control device, similar to the cement equipment conveyor transfer points. MDAQMD agrees that for these transfer points the complete or partial enclosures are equivalent to water sprays, considered BACT, for the sand plant.

High-performance bags will be installed for the new FM4 OSEPA dust collector, and for the existing FM2 OSEPA dust collector. A corresponding grain loading limit of 0.005 gr/dscf will be considered BACT for this specific baghouse type.

3. Class I Area Visibility Protection
PM-10 emissions from the new equipment will be entirely offset using SER's as previously discussed, and therefore, there will not be any facility-wide PM-10 emission increases.

In conclusion, there is no requirement for alternative siting or Class I impact analyses, and no requirement for any Class I area visibility analysis using the USEPA VISCREEN model. The proposed project will not have any adverse visibility impacts.

4. Air Quality Impact Analysis

The proposed action will result in a small emissions decrease of the regulated air pollutant PM-10, therefore, as stated above, there is no impact to visibility, and therefore an air quality impact analysis is not appropriate or required.

5. Toxic Impact Assessment

In accord with District Rule 1320, New Source Review For Toxic Contaminants, at a minimum a State Toxic New Source Review Program Analysis (State T-NSR), including an Emission unit prioritization Score must be established by the MDAQMD. The result of that analysis is presented herein:

- The permit units are not subject to a State air toxics control measure (ATCM).
- The equipment additions and modifications are a source of TAC's (from metals in PM-10), and are therefore subject to State toxics-NSR (t-NSR, which is derived from AB2588).
- MCC is a major source of hazardous air pollutants (HAP's), and is subject to maximum achievable control technology (MACT) under the National Emissions

Standards for Hazardous Air Pollutants (NESHAP) for Portland cement manufacturing (40 CFR 63 Subpart LLL), as discussed further below.

To address AB2588 requirements, prioritization scores were calculated by Geomatrix for cancer, chronic, and acute health effects for the metal emission increases. MDAQMD has reviewed the associated spreadsheet and verified that all prioritization scores are less than one, indicating that the emission increases associated with these equipment additions and modifications are low priority, according to MDAQMD's prioritization score thresholds.

When the prioritization score for the new project was added to the prioritization score for the existing units at MCC, the overall facility-wide prioritization score is below 1.0. Therefore, no further analysis is required. There is no need to update the overall facility prioritization score at this time, and will be done by MDAQMD staff upon submittal of the next Comprehensive Emissions Inventory Report (CEIR). Therefore, there is no further action required by MCC relating to NSR for TAC's.

6. Applicable Rules and Regulations

Rule 221 – Federal Operating Permit Requirement requires certain facilities to obtain Federal Operating Permits. The proposed project includes a request for modification to its federal operating permit.

Rule 401 – Visible Emissions limits visible emissions opacity to less than 20 percent (or Ringlemann No.1). In normal operating mode, visible emissions are not expected to exceed 20 percent opacity. (In some cases as referenced in the proposed permits conditions, the opacity shall not exceed 7%, as required by 40 CFR 60.672(a) and (b)).

Rule 402 – Nuisance prohibits facility emissions that cause a public nuisance. The proposed projects will be required by permit condition to employ good engineering and operational principles in order to minimize emissions and the possibility of a nuisance.

Rule 403 – Fugitive Dust specifies requirements for controlling fugitive dust. The proposed projects will be required by permit condition to minimize opacity and fugitive dust.

Rule 403.2 – Fugitive Dust Control for the Mojave Desert Planning Area specifies requirements for construction projects. The construction of the proposed projects will be required to comply with the requirements of Rule 403.2.

Rule 404 – Particulate Matter – Concentration specifies standards of emissions for particulate matter concentrations. The equipment will be required to remain in compliance with Rule 404 through permit conditions.

Rule 408 – Circumvention prohibits hidden or secondary rule violations. The proposed project is not expected to violate Rule 408.

Rule 430 – Breakdown Provisions requires the reporting of breakdowns and excess emissions. The post project facility is expected to continue compliance with Rule 430.

Regulation XII contains requirements for sources which must have a federal operating permit. The affected facility has submitted an application to modify its federal operating permit. This is a significant permit modification according to Rule 1205(C), and must be modified according to Rule 1203 procedures. A notice and comment period has been established in accordance with Rule 1207.

Rule 1300 – General ensures that Prevention of Significant Deterioration (PSD) requirements apply to all projects. The proposed project is not subject to PSD requirements.

Rule 1302 – Procedure requires certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable MDAQMD rules and regulations. The Authority To Construct (ATC) application package for the proposed project includes sufficient documentation to comply with Rule 1302(D)(5)(b)(iii). Permit conditions for the proposed project will require continued compliance with Rule 1302(D)(5)(b)(iv).

Rule 1303 – Requirements requires that Any new or modified Facility which emits or has the Potential to Emit, 25 tons per year of any Nonattainment Air Pollutant shall be equipped with BACT (Best Available Control Technology) for each new permit Unit. The proposed project meets applicable BACT requirements.

Rule 1320- NSR for Toxic Air Contaminants, establishes the applicability for the State Toxic New Source Review Program (State T-NSR), and Federal Toxic New Source Review Program (Federal T-NSR).

Rule 1320(B)(2), regarding State Toxic New Source Review Program (State T-NSR). Rule applicability applies to any new or Modified Emissions Unit which "Emits or has the potential to emit a Toxic Air Contaminant"

Rule 1320(B)(3), regarding Federal Toxic New Source Review Program (Federal T-NSR) Rule applicability applies to any new or Reconstructed Facility or new or Modified Emissions Unit, which: "Emits or has the potential to emit 10 tons per year or more of any single HAP; or Emits or has the potential to emit 25 tons per year or more of any combination of HAP's"

The facility, as a result of the requested facility modifications, meets Rule 1320 applicability requirements for both State and Federal Toxics NSR.

Pursuant to the requirements of Rule 1320, Geomatrix calculated the facilities Prioritization Scores for Carcinogenic, and Non-Carcinogenic exposures, for both Chronic and Acute categories, and concluded that with the proposed emission increase included, all prioritization Scores are less than 10. The MDAQMD has reviewed the associated spreadsheet, and concluded that a Health Risk Assessment (HRA) is not required.

Rule 1520 – Control of Toxic Air Contaminants From Existing Sources reduces the health risk associated with emissions of toxic air contaminants from existing Facilities; and ensures that an existing facility is required to control the emissions of Toxic Air Contaminants or Regulated Toxic Substances as required pursuant to Part 6 of Division 26 of the California Health and Safety Code.

To ensure compliance with Rule 1520, the post project Facility shall continue to conform to all applicable sections of the National Emissions Standards for Hazardous Air Pollutants (NESHAP's).

7. Federal Regulatory Requirements:

New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart OOO applicability:

EPA promulgated its New Source Performance Standard (NSPS), 40 CFR Part 60, established under Section 111 of the Clean Air Act on December 16, 1975 (40 FR 58416) as means to regulate stationary sources of particulate matter (PM) emissions. Subpart OOO of the NSPS standard covers nonmetallic mineral processing, which includes regulations for emissions from operating equipment that was manufactured, modified or reconstructed after August 31, 1983. Processing equipment regulated under Subpart OOO affecting the crushed stone, sand and gravel industry, includes crushers, grinding mills, screens, bucket elevators, bagging operations, storage bins, enclosed truck and railcars and transfer points on belt conveyors.

The sand plant portion of MCC is affected by the applicable requirements of 40 CFR Part 60, Subpart OOO, which include stack emission requirements, opacity limits, compliance testing requirements, testing notification, and record keeping requirements.

MCC has proposed continued compliance with these requirements including appropriate equipment operating conditions referenced in their District permits as well as the citation of the appropriate section references within their title V permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart LLL applies to equipment associated with the Portland Cement Manufacturing Industry (e.g. Kilns, clinker coolers, finish mills, etc.). Subpart LLL regulates emissions of particulate matter, trace heavy metal emissions, and dioxins/furans in an effort to reduce heath risks to areas surrounding the source. Any source subject to an NESHAP subpart is also subject to the general requirements of the NSPS referenced above.

MCC has proposed continued compliance with these requirements including appropriate equipment operating conditions referenced in their District permits as well as the citation of the appropriate section references within their title V permit.

8. Conclusion

The MDAQMD has reviewed the proposed project's impact, and determined that the facility will comply with all applicable State, Federal, and MDAQMD Rules and Regulations, once

modification of the affected permits to revise permit conditions is completed. A summary of the affected District Permits conditions follows. This preliminary decision/determination will be released for public comment and publicly noticed; final permits (Authorities to Construct) shall be prepared shortly after the end of the public comment period.

9. Permit Conditions

The following permit conditions will be placed on the Permits for the affected equipment:

MILL NO. 4 - FINISH (5-FM-4) SYSTEM, *[MDAQMD Permit: B001033]*

Permit Conditions:

1. Equipment shall be operated/maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

2. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permits C001037 (5-DC-2), C001044 (5-DC-1), and C009579 (5-DC-3).

3. The owner/operator (o/o) shall limit the annual process throughput to 1,138,800 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

FINISH MILL NO. 2 SYSTEM (5-FM-2) *[MDAQMD Permit: B001036]*

Permit Conditions:

1. All covers, lids, gaskets and other devices and/or equipment which ensures this system's air tight integrity shall be maintained to preclude and/or minimize fugitive particulate emissions.

2. This system shall not be operated unless it is vented wholly to the following particulate emissions controls, which are operating under valid District permits: C001000 (5-DC-6 & 7); C000998 (5-DC-8, which controls equipment under District permit number B001034)

and C005164 (5-DC-24) (installed in 1998).

3. The owner/operator (o/o) shall limit the annual process throughput to 963,600 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

CEMENT TRUCK LOADOUT NO. 3 STATION *[MDAQMD Permit: B002109]*

Permit Conditions:

1. Equipment shall be operated/maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

2. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permit C002111 (6-DC-24).

3. The owner/operator (o/o) shall limit the annual process throughput to 1,489,200 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

FINISH MILL NO. 4 ROLLER PRESS SYSTEM, *[MDAQMD Permit: B002405]*

Permit Conditions:

1. Equipment shall be operated/maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

2. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permit C002406 (5-DC-41).

3. The owner/operator (o/o) shall limit the annual process throughput to 1,138,800 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

SAND PLANT, *[MDAQMD Permit: B003948]*

Permit Conditions:

1. This equipment shall not be operated unless it is vented to properly functioning air pollution control equipment covered by valid District permits: C003949, C004289, C004290, C008145, C008146, C008147, C008148, C008149, C008150, C008151, and C009581.

Deleted: C003949, C008145, C008146, C008147, C008148, C008149, C008150, and C008151.

2. The o/o shall have a continuing program of maintenance/inspections in accord with manufacturer's recommendations and/or specifications which ensures compliance with District Rules.

3. The o/o shall maintain a log of all inspections, repairs, and maintenance on this equipment. The log shall be kept on-site for a minimum period of five years and provided to District personnel on request.

4. The o/o shall limit sand production to a maximum of 200 tons per hour.

5. The owner/operator (o/o) shall limit the annual sand production to 1,200,000 tons per year. Records of monthly and yearly throughput shall be kept.

6. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

7. This equipment shall not discharge into the atmosphere an exhaust stream that exhibits greater than the following opacity:
a. Stack emissions - seven percent (40 CFR 60.672(a))
b. All transfer points and fugitive emission points - ten percent (40 CFR 60.672(b))

8. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or Equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (Transfer point or other) associated with this equipment.

9. The o/o will periodically monitor opacity from fugitive emission points according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

CLINKER STORAGE DOME *[MDAQMD Permit: B009582]*

Permit Conditions:

1. Equipment shall be operated/maintained according to the recommendations of the manufacturer/supplier and/or sound engineering principles.

2. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permits.

3. All covers, lids, gaskets, etc. shall be in place at all times during operation of this equipment and shall be maintained to assure proper fit to minimize fugitive dust.

4. The owner/operator (o/o) shall limit the annual process throughput to 800,000 tons per year. Records of monthly and yearly throughput shall be kept.

5. Once the construction of this permit unit is completed, there will be no outside clinker storage other than the existing storage areas connected to B1034 and B1035, except under emergency conditions.

6. This equipment shall not be operated unless it is vented to air pollution control equipment that is operating as per valid District permits C009583 (4-DC-49), C009584 (4-DC-50), C009585 (4-DC-51), C009586 (4-DC-52), and C009587 (4-DC-53).

7. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

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[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR FM 2 FINISH MILL (5-DC-6,7), *[MDAQMD Permit: C001000]*

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of five years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. This baghouse shall discharge no more than 1.71 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

9. The o/o shall conduct an initial PM source test per MDAQMD requirements using USEPA Method 5.

10. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

11. Within 90 days of updated permit issuance, the o/o shall perform an initial compliance test on this unit. This test shall demonstrate that this equipment is capable of operating in compliance with the emission limits specified above.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR FINISH MILL NO. 4 (5-DC-2), *[MDAQMD Permit: C001037]*

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of 5 years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. This baghouse shall discharge no more than 1.71 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

9. The o/o shall conduct an initial PM source test per MDAQMD requirements using USEPA Method 5.

10. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

11. Within 90 days of updated permit issuance, the o/o shall perform an initial compliance test on this unit. This test shall demonstrate that this equipment is capable of operating in compliance with the emission limits specified above.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE (6-DC-24), *[MDAQMD Permit: C002111]*

Permit Conditions:

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of 5 years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. This baghouse shall discharge no more than 0.34 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

9. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR FM 4 ROLL PRESS (5-DC-41), *[MDAQMD Permit: C002406]*

Permit Conditions:

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of 5 years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. This baghouse shall discharge no more than 0.91 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

9. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR GYPSUM UNLOADING (5-DC-23), *[MDAQMD Permit: C003209]*:

Permit Conditions:

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of five years.

3. This baghouse shall be fitted with an operating air lock system on each material discharge port and shall be provided with a differential pressure measuring device. The nominal design operational/differential pressure range shall be provided to the District upon request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or

operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

6. This baghouse shall operate concurrently with the equipment listed in District permit No. T002095 and be operated when previously mentioned conveyor belts are receiving and/or discharging material.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR TYPE III LOADOUT (6-DC-26), *[MDAQMD Permit: C003236]*

Permit Conditions:

1. The owner/operator (o/o) shall operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall maintain a program of maintenance which at least includes monthly visible emission determinations, monthly visual inspections of all associated equipment (inclusive of the bags and their suspension systems) and regular (to be determined with experience with this unit) measurement of the pressure differential across the bags.

3. The o/o shall log all the items in 2. Above, keep the log on-site for a minimum of two years and provide it to District personnel on request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

6. This baghouse shall operate concurrently with the truck loadout silos (District permit No. T003235).

For more information, please refer to Mitsubishi Drawing 6-G-523.

7. This baghouse shall discharge no more than 0.24 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

8. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

9. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

10. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR SAND PLANT (1-DC-1), *[MDAQMD Permit: C003949]*

Permit Conditions:

1. The owner/operator (o/o) shall maintain this baghouse in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o shall conduct a program of maintenance which includes at least quarterly visible emission determinations by a Certified Visible Emissions Reader, monthly visual inspections of all associated equipment (inclusive of the bags and their suspension system) and monthly measurements of the pressure differential across the bags.

3. The o/o shall log all the items required above, keep the log on-site for a minimum of five years and present it to District personnel on request.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one is not provided with the unit.

6. This baghouse shall operate concurrently with the equipment described in District permit No. B003948.

7. This baghouse shall discharge no more than 0.43 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf at the operating conditions given in the above description.

8. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

9. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

10. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

11. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

12. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR SAND PLANT (1-DC-2), *[MDAQMD Permit: C004289]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate, and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2. Above, keep the log current, on-site for a minimum of five years and provide it to District personnel on request.

4. The o/o shall maintain an inventory of the required bags for replacement on-site at all times which will ensure compliance with District Rules.

5. This baghouse shall operate concurrently with equipment described in District permit No. T004299.

6. This baghouse shall discharge no more than 0.06 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

7. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

8. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

9. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

10. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

BAGHOUSE FOR SAND PLANT (1-DC-3), *[MDAQMD Permit: C004290]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate, and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2. Above, keep the log current, on-site for a minimum of five years and provide it to District personnel on request.

4. The o/o shall maintain an inventory of the required bags for replacement on-site at all times which will ensure compliance with District Rules.

5. This baghouse shall operate concurrently with equipment described in District permit No. T004299.

6. This baghouse shall discharge no more than 0.06 pounds per hour of PM10 at a maximum concentration of 0.01 gr/dscf.

7. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

8. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

9. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

10. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

OSEPA BAGHOUSE FOR FINISH MILL NO. 2 (5-DC-24), *[MDAQMD Permit: C005164]*

Permit Conditions:

1. The owner/operator, (o/o), shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o shall institute a program of maintenance which embraces at least weekly visible emission determinations, monthly visual inspections of all associated equipment (inclusive of the bags and their suspension systems) and regular (to be determined with experience with this unit) measurements of the pressure differential across the bags.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. This baghouse shall operate concurrently with Finish Mill No. 2 System (5-FM-2) under valid District permit number B001036.

6. This baghouse shall discharge no more than 2.61 pounds per hour of PM10 at a maximum concentration of 0.005 gr/dscf.

7. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

8. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

9. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

10. The o/o shall conduct an initial PM source test per MDAQMD requirements using USEPA Method 5.

11. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

12. Within 90 days of updated permit issuance, the o/o shall perform an initial compliance test on this unit. This test shall demonstrate that this equipment is capable of operating in compliance with the emission limits specified above.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-4), *[MDAQMD Permit: C008145]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.386 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-5), *[MDAQMD Permit: C008146]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.737 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-6), *[MDAQMD Permit: C008147]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.943 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior

to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-7), *[MDAQMD Permit: C008148]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.082 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-8), *[MDAQMD Permit: C008149]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.065 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-9), *[MDAQMD Permit: C008150]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.065 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-10), *[MDAQMD Permit: C008151]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector in strict accord with those recommendations of the manufacturer/supplier, and sound engineering principles which produce minimum emissions of air contaminants.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall log all the items in 2 above in addition to the bag replacements, repairs and non-scheduled maintenance. The log shall be kept current, on-site for a minimum of 5 years and provided to District personnel on request.

4. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

5. The o/o shall install and maintain a device which measures the pressure differential across the bags if one has not been provided with this unit.

6. This baghouse shall operate concurrently with the Sand Plant under valid District permit number B003948.

7. This baghouse shall discharge no more than 0.386 lb/hour at a maximum concentration of 0.01 gr/dscf at the operating conditions described in the above description.

8. Within 180 days from the initial start-up of this unit, the o/o shall conduct emissions testing in strict accord with all procedures described in the District's Compliance Test Procedural Manual. This testing is necessary to demonstrate compliance with permit conditions in 7 above and District Rules 404 and 405. The District shall be notified no less than 10 working days prior to the test and receive the final test report of emissions no later than 45 days subsequent to the final day of on-site sampling and measurement.

9. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

10. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

11. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

12. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

OSEPA DUST COLLECTOR FOR FINISH MILL NO. 4 (5-DC-3), *[MDAQMD Permit: C009579]*

Permit Conditions:

1. The owner/operator (o/o) shall operate and maintain this dust collector according to the recommendations of the manufacturer/supplier and/or sound engineering principles

2. The o/o shall maintain a record of repairs and maintenance on this equipment and submit it to the District on request. The record shall be retained for a minimum period of five years.

3. This baghouse shall be provided with a differential pressure measuring device.

4. The o/o shall maintain on-site, as a minimum, an inventory of replacement bags that assures compliance with applicable Rules of District Regulation IV.

5. This baghouse shall discharge no more than 3.21 pounds per hour of PM10 at a maximum concentration of 0.005 gr/dscf.

6. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

7. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

8. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

9. The o/o shall conduct an initial PM source test per MDAQMD requirements using USEPA Method 5.

10. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

11. Within 90 days of updated permit issuance, the o/o shall perform an initial compliance test on this unit. This test shall demonstrate that this equipment is capable of operating in compliance with the emission limits specified above.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR SAND PLANT (1-DC-11), *[MDAQMD Permit: C009581]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o will periodically monitor opacity from stack exhaust according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. The o/o shall maintain an inventory of replacement bags on-site at all times which will ensure compliance with applicable Rules of District Regulation IV.

4. The o/o shall install and maintain a device which measures the pressure differential across the bags.

5. This baghouse shall discharge no more than 0.065 lb/hour at a maximum concentration of 0.01 gr/dscf.

6. The owner/operator (o/o) shall limit the annual operating hours of this baghouse to 6,000 hours per year. Records of monthly and yearly hours of operation shall be kept.

7. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

8. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than seven percent opacity (40 CFR 60.672(a)(2)).

9. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (transfer point or other) associated with this equipment.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]

[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR CLINKER DOME (4-DC-49), *[MDAQMD Permit: C009583]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o shall install and maintain a device which measures the pressure differential across the bags.

3. This baghouse shall discharge no more than 0.46 lb/hour at a maximum concentration of 0.01 gr/dscf.

4. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

6. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

7. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR CLINKER DOME (4-DC-50), *[MDAQMD Permit: C009584]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o shall install and maintain a device which measures the pressure differential across the bags.

3. This baghouse shall discharge no more than 0.09 lb/hour at a maximum concentration of 0.01 gr/dscf.

4. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

6. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

7. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR CLINKER DOME (4-DC-51), *[MDAQMD Permit: C009585]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o shall install and maintain a device which measures the pressure differential across the bags.

3. This baghouse shall discharge no more than 0.46 lb/hour at a maximum concentration of 0.01 gr/dscf.

4. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

6. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

7. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR CLINKER DOME (4-DC-52), *[MDAQMD Permit: C009586]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o shall install and maintain a device which measures the pressure differential across the bags.

3. This baghouse shall discharge no more than 0.09 lb/hour at a maximum concentration of 0.01 gr/dscf.

4. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

6. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

7. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]

[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

DUST COLLECTOR FOR CLINKER DOME (4-DC-53), *[MDAQMD Permit: C009587]*

Permit Conditions:

1. The owner/operator (o/o) shall install, operate and maintain this dust collector according to the recommendations of the manufacturer/supplier, and sound engineering principles.

2. The o/o shall install and maintain a device which measures the pressure differential across the bags.

3. This baghouse shall discharge no more than 0.46 lb/hour at a maximum concentration of 0.01 gr/dscf.

4. This baghouse shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

5. This baghouse shall not discharge into the atmosphere an exhaust stream that exhibits greater than ten percent opacity.

6. The o/o shall conduct an initial compliance test per NESHAP Subpart LLL opacity requirements using USEPA Method 9.

7. The o/o shall conduct an initial PM source test per MDAQMD requirements using USEPA Method 5.

8. The o/o shall conduct periodic monitoring per NESHAP Subpart LLL requirements.

9. Within thirty (30) days of achieving maximum production rate, but not later than 180 days after initial start-up, the o/o shall perform an initial compliance test on this unit. This test shall demonstrate that this equipment is capable of operating in compliance with the emission limits specified above.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

SILO - CEMENT STORAGE AND TRANSFER, *[MDAQMD Permit: T002110]*

Permit Conditions:

1. Equipment shall be operated/maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.

2. Silos shall not receive nor unload materials unless each one used is vented to the specific air pollution control equipment that is operating as per valid District permit C002111 (6-DC-24) under B002109.

3. The owner/operator (o/o) shall limit the annual process throughput to 1,489,200 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

SILO - TRUCK LOADOUT, *[MDAQMD Permit: T003235]*

Permit Conditions:

1. All flanges, seals, blowers, and other appurtenant equipment shall be installed and maintained to prevent fugitive emissions.

2. The equipment shall not operate unless the bin vent dust collector is functioning and under valid District permit C003236.

3. The owner/operator (o/o) shall limit the annual process throughput to 2,365,200 tons per year. Records of monthly and yearly throughput shall be kept.

4. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 63 et seq - NESHAP Subpart LLL]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

WHITE SAND SILOS & BAGGING STATION, *[MDAQMD Permit: T004299]*

Permit Conditions:

1. These silos shall not be filled with any material unless vented to functioning baghouses under valid District permit numbers C004289 (1-DC-2) and C004290 (1-DC-3).

2. The owner/operator (o/o) shall limit the annual process throughput to 1,200,000 tons per year. Records of monthly and yearly throughput shall be kept.

3. This equipment shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart OOO -Standards of Performance for Nonmetallic Mineral Processing Plants.

4. This equipment shall not discharge into the atmosphere an exhaust stream that exhibits greater than the following opacity:
a. Stack emissions - seven percent (40 CFR 60.672(a))
b. All transfer points and fugitive emission points - ten percent (40 CFR 60.672(b))

5. The o/o shall conduct an initial compliance test per NSPS Subpart OOO requirements, including PM (USEPA Method 5 or equivalent) and/or opacity (USEPA Method 9 or Equivalent) testing as applicable for each baghouse, bin vent and fugitive emission point (Transfer point or other) associated with this equipment.

6. The o/o will periodically monitor opacity from fugitive emission points according to the following methodology:
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with USEPA Method 22. The test must be conducted while the affected source is in operation.
(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator

must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

[Applies to all conditions above; Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[40 CFR 60.670 et seq - NSPS Subpart OOO]
[Rule 1303 - *Requirements*; Version in SIP = as amended 3/25/96, 40 CFR 52.220(c)(239)(:)(A)(1) - 11/13/96 61 FR 58133; current rule version = 9/24/01]

C. Title V Permit, Significant Permit Modification

1. Proposed Additional or Modified Permit Conditions

Permit conditions are being modified or added to clarify record keeping and address NSPS requirements. Some minor equipment additions are also performed with BACT, SER and NSPS requirements. Various pages in Section III in the Title V permit for MCC (Permit Number 11800001) will be modified.

2. Statement of Legal and Factual Basis

The MDAQMD has a fully SIP-approved New Source Review program. Proposed conditions are added pursuant to the NSR action described in section B above. These conditions will be an applicable requirement for this facility. Please refer to the specific factual bases listed after each condition cited in section (B)(9) above.

Furthermore, the requirements for New Source Performance Standard (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP's) requirements summarized below.

Although specific regulation sections are referenced along with the associated permit conditions, the facility is responsible for compliance with all applicable requirements of the referenced Federal Regulations:

CODE OF FEDERAL REGULATIONS, TITLE 40 -- PROTECTION OF ENVIRONMENT, CHAPTER I -- ENVIRONMENTAL PROTECTION AGENCY, SUBCHAPTER C -- AIR PROGRAMS

SUBPART OOO -- STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS:

Links:
§ 60.670 Applicability and designation of affected facility.
§ 60.671 Definitions.
§ 60.672 Standard for particulate matter.
§ 60.673 Reconstruction.

§ 60.674 Monitoring of operations.
§ 60.675 Test methods and procedures.
§ 60.676 Reporting and recordkeeping.

NSPS Subpart A and Subpart OOO Requirements, MCC Specific Requirements:

Stack Emissions Requirements – Other Than Individual Bin Vents
§60.672(a)(1) and §60.672(g): Particulate Matter Emission Limit
Limit stack particulate matter (PM_{10}) emissions to 0.022 gr/dscf for any transfer point for belt conveyors or any other affected facility, including multiple storage bins with combined stack emissions (not including baghouses that control emissions only from an individual enclosed storage bin)

§60.672(a)(2) and §60.672(g): Opacity Limit
Limit stack emission opacity to 7% for any transfer point for belt conveyors or any other affected facility, including multiple storage bins with combined stack emissions

§60.8 and §60.675: Initial Compliance Testing:

Perform initial compliance testing within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup and at such other times as may be required by the Administrator under Section 114 of the Clean Air Act. Conduct test under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. Use EPA Method 5 or Method 17 to determine compliance with the PM_{10} standard and use EPA Method 9 to determine compliance with opacity standard.

- Particulate Matter Testing: The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121°C (250°F), to prevent water condensation on the filter.

- Opacity Testing – Duration: For multiple storage bins with combined stack emissions, the minimum total time of observations shall be 3 hours (30 6-minute averages). The duration may be reduced from 3 hours to 1 hour if there are no individual readings greater than the opacity limit and there are no more than 3 readings greater than the opacity limit for the 1-hour period.

- Opacity Testing – Method: The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed. For affected facilities using wet dust suppression for particulate matter control, the spray sometimes generates a visible mist. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water

mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

- Initial Testing Notification Requirement: A 30-day notice is required prior to the initial performance test. If, after 30 days notice for an initially scheduled performance test, there is a delay in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

Stack Emissions Requirements – Individual Bin Vents

§60.672(f): Opacity Limit – Stack Emissions – Individual Storage Bins

Limit stack emission opacity to 7% for any baghouse that controls emissions from only an individual enclosed storage bin

§60.8 and §60.675: Initial Compliance Testing:

Perform initial compliance testing within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup and at such other times as may be required by the Administrator under Section 114 of the Clean Air Act. Conduct test under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. Use EPA Method 9 to determine compliance with opacity standard.

- Opacity Testing – Duration: For baghouses that control emissions only from an individual enclosed storage bin, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

- Opacity Testing – Method: The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed. For affected facilities using wet dust suppression for particulate matter control, the spray sometimes generates a visible mist. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

- Initial Testing Notification Requirement: A 30-day notice is required prior to the initial performance test. If, after 30 days notice for an initially scheduled performance test, there is a delay in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

Fugitive Emissions Requirements:

§60.672(b): Opacity Limit – Fugitive Emissions – Transfer Points

Limit fugitive emission opacity to 10% for any transfer point on belt conveyors or any other affected facility

§60.672(c): Opacity Limit – Fugitive Emissions – Uncontrolled Crusher
Limit fugitive emission opacity to 15% from any crusher at which a capture system is not used.

§60.672(d): Truck Dumping
Truck dumping is exempt from above limits

§60.8 and §60.675: Initial Compliance Testing:
Perform initial compliance testing within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup and at such other times as may be required by the Administrator under Section 114 of the Clean Air Act. Conduct test under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. Use EPA Method 9 to determine compliance with opacity standard.

- Opacity Testing – Duration: For transfer points on belt conveyors and any other affected facility, the minimum total time of observations shall be 3 hours (30 6-minute averages). The duration may be reduced from 3 hours to 1 hour if there are no individual readings greater than the opacity limit and there are no more than 3 readings greater than the opacity limit for the 1-hour period.

- Opacity Testing – Method: The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed. For affected facilities using wet dust suppression for particulate matter control, the spray sometimes generates a visible mist. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

- Initial Testing Notification Requirement: A 30-day notice is required prior to the initial performance test. If, after 30 days notice for an initially scheduled performance test, there is a delay in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

General Requirements
§60.7(a)(4): General Notification Requirements
Notify the Administrator of planned changes to the operation or equipment.

§60.7(b): Startup, Shutdown, & Malfunction Recordkeeping Requirements:

Keep records of the occurrence and duration of any startup, shutdown, or malfunction in operation.

§60.11(c): Startup, Shutdown, & Malfunction Opacity Exemption:
The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction.

§60.11(d): General Maintenance and Operation Requirements:
At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

§60.676(a): Equipment Replacement Reporting Requirement:
Submit required information in case of equipment replacement.

§60.676 (f): Test Performance Results Reporting Requirement:
Submit a written report of all performance tests conducted to demonstrate compliance with the PM_{10} and opacity standards.

§60.676 (h): Anticipated Startup Date Reporting Requirement Exemption:
The requirement for notification of the anticipated date of initial startup is waived.

§60.676 (i): Actual Startup Date Reporting Requirement:
Notify the Administrator of the actual date of initial startup.
Additionally, National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart A (GENERAL PROVISIONS) and Subpart LLL requirements apply to the equipment and operations associated with Portland Cement Manufacturing. Specific requirements have been summarized as permit conditions, however, it is understood that the facility is responsible for compliance with all applicable requirements of the referenced Federal Regulation:

CODE OF FEDERAL REGULATIONS, TITLE 40 -- PROTECTION OF ENVIRONMENT, CHAPTER I -- ENVIRONMENTAL PROTECTION AGENCY, SUBCHAPTER C -- AIR PROGRAMS

SUBPART LLL -- NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE PORTLAND CEMENT MANUFACTURING INDUSTRY

Links:

General
Emission Standards and Operating Limits
Monitoring and Compliance Provisions
Notification, Reporting and Recordkeeping
Other

National Emission Standards for Hazardous Air Pollutants Subpart LLL applies to equipment (e.g., kilns, clinker coolers, finish mills, etc.) associated with the Portland Cement Manufacturing Industry. Subpart LLL regulates emissions of particulate matter, trace heavy metal emissions, and dioxins/furans in an effort to reduce health risks to areas surrounding the applicable source. Any source subject to an NESHAP subpart is also subject to the general requirements of the NSPS program contained in Subpart A.

MCC meets applicability of this regulation, and therefore must meet all the applicable requirements.

Specific applicable Sections of Subpart LLL are referenced herein, as they apply to the Portland Cement Manufacturing portion of MCC. Specific requirements have been summarized as permit conditions, however, the facility is responsible for compliance with all applicable requirements of the referenced Federal Regulation:

Specific NESHAP Subpart A and Subpart LLL Requirements as they apply the MCC facility.

Kiln #B001025-1 Requirements
§63.1343(b)(1): Particulate Matter Emission Limit
Limit PM emissions to 0.30 lb/ton of dry feed.

§63.1343(b)(2): Opacity Limit
Limit opacity to 20%.

§63.1343(b)(3)(i): Dioxin/Furan Emission Limit
Limit D/F emissions to $8.7x10^{-11}$ grains (TEQ) per dscf of exhaust gases @ 7% O_2, or $1.7x10^{-10}$ grains (TEQ) per dscf of exhaust gases @ 7% O_2 for temperatures below 400 ^{O}F.

§63.1344(a) & (b): Baghouse Temperature Limit
Limit temperature at kiln baghouse inlet to values measured during D/F performance test (with raw mill on and off, respectively).

§63.1349(b)(1): Initial Performance Test – PM & Opacity
Conduct an initial performance test for PM and opacity using EPA Method 5 for PM and Method 9 for opacity. Test at the highest load or capacity reasonably expected to occur. Minimum 3 separate runs. Minimum sample volume 30 dscf. Back half is not included. Report results in lb/ton feed. Maximum 6-minute average opacity during each of 3 PM tests.

§63.1349(b)(3): Initial Performance Test – D/F
Conduct an initial performance test for D/F using EPA Method 23. Minimum 3 separate runs. Minimum sample volume 90 dscf PM D inlet temperature must be monitored. Test with raw mill on and raw mill off, separately.

§63.1349(c): Continuing Performance Tests – PM
Repeat performance test for PM every 5 years.

§63.1349(d): Continuing Performance Tests – D/F
Repeat performance test for D/F every 30 months.

§63.1349(e): Continuing Performance Tests – Feed or Fuel Change
Repeat performance test for PM, opacity, and D/F within 360 hours of initiating any significant change in the feed or fuel from that used in the previous performance test.

§63.6(e)(3): SSM Plan
Develop startup, shutdown, and malfunction (SSM) plan.

§63.1350(a): O&M Plan
Prepare an operations and maintenance (O&M) plan.

§63.1350(c)(2): Daily Opacity Monitoring
Perform daily opacity monitoring using EPA Method 9 for at least 30 minutes each day. Record the average opacity for each 6-minute period. To be in compliance, no 6-minute period can exceed 10%. The highest emission site will be identified based on a 6-minute Method 9 test covering the entire exhaust from the multi-stack baghouse, and a 30-minute Method 9 will be performed at that site.

§63.1350(f)(1) through (f)(5): Continuous Temperature Monitor - Installation
Install continuous temperature monitor and recording device for baghouse inlet gas (record on three-hour average basis distinguishing between periods when the raw mill is online and offline).

§63.1350(f)(6): Continuous Temperature Monitor - Calibration
Calibrate thermocouples and/or temperature sensors every 3 months.

§63.1350(i): Annual Inspection – Combustion System
Perform annual inspection of the components of the combustion system.

§63.8(c): CMS Installation
Follow requirements for CMS installation and identify out-of-control periods for temperature monitor.

§63.8(d): CMS QC Program
Develop a CMS QC program for temperature monitor.

§63.8(e): CMS QC Performance Evaluation
Conduct a CMS performance evaluation for the temperature monitor.

§63.1353(b)(2) & §63.9(e): Performance Test Notification Requirements
Notify administrator of performance test and opacity observation at least 60 calendar days before scheduled test date.

§63.1353(b)(5): Performance Test Results (Compliance Status) Notification Requirements
Notification of compliance status within 30 or 60 days after performance test completed.

§63.1354(b)(1) & (2) & §63.10(d)(2)&(3): Reporting Requirements – Test Results
Submit results of performance test and opacity observations within 60 days after completion of test.

§63.1354(b)(4) & §63.10(d)(5)(i): Semiannual Malfunction Report
Submit semiannual report of all malfunctions, SSM actions consistent with SSM plan, and SSM actions not consistent with SSM plan but not resulting in excess emissions, within 30 days following the end of the semiannual period.

§63.1354(b)(5) & §63.10(d)(5)(ii): Deviation Reporting
Notify EPA and MDAQMD within 2 working days of actions not consistent with SSM plan, followed by certified letter within 7 days.

§63.1354(b)(9) & §63.10(c): Semiannual Temperature Monitoring Report
Submit semiannual summary report of gas temperature monitoring and recording device.

§63.1355(a) & (b) & §63.10(b) & (c): Recordkeeping Requirements
Keep records for 5 years from the date of occurrence for:

- Applicability determination
- Notifications of performance tests
- Results of performance tests
- SSM records, including actions not consistent with SSM plans
- O&M records, including discrepancies
- VE/opacity inspections
- Temperature monitoring data
- Thermocouple calibrations
- Temperature CMS records
- Semiannual reports and other reports

Clinker Cooler #B001025-2 Requirements
§63.1345(a)(1): Particulate Matter Emission Limit
Limit PM emissions to 0.10 lb/ton of dry feed.

§63.1345(a)(2): Opacity Limit
Limit opacity to 10 %.

§63.1349(b)(1): Initial Performance Test – PM & Opacity
Conduct an initial performance test for PM and opacity using EPA Method 5 for PM and Method 9 for opacity. Test at the highest load or capacity reasonably expected to occur. Minimum 3 separate runs. Minimum sample volume 30 dscf. Back half is not included. Report results in lb/ton feed. Maximum 6-minute average opacity during each of 3 PM tests.

§63.1349(c): Continuing Performance Tests – PM
Repeat performance test for PM every 5 years.

§63.6(e)(3): SSM Plan
Develop startup, shutdown, and malfunction (SSM) plan.

§63.1350(a): O&M Plan
Prepare an operations and maintenance (O&M) plan.

§63.1350(d)(2): Daily Opacity Monitoring
Perform daily opacity monitoring using EPA Method 9 for at least 30 minutes each day. Record the average opacity for each 6-minute period. To be in compliance, no 6-minute period can exceed 10%.

§63.1350(b)(2) & §63.9(e): Daily Opacity Monitoring
Perform daily opacity monitoring using EPA Method 9 for at least 30 minutes each day. Record the average opacity for each 6-minute period. To be in compliance, no 6-minute period can exceed 10%.

§63.1353(b)(2) & §63.9(e): Performance Test Notification Requirements
Notify administrator of performance test and opacity observation at least 60 calendar days before scheduled test date.

§63.1353(b)(5): Performance Test Results (Compliance Status) Notification Requirements
Notification of compliance status within 30 or 60 days after performance test completed.

§63.1354(b)(1) & (2) & §63.10(d)(2)&(3): Reporting Requirements – Test Results
Submit results of performance test and opacity observations within 60 days after completion of test.

§63.1354(b)(4) & §63.10(d)(5)(i): Semiannual Malfunction Report
Submit semiannual report of all malfunctions, SSM actions consistent with SSM plan, and SSM actions not consistent with SSM plan but not resulting in excess emissions, within 30 days following the end of the semiannual period.

§63.1354(b)(5) & §63.10(d)(5)(ii): Deviation Reporting
Notify EPA and MDAQMD within 2 working days of actions not consistent with SSM plan, followed by certified letter within 7 days.

§63.1355(a) & (b) & §63.10(b) & (c): Recordkeeping Requirements
Keep records for 5 years from the date of occurrence for:

- Applicability determination
- Notifications of performance tests
- Results of performance tests
- SSM records, including actions not consistent with SSM plans

- O&M records, including discrepancies
- VE/opacity inspections
- Reports

Raw Mills and Finish Mills Requirements

§63.1347: Opacity Limit

Limit opacity to 10 %.

§63.1349(b)(2): Initial Performance Test – Opacity

Conduct an initial performance test for opacity using EPA Method 9. The duration of the test shall be 3 hours but may be reduced to 1 hour if certain conditions are met.

§63.1349(c): Continuing Performance Tests – Opacity

Repeat performance test for opacity every 5 years.

§63.6(e)(3): SSM Plan

Develop startup, shutdown, and malfunction (SSM) plan.

§63.1350(a): O&M Plan

Prepare an operations and maintenance (O&M) plan.

§63.1350(e): Daily Opacity Monitoring

Perform daily opacity monitoring using EPA Method 22 for six minutes.

§63.1350(e)(1) & (e)(2): Daily Opacity Monitoring

If visible emissions are observed during opacity monitoring, perform corrective actions within 1 hour according to O&M plans, followed by VE inspection using EPA Method 9 within 24 hours.

§63.1353(b)(3) & §63.9(f): Performance Test Notification Requirements

Notify administrator of opacity test at least 30 calendar days before scheduled test date.

§63.1353(b)(5): Performance Test Results (Compliance Status) Notification Requirements

Notification of compliance status within 30 or 60 days after performance test completed.

§63.1354(b)(2) & §63.10(d)(3): Reporting Requirements – Test Results

Submit results of opacity observations before 30 days following the completion of the VE/opacity observation.

§63.1354(b)(4) & §63.10(d)(5)(i): Semiannual Malfunction Report

Submit semiannual report of all malfunctions, SSM actions consistent with SSM plan, and SSM actions not consistent with SSM plan but not resulting in excess emissions, within 30 days following the end of the semiannual period.

§63.1354(b)(5) & §63.10(d)(5)(ii): Deviation Reporting

Notify EPA and MDAQMD within 2 working days of actions not consistent with SSM plan, followed by certified letter within 7 days.

§63.1355(a) & (b) & §63.10(b) & (c): Recordkeeping Requirements

Keep records for 5 years from the date of occurrence for:

- Applicability determination
- Notifications of performance tests
- Results of performance tests
- SSM records, including actions not consistent with SSM plans
- O&M records, including discrepancies
- VE/opacity inspections
- Reports

Other Affected Sources Requirements

§63.1348: Opacity Limit

Limit opacity to 10 %.

§63.1349(b)(2): Initial Performance Test – Opacity

Conduct an initial performance test for opacity using EPA Method 9. The duration of the test shall be 3 hours but may be reduced to 1 hour if certain conditions are met.

§63.1349(c): Continuing Performance Tests – Opacity

Repeat performance test for opacity every 5 years.

§63.6(e)(3): SSM Plan

Develop startup, shutdown, and malfunction (SSM) plan.

§63.1350(a): O&M Plan

Prepare an operations and maintenance (O&M) plan.

§63.1350(a)(4): Continuing Opacity Monitoring

Perform 1-minute opacity monitoring using EPA Method 22 monthly, semi-annually, or annually. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

§63.1353(b)(1): Initial Applicability Notification

If visible emissions are observed during opacity monitoring, perform corrective actions within 1 hour according to O&M plans, followed by VE inspection using EPA Method 9 within 24 hours.

§63.1353(b)(1): Initial Applicability Notification

If visible emissions are observed during opacity monitoring, perform corrective actions within 1 hour according to O&M plans, followed by VE inspection using EPA Method 9 within 24 hours.

§63.1353(b)(3) & §63.9(f): Performance Test Notification Requirements

Notify administrator of opacity test at least 30 calendar days before scheduled test date.

§63.1353(b)(5): Performance Test Results (Compliance Status) Notification Requirements

Notification of compliance status within 30 or 60 days after performance test completed.

§63.1354(b)(2) & §63.10(d)(3): Reporting Requirements – Test Results

Submit results of opacity observations before 30 days following the completion of the VE/opacity observation.

§63.1354(b)(4) & §63.10(d)(5)(i): Semiannual Malfunction Report

Submit semiannual report of all malfunctions, SSM actions consistent with SSM plan, and SSM actions not consistent with SSM plan but not resulting in excess emissions, within 30 days following the end of the semiannual period.

§63.1354(b)(5) & §63.10(d)(5)(ii): Deviation Reporting

Notify EPA and MDAQMD within 2 working days of actions not consistent with SSM plan, followed by certified letter within 7 days.

§63.1355(a) & (b) & §63.10(b) & (c): Recordkeeping Requirements

Keep records for 5 years from the date of occurrence for:

- Applicability determination
- Notifications of performance tests
- Results of performance tests
- SSM records, including actions not consistent with SSM plans
- O&M records, including discrepancies
- VE/opacity inspections
- Reports

Table 2: Summary of Applicable Sections of Subpart LLL & A

Section #	Section Title	Applicability (yes/no)	Exceptions?
§63.1	Applicability	Yes, except	63.1(b)(1) See 63.1340
§63.2	Definitions	Yes	

Section #	Section Title	Applicability (yes/no)	Exceptions?
§63.3	*UNITS AND ABBREVIATIONS*	Yes	
§63.4	Prohibited Activities and Circumvention	Yes	
§63.5	Construction and Reconstruction	Yes	
§63.6	Compliance with Standards & Maintenance Requirements	Yes, except	63.6(h)(5) See LLL
§63.7	Performance Testing Requirements	Yes	
§63.8	Monitoring Requirements	Yes, except 63.8(c)	Data reduction per LLL
§63.9	Notification	Yes, except	63.9(f), not required per 63.1350 (e) & (j)
§63.10	Recordkeeping and Reporting	Yes	
§63.11	Control Device Requirements	No	All sections do not apply
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses of State Agencies and EPA Regional Offices	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information and Confidentiality	Yes	
§63.1340	Applicability and Designation of Affected Sources	Yes	
§63.1341	Definitions	Yes	
§63.1342	Standards: General	Yes	
§63.1343	Standards for Kilns and In-line Kiln/Raw Mills	Yes, except	63.1343(c), (d) & (e)
§63.1344	Operating Limits for Kilns and In-line Kiln/Raw Mills	Yes, except	63.1344(c), (d) & (e)
§63.1345	Standards for Clinker Coolers	Yes	
§63.1346	Standards for New and Reconstructed Raw Material Dryers	No	
§63.1347	Standards for Raw and Finish Mills	Yes	
§63.1348	Standards for Affected Sources Other than Kilns; In-line Kiln/Raw Mills; Clinker Coolers; New and Reconstructed Raw Material Dryers; and Raw and Finish Mills	Yes	
§63.1349	Performance Testing Requirements	Yes, except	63.1349(b)(3)(v) and (vi), (b)(4)
§63.1350	Monitoring Requirements	Yes, except	63.1350(c)(1), (d)(1), (g), (h) & (K)

Section #	Section Title	Applicability (yes/no)	Exceptions?
§63.1351	Compliance Dates	Yes	
§63.1352	Additional Test Methods	Yes	
§63.1353	Notification Requirements	Yes, except	(b)(4)
§63.1354	Reporting Requirements	Yes, except	(b)(7)
§63.1355	Recordkeeping Requirements	Yes	
§63.1356	Exemption from new Source Performance Standards	Yes	
§63.1357	Temporary, Conditioned Exemption from Particulate Matter and Opacity Standards	Yes	
§63.1358	Delegation of Authority	Yes	

D. Public Comment and Notifications

1. Public Comment

This preliminary decision/determination will be released for public comment and publicly noticed on or about TBD. Written comments will be accepted for 30 days from the date of publication of the public notice. Final permits (Authorities to Construct) shall be prepared approximately 15 days after the public comment period has ended so as to allow 45 days for EPA to respond as required by rule 1205, Modifications of Federal Operating Permits, approximately TBD.

Any comments on this Preliminary Decision/Determination shall be forwarded to:

Eldon Heaston, Executive Director
C/O Samuel J. Oktay, Air Quality Engineer
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310

2. Notifications

All correspondence as required by Rules 1207 and 1306 shall be forwarded to (including written and electronic notification to USEPA at the start of the public comment period):

Director, Office of Air Division
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Mr. H. O. "Bud" Biggs
Vice President and Plant Manager,
Mitsubishi Cement Corporation
5808 State Highway 18
Lucerne Valley, CA 92356

Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812