



Permit to Operate 12315
And
Part 70 Minor Modification 12315

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EQUIPMENT OWNER:

Celite Corporation

205129

EQUIPMENT OPERATOR:

Celite Corporation

EQUIPMENT LOCATION:

2500 Miguelito Rd, Lompoc

STATIONARY SOURCE/FACILITY:

Celite Corporation

SSID: 01735

FID: 00012

EQUIPMENT DESCRIPTION:

The equipment subject to this permit is listed in Table 6 at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

Celite currently mines and processes diatomaceous earth ("DE") at its Lompoc Plant. Celite operates four product lines (3, 5, 6, and 7 Systems) each with "wet end" and "dry end" processing. Wet diatomaceous earth crude is surface mined, crushed, milled and dried and/or calcined at high temperatures. The dried product is classified into a variety of grades and bagged or bulk loaded for shipment to distributors and customers. The mobile crude ore crushing and screening plant ("Mobile Plant") allows Celite to remove waste during an early stage of the process and maximizes downstream drying and classification performance due to the reduced size of the crude ore by crushing and screening at the quarry. This early processing of the crude ore results in lower cost from energy savings and reduced equipment wear rate. Control of fugitive particulate matter ("PM") emissions is accomplished through wet suppression, material handling in shrouded and contained enclosures, and plant operating

limitations. This Permit to Operate also authorizes an increase in the maximum allowable hours per year of operation for the mobile plant. The Celite Facility ID is 00012 and the Stationary Source ID is 1735.

CONDITIONS:

9.A Standard Administrative Conditions

In case of discrepancy between the wording of a condition and the applicable APCD rule, the wording of the rule shall control. The following federally-enforceable administrative permit conditions apply to the Celite Corporation Lompoc Plant:

A.1 Compliance with Permit Conditions

- (a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and 9.C.
- (b) This permit does not convey property rights or exclusive privilege of any sort.
- (c) Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- (d) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.
- (f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
 - (i) compliance with the permit, or
 - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action. [*Re: 40 CFR Part 70.6, APCD Rules 1303.D.1*]
- (g) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible.

A.2 Emergency Provisions. The permittee shall comply with the requirements of the APCD, Rule 505 (Upset/Breakdown rule) and/or APCD Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the APCD, in writing, a “notice of emergency” within 2 days of the emergency. The “notice of emergency” shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6, APCD Rule 1303.F*]

A.3 Compliance Plan.

- (a) The permittee shall comply with all federally-enforceable requirements that become applicable during the permit term, in a timely manner, as identified in the Compliance Plan.

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- (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards. [*Re: APCD Rule 1302.D.2*]
- A.4 **Right of Entry.** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:
- (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
 - (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
 - (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times. Monitoring of emissions can include source testing. [*Re: APCD Rule 1303.D.2*]
- A.5 **Payment of Fees.** The permittee shall reimburse the APCD for all its Part 70 permit processing and compliance expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the APCD and the USEPA pursuant to section 502(a) of the Clean Air Act. [*Re: APCD Rules 1303.D.1 and 1304.D.11, 40 CFR 70.6*]
- A.6 **Prompt Reporting of Deviations:** The permittee shall submit a written report to the APCD documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7 days after discovery of the violation, but not later than 180-days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation, 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to APCD in accordance with Rule 505. *Breakdown Conditions*, or Rule 1303.F *Emergency Provisions*. [APCD Rule 1303.D.1, 40 CFR 70.6(a) (3)]
- A.7 **Reporting Requirements/Compliance Certification:** The permittee shall submit compliance certification reports to the USEPA and the Control Officer every six months. These reports shall be submitted on APCD forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1 and March 1, respectively, each year. Supporting monitoring data shall be submitted in accordance with the “Semi-Annual Monitoring/Compliance Verification Report” condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c*]

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A.8 **Federally-Enforceable Conditions.** Each federally-enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the APCD-only enforceable section of this permit are federally-enforceable or subject to the public/USEPA review. [Re: CAAA, § 502(b)(6), 40 CFR 70.6]

A.9 **Recordkeeping Requirements.** Records of required monitoring information shall include the following:

- (a) The date, place as defined in the permit, and time of sampling or measurements;
- (b) The date(s) analyses were performed;
- (c) The company or entity that performed the analyses;
- (d) The analytical techniques or methods used;
- (e) The results of such analyses; and
- (f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the APCD upon request. [Re: APCD Rule 1303.D.1.f, 40CFR70.6(a)(3)(ii)(A)]

A.10 **Conditions for Permit Reopening.** The permit shall be reopened and revised for cause under any of the following circumstances:

- (a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30-day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.
- (b) Inaccurate Permit Provisions: If the APCD or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.
- (c) Applicable Requirement: If the APCD or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally-enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen and revise/revoke/reissue a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exists.

If a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [Re: 40 CFR 70.7, 40 CFR 70.6]

9.B. Generic Conditions

In case of discrepancy between the wording of a condition and the applicable APCD rule, the wording of the rule shall control. The generic conditions listed below apply to all emission units regardless of their category or emission rates. These conditions are federally enforceable. Compliance with these requirements is discussed in Section 3.

B.1 Circumvention (Rule 301): A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of APCD Rule 303. [Re: APCD Rule 301]

B.2 Visible Emissions (Rule 302). Celite shall not discharge into the atmosphere from any single source of emission any air contaminants for a period or periods aggregating more than three minutes in any one hour which is:

- (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2(a) above.

Compliance shall be determined by visible emission evaluations by certified observers. All visible emission observation and inspection sheets and records shall be maintained consistent with the recordkeeping condition of this permit. [Ref: APCD Rule 302].

B.3 Nuisance (Rule 303): No pollutant emissions from any source at the permittee shall create nuisance conditions. Operations shall not endanger health, safety or comfort, nor shall they damage any property or business. [Re: APCD Rule 303]

B.4 PM Concentration – Northern Zone (Rule 304). Celite shall not discharge into the atmosphere, from any source, particulate matter in excess of 0.3 grain per cubic foot of gas as standard conditions. [Ref: APCD Rule 304].

9.C Requirements and Equipment Specific Conditions

This section includes non-generic federally enforceable conditions including emissions and operation limits, monitoring and recordkeeping and reporting for each specific equipment group. This section may also contain other non-generic requirements.

C.1 Emissions Limitations. The mass emissions of PM and PM₁₀ from the equipment permitted herein shall not exceed the values listed in Table 3 and Table 4. Compliance shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.

C.2 Operating Limitations. The equipment permitted herein is subject to the following operational restrictions:

- a. Visible Emissions: Fugitive particulate emissions from equipment permitted herein shall not exceed 10% opacity. Compliance with this condition shall be based on the monitoring conditions of this permit.
- b. Feedrate: Crude ore crushing and screening plant feed-rate as measured at belt scale BS014 (Dev No 110488) shall not exceed 322 wet short tons per hour (293 wet metric tons per hour).
- c. Crude Ore Moisture Content: The moisture content of crude ore handled and stored by this crushing and screening plant shall be greater than 34 % by weight and shall be maintained such that visible emissions are not observed, as specified in Condition 9.C.2.a and 9.C.2.g. requiring that fugitive particulate emissions shall not exceed 10% opacity. If crude ore moisture content is equal to or less than 34 %, Celite shall perform a visible inspection of the entire process employing EPA Method 22. If any visible emissions are detected, Celite shall implement corrective actions as defined in the *Crude Ore Fugitive Emission Dust Monitoring Plan*. Celite shall notify the APCD by the end of the next business day of the results of the EPA Method 22 visible inspection that detects visible emissions from the plant and of any corrective action taken as required by this permit condition.
- d. Operating Hours: Operation of Mobile Plant equipment including grizzly, crusher, vibrating screen, and all conveyor belts shall not exceed 4,380 hours per calendar year.
- e. Wet Suppression of Fugitive PM Emissions from Transfer Points (BACT): Fugitive PM/PM₁₀ from conveyor and hopper material handling transfer points, crusher, and vibrating screen shall be controlled with wet suppression at all times crude ore processing equipment is operated as described in the *Crude Ore Fugitive Emission Dust Monitoring Plan*. Specified plant transfer points and wet suppression equipment are described in Table 5A of this permit. Pumps, flow lines and nozzles shall be maintained in good operating order free of mineral buildup obstructions to proper water flow and effective spray pattern.
- f. Control of Fugitive PM Emissions Through Enclosed Crude Material Handling and Transfer Equipment (BACT): Fugitive PM/PM₁₀ from conveyors, crusher, and vibrating screen, and hoppers shall be controlled as described in the *Crude Ore Fugitive Emission Dust Monitoring Plan*. Specified plant equipment is described in Table 5B of this permit. Enclosures shall be maintained in good operating order free of tears, gaps, or other openings to the atmosphere.

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- g. Visible Emissions from Storage Piles: Fugitive particulate emissions from the surface of any crude ore product or reject storage pile permitted herein shall not exceed 10% opacity. Compliance with this condition shall be based on the monitoring conditions of this permit and as described in the *Crude Ore Fugitive Emission Dust Monitoring Plan*.
- h. Storage Pile Height: The height of each crude product storage pile (Dev. No.s 110561 and 110562) shall not exceed 40 feet from ground level. The height of the reject storage pile (Dev. No. 110563) shall not exceed 15 feet from ground level.
- i. Wet Suppression Water Flow: Water pressure in all flow lines serving foggers and spray nozzles shall operate at a minimum pressure of 800 psig. Flow in the water supply lines to nozzles controlling the particulate emissions from each plant transfer point shall not be less than the sum of all spray bar water flows(as shown in Table 5A) for the equipment in concurrent operation.

C.3 **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:

- a. Celite shall monitor wet short tons per hour feed-rate to the crude ore crushing and screening plant at belt scale BS014 (APCD Dev No 110488) measuring total Mobile Plant throughput. Celite shall operate APCD-approved product feed rate monitoring equipment and procedures.
- b. Once each operating day, Celite shall perform a fugitive emission inspection for a one-minute period on the crude ore crushing and screening plant equipment when operating. If visible emissions are detected during any inspection, then a USEPA Method 9 visible emission evaluation (VEE) shall immediately be performed for a six-minute period. Celite staff certified in VEE shall perform the VEE and maintain logs in accordance with EPA Method 9. The Method 9 shall be performed in response to visible emissions and is not meant to apply to transient occurrences such as dumping crude into the grizzly hopper.
- c. Water line pressure and water flow to each wet suppression control location shall be measured and displayed by a flow meter approved by the APCD in the *Crude Ore Fugitive Emission Control Plan*.
- d. Moisture content of crude ore processed by the Mobile Plant shall be monitored continuously at the crude belt after the crude bins. Moisture content readings used for compliance with this permit shall be recorded and reported on a fifteen (15) minute clock average. Each crushed ore storage pile shall be evaluated weekly to ensure that an adequate crust exists over the surface. If there is not an adequate crust, additional water will be applied to the pile. Compliance with moisture content of the crude shall also be based on an ad hoc sampling of ore from the process line and from the crushed ore storage piles. The frequency and location of such ad hoc sampling shall be specified by the APCD.
- e. Celite shall conduct offsite fugitive dust monitoring as required in permit condition 7.
- f. Celite shall conduct a daily inspection of the plant when operating to verify that pumps, flow lines and nozzles are maintained in good operating order free of mineral buildup obstructions to proper water flow and effective spray pattern and that all enclosures are maintained in good operating order free of tears, gaps, or other openings to the atmosphere.

- g. Within 24 hours of startup of each one of the following transfer conveyors (Dev. No.s 110497, 110498 and 110499), Celite shall notify the APCD of startup and arrange for witnessing of the initial Method 9 inspection by the APCD. Within 7 days of startup, Celite shall complete the initial Method 9 opacity inspection.

C.4 **Recordkeeping.** For any condition that requires for its effective enforcement, inspection of facility records or equipment by the APCD or its agents, Celite shall make such records available or provide access to such equipment upon notice from the APCD. Access to facilities shall mean access consistent with the California Health and Safety Code Section 41510 and Clean Air Act Section 114(a). At a minimum, the following records (electronic or manual) shall be maintained by the permittee for a minimum of five (5) years and shall be made available to the APCD upon request:

- a. Crude ore crushing and screening plant maximum feed-rate on a daily basis in wet short tons per hour as measured by belt scale BS014 (APCD Dev. No. 110488).
- b. Celite shall maintain records of crude ore moisture content from all samples in percent by weight. The continuous moisture samples will be recorded as part of the pi server. Celite shall maintain records of any EPA Method 22 triggered by moisture content below permitted limits in permit condition 9.C.2 and any corrective action taken as a result of recording the presence of visible emissions.
- c. Celite shall record the date, time, and initials of responsible person conducting the plant fugitive emissions inspections and whether or not daily visible emissions are present or the date and initials of a responsible person attesting that the plant equipment is non-operational and no storage pile activity occurred for the entire day.
- d. Each quarterly Method 9 opacity reading report shall contain the name and most recent Method 9 certification date of the reader, the name and APCD Device Number of the equipment observed, the date and time of the reading, and the reading.
- e. Celite shall maintain written records of wind speed and direction monitor calibrations, maintenance work and breakdowns. Records shall include dates, times, descriptions of events and the initials of the responsible personnel.
- f. Celite personnel shall maintain electronic records of the wind speed and direction monitored daily to confirm verification of the monitor's operation and this data shall be stored in the Celite pi server or local data logger.
- g. Celite shall maintain records of alarm events, except during scheduled Celite Holidays if no control person is on duty. During scheduled Celite Holidays, if no control person is on duty, the front gate security personnel shall initiate and record corrective actions if necessary. Records shall include date and time of alarm, initials of response personnel, and description of conditions. When corrective action is required Celite shall record the start and end times of corrective action and the type(s) of corrective action taken.
- h. Documentation of daily offsite fugitive dust visual surveys.

These records are required to verify compliance with the conditions of this permit. The Control Officer may require a revised recordkeeping format if the format used is inadequate to determine compliance. The records shall be kept on file at the Celite Lompoc facility for at least five years.

- C.5 **Reporting.** On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the APCD. The report must list all the data listed as follows:
- a. Feed Rate. Summaries of the daily and monthly throughputs of the crude ore crushing and screening plant in units of wet short tons/hour.
 - b. Moisture Content. Minimum daily readings of the fifteen minute averages from the continuous moisture content monitor and results from all ad hoc sampling shall be reported. Celite shall also report any EPA Method 22 triggered by moisture content below permitted limits in permit condition 9.C.2.c and any corrective action taken as a result of recording the presence of visible emissions.
 - c. Visible Emission Observations. Results of daily visible emission observation for which visible emissions were detected for all permitted equipment.
 - d. Visible Emission Inspections (Method 9). For all equipment and storage piles, the results of the visible emission inspections obtained by the use of USEPA Method 9, which include the date and time of reading, name of reader, most recent Method 9 certification date of reader, equipment name and APCD Device Number, individual interval readings required by Method 9, and the final reading.
 - e. Hours of Operation. On a daily and monthly basis, the Mobile Plant operating hours.
- C.6 **Best Available Control Technology (BACT).** The permittee shall apply emission control technology and plant design measures that represent Best Available Control Technology ("BACT") to the operation of the equipment/facilities as described in this permit and the APCD's Permit Evaluation for this permit. Table 5 and the Emissions, Operational, Monitoring, Recordkeeping and Reporting Conditions of this permit define the specific control technology and performance standard emission limits for BACT. The BACT shall be in place, and shall be operational at all times, for the life of the project. BACT related monitoring, recordkeeping and reporting requirements are defined in those specific permit conditions.
- The need for additional controls shall be evaluated by the APCD and shall be implemented by Celite if controls listed in Table 5 are determined to be ineffective.
- C.7 **Offsite Fugitive Dust Monitoring.** "Offsite Fugitive Emissions" shall be defined as visible fugitive emissions from Celite's crude ore crushing, screening, handling, and storage operations permitted herein that cross or have the imminent potential to cross Celite property boundaries and enter adjacent lands not owned or operated by Celite.
- a. Visual Survey: Celite shall conduct a visual survey of the Plant processing area and the product storage piles for a minimum of 20 minutes each day to identify any Offsite Fugitive Emissions.

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During daylight hours, when wind speeds measured by Celite's on site monitor exceed 20 miles per hour, Celite shall conduct a visual survey once every two hours until two consecutive hours of wind alarm data show no occurrences of wind speeds over the 20 mph threshold. Visual surveys shall not be required on days which receive (or on the day immediately following any day which receives) at least 1/4 inch of precipitation. Precipitation data will be obtained from Celite's on site rain gauge (or the Santa Barbara County Flood Control District's "Miguelito Debris Basin" rain gauge if Celite's is inoperable).

- b. Wind Speed and Direction Monitor: Celite shall operate a wind speed and direction monitor at the location approved in the *Offsite Fugitive Dust Monitoring Plan*. Celite shall maintain the wind speed and direction monitor and recorder in continuous operation, except while the monitor is being calibrated. The monitor shall be calibrated at least every six months in accordance with manufacturers recommended procedures. A malfunctioning/inoperable monitor shall be repaired or replaced as soon as practicable, but no later than 7 calendar days from the malfunction. During any period that the monitor is inoperable, Celite shall conduct a 20-minute visual survey twice per shift each day until the monitor is back in service.
- c. Daily Monitor Operation Check: Celite shall check the wind speed and direction monitor daily to verify its operating condition. Celite shall notify the APCD (via fax or E-mail) of any monitor malfunction before the end of the next business day after the malfunction. No monitor or recorder failure shall constitute a permit violation provided that Celite maintains a record of the failure (description, time and date), notifies the APCD as specified above and repairs or replaces the monitor no later than 7 calendar days from the malfunction.
- d. Alarm System: Celite shall operate and maintain a visual and/or audio alarm system designed to instantaneously notify the control person when wind conditions in the storage pile area are gusting over 20 mph. During scheduled Celite Holidays (when a control person is not on duty), the front gate security personnel will perform a five-minute visual survey twice per shift during daylight hours.
- e. Corrective Action: Corrective action shall be promptly taken if Offsite Fugitive Emissions are identified by Celite visual surveys, or by APCD inspectors. If Offsite Fugitive Emissions are identified and reported by a member of the public directly to Celite (or to Celite via the APCD), the incident will be investigated. If Offsite Fugitive Emissions are verified, corrective actions will be initiated. Corrective action shall at a minimum consist of a cessation of all crude crushing, screening and handling operations determined by Celite to be causing the Offsite Fugitive Emissions until water has been applied in sufficient amounts by the Mobile Plant wet suppression system and by water trucks (or other similar watering equipment) to road and Plant surfaces or the implementation of other fugitive dust control methods to mitigate to the maximum extent feasible Offsite Fugitive Emissions. Watering and other corrective actions initiated by Celite may be discontinued upon Celite presenting evidence to the APCD that conditions that initiated Offsite Fugitive Emissions have ceased. Mobile Plant operations without these corrective actions may resume upon APCD approval. In no case shall the plant operate when wind speed gusts are greater than 30 mph without APCD approval. Emissions that are obviously transient in nature (i.e., generated by mobile equipment not engaged in crude handling or storage pile disturbance activities) and have ceased within ten minutes, no corrective action is required. The Plant Manager shall be responsible for overall implementation, including

corrective action, and shall review applicable portions of this procedure with individual staff members that have a role in the implementation.

- C.8 **Public Nuisance Abatement.** If any operations of the crude ore crushing and screening plant permitted herein causes or attributes to a public nuisance as defined by APCD Rule 303, Celite shall cease all operations of the Plant and submit an application for a modification to the Plant equipment that will permanently eliminate the cause of the public nuisance. Plant modifications may include but not be limited to additional wet or chemical suppression controls, erecting wind breaks, covering all exposed product on conveyor belt and vibrating screen surfaces, installation of fabric filter controls, enclosing or covering storage piles, paving of vehicle access roads and Plant work areas and reducing mobile vehicle speeds within the plant area. Plant operations shall not continue without APCD approval.
- C.9 **Documents Incorporated by Reference.** The documents listed below, including any APCD approved updates thereof, are incorporated herein by reference and shall have the full force and effect of a permit condition for this permit. These documents shall be implemented for the life of the Project and shall be made available to APCD inspection staff upon request.
- a. Offsite Fugitive Dust Monitoring Plan (approved August 18, 2008)
 - b. Crude Ore Fugitive Emission Control Plan (approved August 4, 2008)
 - c. Hardware and Software Plan (approved November 4, 2008)
- C.10 **Modifications.** Prior to making any modifications to the crude ore crushing and screening plant, including tie-ins to any other processing equipment or processing lines at the facility, Celite shall obtain an Authority to Construct (ATC) permit or modification.
- C.11 **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the APCD's project file) and the APCD's analyses under which this permit is issued as documented in the Permit Evaluation prepared for and issued with the permit.
- C.12 **Equipment Maintenance.** The equipment listed in this permit shall be properly maintained and kept in good condition at all times. The equipment manufacturer's maintenance manual, maintenance procedures and/or maintenance checklists (if any) shall be kept on site.
- C.13 **Compliance.** Nothing contained within this permit shall be construed as allowing the violation of any local, state or federal rules, regulations, air quality standards or increments.
- C.14 **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force.
- C.15 **Conflict Between Permits.** The requirements or limits that are more protective of air quality shall apply if any conflict arises between the requirements and limits of this permit and any other permitting actions associated with the equipment permitted herein.

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- C.16 **Access to Records and Facilities.** As to any condition that requires for its effective enforcement the inspection of records or facilities by the APCD or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the APCD. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.
- C.17 **Emission Factor Revisions.** The APCD may update the emission factors for any calculation based on USEPA AP-42 or APCD emission factors at the next permit modification or permit reevaluation to account for USEPA and/or APCD revisions to the underlying emission factors.
- C.18 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.*
- C.19. **Reimbursement of Costs.** All reasonable expenses, as defined in APCD Rule 210, incurred by the APCD, APCD contractors, and legal counsel for the activities listed below that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210. Reimbursable activities include work involving: permitting, compliance, CEMS, modeling/AQIA, ambient air monitoring and air toxics.

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9.D APCD-Only Conditions

The following section lists permit conditions that are not enforceable by the USEPA or the public. However, these conditions are enforceable by the APCD and the State of California. These conditions are issued pursuant to APCD Rule 206 (*Conditional Approval of Authority to Construct or Permit to Operate*), which states that the Control Officer may issue an operating permit subject to specified conditions. Permit conditions have been determined as being necessary for this permit to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any condition specified pursuant to the provisions of Rule 206 shall be a violation of that rule, this permit, as well as any applicable section of the California Health & Safety Code.

D.1 Permit Activation. All aspects of this permit are enforceable by the APCD and the State of California upon the issuance date stamped below. The Part 70 aspects of this permit are not final until:

- (a) The USEPA has provided written comments to the APCD and these comments require no modification to this permit. The APCD will issue a letter stating that this permit is a final Part 70 permit. The effective date that this permit will be considered a final Part 70 permit will be the date stamped on the APCD's letter.
- (b) After the USEPA has provided the APCD written comments that require a modification to this permit, the APCD will modify this permit to address the USEPA's comments and issue the Part 70 permit as final. The re-issued permit will supersede this permit in its entirety.

AIR POLLUTION CONTROL OFFICER

Date

Notes:

(1) Next Reevaluation Due: March 2010

Attachment: Permit Evaluation for PTO No. 12315

Table 1
Operating Equipment Description
Crude Ore Crushing and Screening Plant: PTO 12315

Equipment Description		Equipment Specification		Operating Schedule		
Equipment Item	APCD DeviceNo	Size	Units	On-line		
				(hr/day)	(hr/qtr)	(hr/yr)
Grizzly Feeder	110481	178	short tons/hour	24	2190	4380
Screening	110489	178	short tons/hour	24	2190	4380
Conveyors (10)	Note 1	178	short tons/hour	24	2190	4380
Crusher	110486	178	short tons/hour	24	2190	4380
Raw Crude Transfer to Ground Storage	NA	178	short tons/hour	24	2190	4380
Oversize Transfer to Reject Pile	110493	17	short tons/hour	24	2190	4380
Storage Pile Radial Stacking	110500	161	short tons/hour	24	2190	6570
Storage Piles (4) Fugitive Emissions	110561/110562	9	acres surface area	24	2190	8760

Notes

1. Conveyors consist of APCD Device Numbers 110483, 110484, 110487, 110490, 110491, 110492, 110495, 110497, 110498 and 110499.

Table 2
Emission Factors
Crude Ore Crushing and Screening Plant: PTO 12315

Table 2.a. EMISSION FACTORS FOR CRUSHING, SCREENING, AND HANDLING EQUIPMENT

Source	EF Total PM	EF Total PM ₁₀	Units	EF Reference
	Controlled	Controlled		
Grizzly Feeder	1.40E-04	4.60E-05	lb/ton material	EPA FIRE 6.25 Oct 2004, Misc Handling, Wet Suppression
Screening	3.60E-03	2.20E-03	lb/ton material	EPA FIRE 6.25 Oct 2004, Fines Screening Wet Suppression
Conveyors	1.40E-04	4.60E-05	lb/ton material	EPA FIRE 6.25 Oct 2004, Misc Handling, Wet Suppression
Crusher	2.20E-03	7.40E-04	lb/ton material	EPA FIRE 6.25 Oct 2004, Secondary Crushing, Wet Suppression

Table 2.b EMISSION FACTOR FOR DROP OPERATIONS ¹

Source	Pollutant	k ² dimensionless	U mean wind speed, mph	M, %moisture	EF, lbs/ton material	EF Reference
Raw Crude Transfer to Ground Storage	PM	0.74	5	45	3.03E-05	EPA AP-42 Section 13.2.4
	PM ₁₀	0.35	5	45	1.43E-05	EPA AP-42 Section 13.2.4
Oversize Transfer to Reject Pile	PM	0.74	5	45	3.03E-05	EPA AP-42 Section 13.2.4
	PM ₁₀	0.35	5	45	1.43E-05	EPA AP-42 Section 13.2.4
Storage Pile Radial Stacking	PM	0.74	5	45	3.03E-05	EPA AP-42 Section 13.2.4
	PM ₁₀	0.35	5	45	1.43E-05	EPA AP-42 Section 13.2.4

Note: 1 Drop Operation Equation $E = k(0.0032) ((U/5)^{1.3} / (M/2)^{1.4})$ from AP-42 Section 13.2.4

2 Factor k particle size multiplier default values found in AP-42 Section 13.2.4

Table 2.c. EMISSION FACTOR FOR STORAGE PILES ¹

Total Storage Pile Surface Area	9	acres	Ref: ATC application attachment 3
	392040	ft ²	
	36422.1	m ²	
Threshold Friction Velocity (u _t)	1.12	m/s	EPA AP-42 Table 13.2.5-2 for Uncrusted coal pile
Fastest mile (u ₁₀₊), average	8	mph	Ref: ATC application sec 3.1
	3.58	m/s	
Fastest mile (u ₁₀₊), worst case day	30	mph	Ref: ATC application sec 3.1
	13.41	m/s	
% of annual operations during worst case wind	3	%	Ref: ATC application sec 3.1
% of annual operations during average wind	97	%	
PM Aerodynamic Particule Size (k)	0.6	dimensionless	
PM10 Aerodynamic Particule Size (k)	0.5	dimensionless	

Pile subarea, pile profile	Ratio of surface wind speed (u _s) to approach wind speed (u _r)	% pile surface area	Surface wind speed distribution, avg u ₁₀₊ = 3.58 m/s	Surface wind speed distribution, worst case u ₁₀₊ = 13.41 m/s	Equivalent friction velocity, avg u _{s+}	Equivalent friction velocity, worst case u _{s+}	Frequency of Disturbance	Erosion potential between disturbances, avg u*	Erosion potential between disturbances, worst case u*	PM Emission Factor, worst case wind operation	PM10 Emission Factor, worst case wind operation
Pile B3	us/ur	%	us+	us+	u*	u*	N	P	P	gm/m ² /yr	gm/m ² /yr
Figure 13.2.5-2	Table 13.2.5-3	Table 13.2.5-3	Equation 6	Equation 6	Equation 7	Equation 7		Equation 3 ²	Equation 3 ²	Equation 2	Equation 2
0.2a	0.2	3	0.716	2.682	0.0716	0.2682	365	0.00	0.00	0.00	0.00
0.2b	0.2	25	0.716	2.682	0.0716	0.2682	365	0.00	0.00	0.00	0.00
0.2c	0.2	0	0.716	2.682	0.0716	0.2682	365	0.00	0.00	0.00	0.00
0.6a	0.6	28	2.148	8.046	0.2148	0.8046	183	0.00	0.00	0.00	0.00
0.6b	0.6	26	2.148	8.046	0.2148	0.8046	365	0.00	0.00	0.00	0.00
0.9	0.9	14	3.222	12.069	0.3222	1.2069	183	0.00	2.61	8.58	7.15
1.1	1.1	4	3.938	14.751	0.3938	1.4751	183	0.00	16.19	53.19	44.32

- Notes:
1. Reference EPA AP-42 Section 13.2.5 Industrial Wind Erosion
 2. If u* < u_t, P=0.

Table 3
Short Term Emissions
Crude Ore Crushing and Screening Plant: PTO 12315

Equipment Description		NOx		ROC		CO		SOx		PM		PM10		Federal Enforceability
Equipment Item	APCD DeviceNo	lb/hr	lb/day	lb/hr	lb/day									
Grizzly Feeder	110481	--	--	--	--	--	--	--	--	0.02	0.60	0.01	0.20	FE
Screening	110489	--	--	--	--	--	--	--	--	0.64	15.38	0.39	9.40	FE
Conveyors (10)	See Table 1	--	--	--	--	--	--	--	--	0.25	5.98	0.08	1.97	FE
Crusher	110486	--	--	--	--	--	--	--	--	0.39	9.40	0.13	3.16	FE
Raw Crude Transfer to Ground Storage	NA	--	--	--	--	--	--	--	--	0.01	0.13	0.00	0.06	FE
Oversize Transfer to Reject Pile	110493	--	--	--	--	--	--	--	--	0.00	0.01	0.00	0.01	FE
Storage Pile Radial Stacking	110500	--	--	--	--	--	--	--	--	0.00	0.12	0.00	0.06	FE
Storage Piles (4) Fugitive Emissions	110561/110562	--	--	--	--	--	--	--	--	1.46	1.46	1.22	1.22	FE
TOTAL PLANT EMISSIONS		0.00	2.78	33.08	1.84	16.06								

Table 4
Long Term Emissions
Crude Ore Crushing and Screening Plant: PTO 12315

Equipment Description		NOx		ROC		CO		SOx		PM		PM10		Federal Enforceability
Equipment Item	APCD DeviceNo	TPQ	TPY											
Grizzly Feeder	110481	--	--	--	--	--	--	--	--	0.03	0.05	8.97E-03	1.79E-02	FE
Screening	110489	--	--	--	--	--	--	--	--	0.70	1.40	4.29E-01	8.58E-01	FE
Conveyors (10)	See Table 1	--	--	--	--	--	--	--	--	0.27	0.55	8.97E-02	1.79E-01	FE
Crusher	110486	--	--	--	--	--	--	--	--	0.43	0.86	1.44E-01	2.88E-01	FE
Raw Crude Transfer to Ground Storage	NA	--	--	--	--	--	--	--	--	0.01	0.01	2.79E-03	5.59E-03	FE
Oversize Transfer to Reject Pile	110493	--	--	--	--	--	--	--	--	0.00	0.00	2.67E-04	5.33E-04	FE
Storage Pile Radial Stacking	110500	--	--	--	--	--	--	--	--	0.01	0.02	2.53E-03	7.58E-03	FE
Storage Piles (4) Fugitive Emissions	110561/110562	--	--	--	--	--	--	--	--	0.03	0.13	2.78E-02	1.11E-01	FE
TOTAL PLANT EMISSIONS		0.00	1.48	3.02	0.71	1.47								

Table 5
Best Available Control Technology

Emission Source	Pollutant	BACT Technology	BACT Performance Standard
Product transfer, handling, and conveyance	PM/PM ₁₀	Enclosed transfer points controlled by wet suppression as described in Tables 5A and 5B.	Visible emissions less than 10% opacity

**Table 5A - BACT Wet Suppression Fugitive Dust Control
Crude Ore Crushing and Screening Plant: PTO 12315**

APCD Device No.	Celite ID	Transfer Point Description	Fugitive Dust Control	Spray bar water flow, gpm
110482	FH011	Grizzly Feed to Crusher Hopper	Four sided enclosed hopper controlled by a spray bar with sixteen (16) spray nozzles located around the top of the feeder hopper	7.2
110483	FB011	Feeder Belt - Impact point after FH011	One (1) spray bar with 10 fog nozzles at impact point after FH101 hopper outlet	0.22
		Feeder Belt - Head Pulley	One (1) spray bar with 10 fog nozzles located at head pulley	0.22
110484	CB012	Conveyor Belt - Impact point after FB011	One (1) spray bar with 8 fog nozzles at impact point after FH101 hopper outlet	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
110487	CB014	Conveyor Belt - Impact point after Impact Crusher CR013	One (1) spray bar with 8 fog nozzles at impact point after FH101 hopper outlet	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
110490	FB016	Feeder Belt - Impact point after Double Vibratory Screen VS015 Discharge Hopper	One (1) spray bar with 10 fog nozzles at impact point after VS015 hopper outlet	0.22
		Feeder Belt - Head Pulley	One (1) spray bar with 10 fog nozzles located at head pulley	0.22
		Feeder Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110491	CB020	Reject Conveyor Belt - Impact point after Double Vibratory Screen VS015 Deck	One (1) spray bar with 8 fog nozzles at impact point after VS015 deck	0.18
		Reject Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
110492	CB021	Reject Conveyor Belt - Impact point after Reject Conveyor CB020	One (1) spray bar with 8 fog nozzles at impact point after Reject Conveyor CB020	0.18
		Reject Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
110493	ST022	Reject Stacker Belt - Impact point after Reject Conveyor CB021	One (1) spray bar with 8 fog nozzles at impact point after CB021	0.18
		Reject Stacker Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Reject Stacker Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110495	CB030	Conveyor Belt - Impact point after Feeder Belt FB016	One (1) spray bar with 8 fog nozzles at impact point after FB016	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Conveyor Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110497	CB031	Conveyor Belt - Impact point after Conveyor Belt CB030	One (1) spray bar with 8 fog nozzles at impact point after CB030	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Conveyor Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110498	CB032	Conveyor Belt - Impact point after Conveyor Belt CB031	One (1) spray bar with 8 fog nozzles at impact point after CB031	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Conveyor Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110499	CB033	Conveyor Belt - Impact point after Conveyor Belt CB032	One (1) spray bar with 8 fog nozzles at impact point after CB032	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Conveyor Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44
110500	ST034	Telescoping Radial Stacker Belt - Impact point after Conveyor Belt CB033	One (1) spray bar with 8 fog nozzles at impact point after CB033	0.18
		Conveyor Belt - Head Pulley	Two (2) spray bars each with 8 fog nozzles located at head pulley	0.36
		Conveyor Belt - Discharge	One (1) spray ring with 20 fog nozzles located at conveyor head pulley discharge	0.44

**Table 5B - BACT Enclosed Crude Material Handling and Transfer
Crude Ore Crushing and Screening Plant: PTO 12315**

Emission Source	Pollutant	BACT Technology	BACT Performance Standard
Grizzly/ Crusher Feed Hopper	PM/PM ₁₀	Loading hopper to grid enclosed by four sides, totally enclosed chute to feeder belt with adjustable belt skirting to keep skirt edge in continuous contact with moving belt surface, dust curtain to prevent dust emission from exiting from outlet opening and wet suppression per Table 5A.	Visible emissions less than 10% opacity
All Conveyor Transfer Points - Head Pulley Area (see below for conveyor transfer point from ST034 to storage piles)	PM/PM ₁₀	Fully enclosed head box with inlet and outlet dust curtains to prevent dust emissions exiting openings, adjustable belt skirting to keep skirt edge in continuous contact with belt surface. belt scraper to minimize carry back and wet suppression per Table 5A. Drop distances from head pulley to receiving hopper of the following conveyor shall be equal to or less than three feet.	Visible emissions less than 10% opacity
All Conveyor Transfer Points - Tail Box Receiver Area	PM/PM ₁₀	"Rock box" design with muckshelves to direct product to center portion of belt impact area, at least a 30 degree belt troughing, adjustable belt skirting to keep skirt edge in continuous contact with belt surface. covered area extending back behind the chute for approximately one belt width, fully enclosed skirtboard enclosure extending at least three beltwidths downstream of impact area, dust curtain over exit to prevent dust from escaping through opening, complete covering of interface between head box of previous conveyor and receiving hopper, and wet suppression per Table 5A.	Visible emissions less than 10% opacity
CB012 Conveyor Head Pulley Transfer to Crusher Inlet	PM/PM ₁₀	Fully enclosed crusher inlet chute with inlet dust curtain to prevent dust emissions from escaping through opening, adjustable belt skirting to keep skirt edge in continuous contact with belt surface, enclosed inlet chute made from heavy rubber strips backed by free hanging metal chains for additional support, belt scraper to minimize carry back and wet suppression per Table 5A.	Visible emissions less than 10% opacity
Crusher Discharge Chute to Conveyor CB014	PM/PM ₁₀	Fully enclosed crusher outlet chute, fully enclosed skirtboard enclosure extending at least three beltwidths downstream of impact area, adjustable belt skirting to keep skirt edge in continuous contact with belt surface, dust curtain over exit to prevent dust from escaping through opening, and wet suppression per Table 5A.	Visible emissions less than 10% opacity
CB014 Conveyor Head Pulley Transfer to Vibrating Screen Inlet	PM/PM ₁₀	Fully enclosed vibrating screen inlet chute with inlet dust curtain to prevent dust emissions from escaping through opening, adjustable belt skirting to keep skirt edge in continuous contact with belt surface, belt scraper to minimize carry back and wet suppression per Table 5A.	Visible emissions less than 10% opacity
Vibrating Screen Discharge Chute to Conveyor FB016	PM/PM ₁₀	Fully enclosed vibrating screen outlet chute, fully enclosed skirtboard enclosure extending at least three beltwidths downstream of impact area, adjustable belt skirting to keep skirt edge in continuous contact with belt surface, dust curtain over exit to prevent dust from escaping through opening, complete covering of interface between discharge chute and receiving hopper, and wet suppression per Table 5A.	Visible emissions less than 10% opacity
Vibrating Screen Discharge Chute to Conveyor CB020	PM/PM ₁₀	Fully enclosed vibrating screen outlet chute, fully enclosed skirtboard enclosure extending at least three beltwidths downstream of impact area, adjustable belt skirting to keep skirt edge in continuous contact with belt surface, dust curtain over exit to prevent dust from escaping through opening, complete covering of interface between discharge chute and receiving hopper, and wet suppression per Table 5A.	Visible emissions less than 10% opacity
Conveyor Transfer Point from ST034 to Storage Piles	PM/PM ₁₀	Fully enclosed head box with inlet dust curtain to prevent dust emissions exiting openings, adjustable belt skirting to keep skirt edge in continuous contact with belt surface. belt scraper to minimize carry back and wet suppression per Table 5A. Drop distances from head pulley to storage pile surface shall be equal to or less than three feet.	Visible emissions less than 10% opacity

Table 6 Equipment List

Santa Barbara County APCD – Equipment List

PTO 12315 / FID: 00012 Celite Corporation / SSID: 01735

A PERMITTED EQUIPMENT

1 Hinged Grizzly

<i>Device ID #</i>	110481	<i>Device Name</i>	Hinged Grizzly
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	SC010
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	16 inch openings on grid; automatic lift		

2 Crusher Feed Hopper

<i>Device ID #</i>	110482	<i>Device Name</i>	Crusher Feed Hopper
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	FH010
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Capacity of 61 yd ³ ; unlined; above ground		

3 Crusher Apron Feeder

<i>Device ID #</i>	110483	<i>Device Name</i>	Crusher Apron Feeder
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Dodge	<i>Operator ID</i>	FB011
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	60" belt width x 44ft length; 60" Apron type; VFD, driven by 20 HP electric motor		

4 Raw Ore Transfer Belt Conveyor to Crusher

<i>Device ID #</i>	110484	<i>Device Name</i>	Raw Ore Transfer Belt Conveyor to Crusher
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB012
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	42" belt width X 80ft length; driven by 20 HP electric motor		
<i>Description</i>			

5 Protection ElectroMagnet cw tramp metal conveyor

<i>Device ID #</i>	110485	<i>Device Name</i>	Protection ElectroMagnet cw tramp metal conveyor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Dings 44CR	<i>Operator ID</i>	MA040
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	36" belt width X 6ft length; self cleaning; driven by 5 HP electric motor		
<i>Description</i>			

6 DE Ore Crusher

<i>Device ID #</i>	110486	<i>Device Name</i>	DE Ore Crusher
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Metso NP1520	<i>Operator ID</i>	CR013
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Size minus 1/2 inch; horizontal shelf impactor; open discharge, VFD; driven by		
<i>Description</i>	2 - 250 HP electric motors		

7 Crushed Ore Transfer Belt Conveyor to Screen

<i>Device ID #</i>	110487	<i>Device Name</i>	Crushed Ore Transfer Belt Conveyor to Screen
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB014
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	36" belt width X 100ft length; stationary; driven by 40 HP electric motor		
<i>Description</i>			

8 Feed Belt Scale

<i>Device ID #</i>	110488	<i>Device Name</i>	Feed Belt Scale
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Milltronics (Siemens)	<i>Operator ID</i>	BS014
<i>Model</i>	Tecweigh WY15	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	36" width		
<i>Description</i>			

9 Vibratory Screen Deck

<i>Device ID #</i>	110489	<i>Device Name</i>	Vibratory Screen Deck
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Nordberg	<i>Operator ID</i>	VS015
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Triple deck capability; 8ft X 20ft inclined deck; square aperture wire mesh screen, 5/8 inch & 1" screen sizes; driven by a 50 HP electric motor. Equipped with Trellex Dust Control screen topper enclosure by Metso Minerals.		
<i>Description</i>			

10 Undersize Collection Conveyor Belt

<i>Device ID #</i>	110490	<i>Device Name</i>	Undersize Collection Conveyor Belt
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	JW Jones	<i>Operator ID</i>	FB016
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	48" belt width X 25ft length; driven by a 10 HP electric motor		

11 First Oversize Collection Conveyor Belt

<i>Device ID #</i>	110491	<i>Device Name</i>	First Oversize Collection Conveyor Belt
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB020
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	30" belt width X 60ft length; portable/stackable; driven by a 15 HP electric motor		

12 Second Oversize Conveyor Belt

<i>Device ID #</i>	110492	<i>Device Name</i>	Second Oversize Conveyor Belt
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB021
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	30" belt width X 60ft length; portable/stackable; driven by a 15 HP electric motor		

13 Oversize Stacker

<i>Device ID #</i>	110493	<i>Device Name</i>	Oversize Stacker
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	ST022
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	30" belt width X 80ft length; driven by a 20 HP electric motor		
<i>Description</i>			

14 Reject Belt Scale

<i>Device ID #</i>	110494	<i>Device Name</i>	Reject Belt Scale
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Belt Way	<i>Operator ID</i>	BS022
<i>Model</i>	100	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

15 First Undersize Transfer Belt Conveyor

<i>Device ID #</i>	110495	<i>Device Name</i>	First Undersize Transfer Belt Conveyor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB030
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	36" belt width X 100ft length; portable; driven by a 40 HP electric motor		
<i>Description</i>			

16 Crushed Product Belt Scale

<i>Device ID #</i>	110496	<i>Device Name</i>	Crushed Product Belt Scale
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Milltronics (Siemens)	<i>Operator ID</i>	BS030
<i>Model</i>	Tecweigh WY15	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	30" width		
<i>Description</i>			

17 Second Undersize Transfer Conveyor

<i>Device ID #</i>	110497	<i>Device Name</i>	Second Undersize Transfer Conveyor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB031
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	36" belt width X 80ft length; portable; driven by a 25 HP electric motor		

18 Third Undersize Transfer Conveyor

<i>Device ID #</i>	110498	<i>Device Name</i>	Third Undersize Transfer Conveyor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB032
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	36" belt width X 60 ft length; portable/stackable; driven by a 15 HP electric motor		

19 Fourth Undersize Transfer Conveyor

<i>Device ID #</i>	110499	<i>Device Name</i>	Fourth Undersize Transfer Conveyor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rock Systems	<i>Operator ID</i>	CB033
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	36" belt width X 50ft length; portable/stackable; driven by a 10 HP electric motor		

20 Telescoping Radial Stacker Belt

<i>Device ID #</i>	110500	<i>Device Name</i>	Telescoping Radial Stacker Belt
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Thorstack T150-8	<i>Operator ID</i>	ST034
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	36" belt width X 150ft length; able to create >50ft pile height; driven by a 72		
<i>Description</i>	HP electric motor		

21 Product Storage Pile - Large

<i>Device ID #</i>	110561	<i>Device Name</i>	Product Storage Pile - Large
<i>Rated Heat Input</i>		<i>Physical Size</i>	4.80 Acres of Storage Piles
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Base footprint of each pile = 2.4 acres; surface area of each pile = 2.9 acres;		
<i>Description</i>	maximum height of each pile shall not exceed 40 ft; each pile is arranged in a "C" shape with an end-to-end expanse = 330 degrees		

22 Product Storage Pile - Small

<i>Device ID #</i>	110562	<i>Device Name</i>	Product Storage Pile - Small
<i>Rated Heat Input</i>		<i>Physical Size</i>	2.60 Acres of Storage Piles
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Base footprint of each pile = 1.3 acres; surface area of each pile = 1.6 acres;		
<i>Description</i>	maximum height of each pile shall not exceed 40 ft; each pile is arranged in a "C" shape with an end-to-end expanse = 180 degrees		

23 Reject Storage Pile

<i>Device ID #</i>	110563	<i>Device Name</i>	Reject Storage Pile
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	650 cu yds of reject material, maximum height of pile = 15 feet		
<i>Description</i>			



PERMIT EVALUATION for
PERMIT TO OPERATE No. 12315

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1.0 BACKGROUND

- 1.1 General: ATC 12315 was issued to Celite on January 11, 2008 for the installation of a portable crushing and screening plant (“mobile plant”) as part of the crude ore supply system for the System 7 production line modification permitted under ATC 12105. The Celite Facility ID is 00012 and the Stationary Source ID is 1735.

ATC 12315-01 was issued to Celite on May 23, 2008 for the installation and temporary operation of a new loader hopper and with belt feeder. There were no new emissions from this project.

ATC 12315-02 was issued to Celite on August 20, 2008 for the replacement of the existing belt, pulleys, gearbox and motor on the existing Crusher Apron Feeder (APCD Dev. No. 110483) and the installation of a new enclosure (“screen topper”) on the existing Vibratory Screen Deck (APCD Dev. No. 110489) for enhanced PM control. There were no new emissions from this project.

On October 14, 2008, Celite applied for modifications of ATC 12315 for the mobile plant. The application requested an increase in the maximum permitted annual operating hours for the mobile plant. Celite stated a need to increase the allowable operating hours per year to ensure adequate crude supply due to the fact that the maximum throughput to the Mobile Plant had not been successfully reached. On this same date, Celite applied for Permit to Operate 12315 for the mobile plant. The increase in operating hours requested in the ATC modification has been directly incorporated in this Permit to Operate.

- 1.2 Project Description: Celite Corporation (Celite) currently mines and processes diatomaceous earth (DE) at its Lompoc Plant and operates four product lines (3, 5, 6, and 7 Systems).

The crushing and screening plant is skid mounted and portable. It removes the current waste material at an early stage rather than removing the waste after it has been milled and dried. The new plant will maximize downstream drying and classification performance due to the crude ore having been reduced in size by crushing at the quarry. Lower operating costs involving energy savings and reduced equipment wear rate are expected.

There will be no increase in crude throughput in the existing processing Systems. The equipment is powered by utility electricity; therefore, the only emissions are PM/PM10 which are controlled by the use of partial enclosures, a wet suppression system, and limiting operations during high wind.

- 1.3 Compliance/SCDP: The Mobile Plant began the Source Compliance Demonstration Period (SCDP) on May 27, 2008. During this demonstration period, excess fugitive emissions were found at the

PERMIT EVALUATION
Permit to Operate No. 12315

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Vibratory Screen Deck, which prompted the installation of a “screen topper” under ATC 12315-02. The initial visible emissions inspections required by 40CFR60 Subpart OOO, namely one hour Method 9 inspections, were not conducted in the time frame specified by this Subpart. Celite began conducting the one hour Method 9 inspections after they became aware of the omission, and completed most of the inspections by November 30, 2008. The three remaining inspections (Dev. No.s 110497, 110498 and 110499) are required to be completed within 7 days of startup of the equipment. The completed one hour Method 9 inspections showed the equipment to be in compliance with the NSPS standards for visible emissions.

2.0 ENGINEERING ANALYSIS

2.1 Equipment/Processes: The mobile quarry crushing and screening plant consists of crushing and screening operations and creation of four crushed crude ore stockpiles and one reject storage pile. The crushing and screening plant is designed for a total feed-rate of raw crude ore of 322 wet short tons per hour (approximately 178 dry short tons per hour) with a maximum operating schedule of 24 hours per day, 4,380 hours per year (an increase from the previously permitted 2,190 hours per year). The APCD reviewed the increase request and determined that the associated emissions increase would be sufficiently small to not trigger offsets. Therefore, the requested increase in operating hours was granted.

An existing front end loader from the existing mine fleet is used to transfer raw crude ore to a feed hopper FH010 (APCD Dev. No. 110482) equipped with grizzly SC010 (APCD Dev. No. 110481). The crude is conveyed to horizontal impact crusher CR013 (APCD Dev. No. 110486). The crusher discharges crushed DE to a transfer conveyor and then to vibratory screen VS015 (APCD Dev. No. 110489). The screen separates undersize DE and oversize waste. Waste is conveyed to a reject pile and stacked by reject stacker ST022 (APCD Dev. No. 110493). Undersize DE is directed to feeder belt conveyor FB016 (APCD Dev. No. 110490). Belt scales BS014 and BS030 (APCD Dev. No.s 110488 and 110496) measure wet metric tons per shift on the feed and product/undersize fractions.

DE product is conveyed by FB016 (APCD Dev. No. 110490) to a series of portable transfer belt conveyors CB030, CB031, CB032, CB033 (APCD Dev. No.s 110495, 110497, 110498, 110499). These conveyors transport the DE to a specific stockpile area. The automated radial stacker ST034 (APCD Dev. No. 110500) stacks the material in a total of four locations. ST034 is used at one location and then moved to another location as needed for various ore types. A single movable pad is used to provide the pivot point. Fugitive emissions throughout the crushing and screening plant are controlled by water spray/foggers and covered conveyor transfer points.

For the stacked piles, the DE pile surface has an insulating effect from wet weather. The exterior of the pile has a dual purpose of providing a barrier to reduce fugitive emissions and protecting the inner material from moisture for use during the rainy season. This will allow the mill to continue to run during wet weather. The pile will be built during the dry season to assist in constraining ore moisture which in turn reduces energy consumption in the downstream mill drying process. The quarry crushing plant will not be operated in wet weather.

The four crushed product storage piles will total a maximum of 7.4 acres beneath stockpiles with each pile reaching a maximum height of 40 feet at the peak. The maximum surface area of all four crushed product storage piles will be 9 acres. Only a fraction of the total stockpile area will be active for crude batch unloading and radial stacking. The frequency of disturbance of sub-areas of the pile surface is determined based on operating schedule. The piles will be built over a maximum 6 month period. Crude ore batch unloading operations from certain piles may be conducted daily

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all during the year to transport crude ore to the processing lines in the main plant area with the other stockpiles remaining inactive for 24 hours per day.

- 2.2 Emission Controls: Fugitive emissions are controlled by the use of partial enclosures, dust suppression system, and limiting operations during high wind. Crude transfers from mobile equipment to the feed hopper and grizzly are conducted in a four sided enclosure with fugitive PM emissions controlled with BACT approved water spray/foggers. Fugitive PM emissions are controlled from all conveyor transfer points by conducting material transfer within enclosed “rock boxes.” Fugitive particulates from drop points are controlled through maintaining material transfer distances to no more than three feet. Material feed to and from the crusher and vibrating screen is conducted within an enclosed feed hopper and chute. Water spray/fog points are installed at each conveyor and process equipment transfer point. Celite will use mobile water spray/fog control on storage pile surfaces to ensure there is a barrier to reduce fugitive emissions. Any crusting of the surface of the storage piles serves to bind erodible material and reduces fugitive dust potential from surfaces of the piles not disturbed by material handling activities or exposed to high wind conditions. The composition of the reject pile will be chert laden material with high density. Water will be applied to the reject pile by water trucks as needed. Visible particulate emissions from plant equipment and from storage pile surfaces shall not exceed 10% opacity.
- 2.3 Emissions: Detailed emission calculation spreadsheets may be found in Tables 1 through 4. These emissions define the Potential to Emit for the permitted equipment.
- 2.4 Reasonable Worst Case Emission Scenario: Mobile Plant operation at 24 hours per day and 4380 hours per year except for storage pile operation of 8760 hours per year.
- 2.5 Special Calculations: There are no special calculations.
- 2.6 BACT Analyses: The crude ore crushing and screening plant project did not exceed the Rule 802 25 lb/day BACT threshold emissions for PM₁₀ however the installation of the equipment under this project are a part of the System 7 modification that is permitted under ATC 12105. BACT is required on all equipment that is part of the System 7 modification. The PM/PM₁₀ control technology of loading ore in a four sided enclosure controlled by water sprays, material transfer points within an enclosure controlled by a wet suppression system and limiting plant operations during high wind conditions proposed by Celite for this project meets the current APCD definition of BACT.
- 2.7 Enforceable Operational Limits: The permit has enforceable operating conditions to ensure compliance with APCD rules and regulations.
- 2.8 Monitoring Requirements: This permit requires the monitoring of fugitive particulate emissions through EPA Method 9 visible emission evaluations.
- 2.9 Recordkeeping and Reporting Requirements: The permit requires that specific data be recorded and reported to the APCD.
- 3.0 REEVALUATION REVIEW (not applicable)**

4.0 REGULATORY REVIEW

4.1 Partial List of Applicable Rules: This project is anticipated to operate in compliance with the following rules:

- Rule 101. Compliance of Existing Facilities
- Rule 205. Standards for Granting Permits
- Rule 302. Visible Emissions
- Rule 303. Nuisance
- Rule 304. Particulate Matter - Northern Zone
- Rule 306. Dust and Fumes - Northern Zone
- Rule 309. Specific Contaminants
- Rule 505. Breakdown Procedures
- Rule 801. New Source Review
- Rule 802. Nonattainment Review
- Rule 803. Prevention of Significant Deterioration

4.2 40 CFR Part 60 {New Source Performance Standards}: Subpart OOO applies to crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins and enclosed truck or rail car loading stations constructed, reconstructed or modified, as defined by the standard, after August 31, 1983. The crude ore crushing and screening plant operation is subject to Subpart OOO. As related to this permit, the Subpart OOO emission requirements are: (1) an exhaust emission limit of 0.022 gr/dscf, (2) a stack opacity limit of 7%, and (3) fugitive emissions from facility equipment not to exceed 10% opacity or no visible fugitive emissions emitted from the building enclosing these operations. The plant design does not include any baghouses, device stacks or buildings. An initial Method 9 inspection for fugitive visible emissions from plant equipment per permit condition C.3 will determine compliance with item 3 above. Also, ongoing periodic monitoring has been included for determining compliance with APCD Rule 302 opacity limits, consistent with Part 70 permit 5840.

4.3 NEI Calculations: The increase in annual operating hours of the crude ore crushing and screening plant will result in an increase to the stationary source NEI of 1.43 TPY PM and 0.68 TPY PM₁₀ and qualifies as a "P1" term in this PTO. The emission increase ("P1") and resultant stationary source NEI total are listed in Attachment C.

5.0 AQIA

The APCD did not require an AQIA for the ATC or this PTO.

6.0 OFFSETS/ERCs

6.1 General: The emission offset thresholds of Regulation VIII are not exceeded for this permitting action.

6.2 Offsets: Offsets are not triggered by this permitting action.

6.3 ERCs: This permitting action does not generate emission reduction credits.

7.0 AIR TOXICS

A health risk assessment was not performed for this permitting action.

ATTACHMENT A
PROCESS FLOW DIAGRAM

EXISTING RAW CRUDE ORE PILES



△ Water spray/fog

PRODUCTION RATE LEGEND

DWTPH	WMTPH
DSTPH	WSTPH

RAW CRUDE ORE

161	293
177	322

CRUSHED ORE

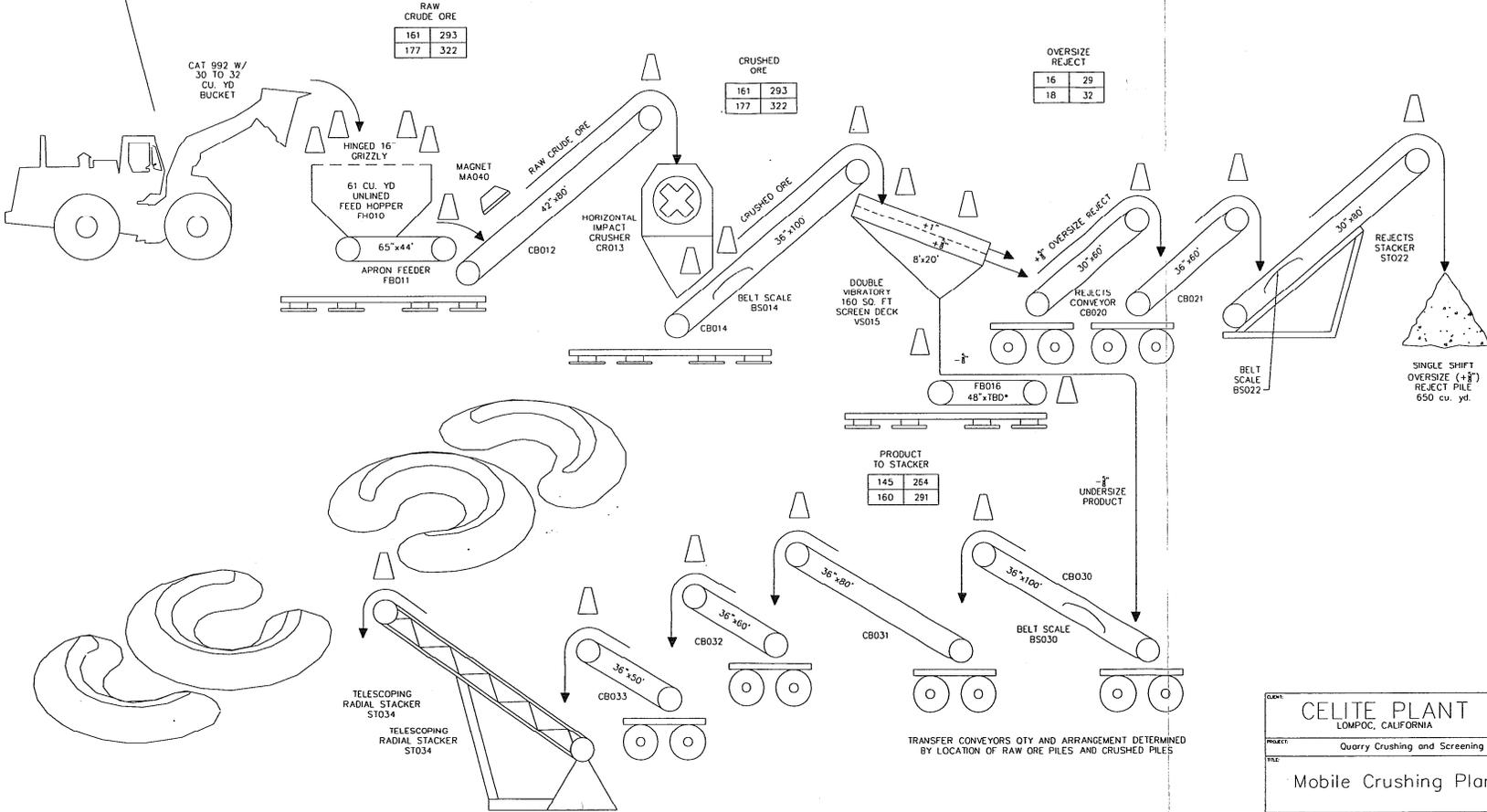
161	293
177	322

OVERSIZE REJECT

16	29
18	32

PRODUCT TO STACKER

145	264
160	291



TRANSFER CONVEYORS QTY AND ARRANGEMENT DETERMINED BY LOCATION OF RAW ORE PILES AND CRUSHED PILES

CLIENT: CELITE PLANT LOMPOC, CALIFORNIA				
PROJECT: Quarry Crushing and Screening				
TITLE: Mobile Crushing Plant				
DRAWN BY:	DATE:	COPYRIGHT YEAR:	PLANT SYMBOL:	REV. NO.:
CHECKED BY:	DATE:	SCALE:	DRAWING NO.:	
PROJ. NO.:	DESIGNED BY:			

ATTACHMENT B

IDS TABLES

IDS Database Emission Tables

**Table 1
Permitted Potential to Emit (PPTE)**

PTO 12315 Crude Ore Crushing and Screening Plant

	NOx	ROC	CO	SOx	PM	PM₁₀
lb/day	0.00	0.00	0.00	0.00	33.08	16.06
tons/year	0.00	0.00	0.00	0.00	3.02	1.47

**Table 2
Facility Potential to Emit (FPTE)**

	NOx	ROC	CO	SOx	PM	PM₁₀
lb/day	53820.60	6502.69	4066.43	57880.07	26795.90	26734.29
tons/year	9218.40	1186.34	735.96	10517.97	4885.43	4875.97

**Table 3
Federal Pt-70 Facility Potential to Emit (PT70 FPTE)**

	NOx	ROC	CO	SOx	PM	PM₁₀
lb/day	20871.23	10169.86	36706.85	48202.74	7195.13	7178.11
tons/year	3809.00	1856.00	6699.00	8797.00	1309.51	1307.96

**Table 4
Facility Net Emission Increase (FNEI-90)**

	NOx	ROC	CO	SOx	PM	PM₁₀
lb/day	0.00	2.49	85.66	0.00	76.76	75.49
tons/year	0.00	0.46	14.44	0.00	10.99	11.65

ATTACHMENT C

NEI TABLE

TABLE - Stationary Source NEI
Part 70/APCD PTO 5840
Celife Corporation - Lompoc and Celpure Plants

I. This Project's "I" NEI-90

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr										
PTO 12315													
Totals		0.00											

II. Stationary Source "P1s"

Enter all stationary source "P1" NEI-90s below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
PTO 5840-R2 ¹	Jun-03					145.40	25.25	3.60	0.23	10.46	4.25	12.12	2.13
A/P 11107	Dec-03									1.90	0.33	1.90	0.33
PTO 11008	Mar-04									6.48	1.15	1.85	0.33
PTO 11083	Apr-04									0.55	0.03	0.55	0.03
ATC/PTO 11224	Sep-04									16.07	2.57	16.07	2.57
PTO 11007	Mar-05									0.59	0.10	0.59	0.10
ATC/PTO 11224-01	Apr-06									0.48	0.08	0.48	0.08
ATC 12091	Oct-06									16.24	2.96	16.24	2.96
ATC 12208	Jan-07									19.84	3.62	19.84	3.62
ATC 12091-01 ²	Mar-07									0.00	0.00	0.00	0.00
ATC 12105	Jun-07	48.53	8.86	10.74	1.96	147.41	26.90	84.63	15.45	151.81	27.32	145.45	26.42
ATC 12208-01 ³	Aug-07									0.00	0.00	0.00	0.00
ATC 12091-02	Sep-07									11.31	2.06	11.31	2.06
ATC 12208-02	Dec-07									7.16	1.31	7.16	1.31
ATC 12315	Jan-08									33.08	1.59	16.06	0.79
ATC 12105-01	Jan-08									57.79	10.55	57.79	10.55
ATC 12091-03	Jun-08									2.06	0.38	2.06	0.38
PTO 12398 ⁴	Jul-08									23.15	4.22	23.15	4.22
PTO 12315	TBD									1.43			0.68
Totals		48.53	8.86	10.74	1.96	292.81	52.15	88.23	15.68	358.97	63.95	332.62	58.56

Notes:
 1. Stationary source (Lompoc and Celpure Plant) NEI as found in Table 5.6 of P170 PTO 5840-R2 issued 6/24/03
 2. PTE remains the same under modification ATC 12091-01 as PTE under ATC 12091; therefore, no increase in PTE.
 3. PTE remains the same under modification ATC 12208-01 as PTE under ATC 12208; therefore, no increase in PTE.
 4. P1 includes ATC 12398 project plus an increase of 3.35 lb/day PM/PM10 incorporated in PTO 12398.

III. Stationary Source "P2" NEI-90s Decreases

Enter all facility "P2" NEI-90s below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
PTO 11083	Apr-04									0.24	0.03	0.24	0.03
ATC 12105-01	Jan-08	28.06	5.12	6.21	1.13	85.25	15.56	12.68	2.32	80.84	14.75	80.84	14.75
Totals		28.06	5.12	6.21	1.13	85.25	15.56	12.68	2.32	81.08	14.78	81.08	14.78

IV. Stationary Source Pre-90 "D" Decreases

Enter all stationary source "D" decreases below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
ATC 12105-01 ^{1,2}	Jan-08	20.47	3.74	2.04	0.37	121.90	22.15	75.55	13.36	201.13	38.18	176.05	32.13
Totals		20.47	3.74	2.04	0.37	121.90	22.15	75.55	13.36	201.13	38.18	176.05	32.13

Notes: 1. "D"-Term values in table above excludes reductions which are subject to DOI 047 ERC application (see table below).

This is necessary so that NEI remains non-negative per Rule 801

2. Original ATC 12105 NOx, SOx, and PM "D" Term adjusted to account for equipment removal in ATC 12105-01

	NOx		SOx		PM	
	lb/day	TPY	lb/day	TPY	lb/day	TPY
Total Reductions from ATC 12105 ("D" Term)	65.82	12.01	1147.42	209.40	355.87	64.95
D Term Adjustment I+ (P1-P2) on June 11, 2007 (issue date of ATC 12105)	48.53	8.86	88.23	15.68	224.18	42.38
Add I Term from ATC 12105-01					57.79	10.55
Subtract Above P2 Decrease	28.06	5.12	12.68	2.32	80.84	14.75
Remaining Reductions subject to DOI 047 application	45.35	8.27	1071.87	196.04	270.32	47.87

V. Calculated Stationary Source NEI-90

Table below summarizes stationary source NEI-90 as equal to: I + (P1-P2) -D

Term	NOx		ROC		CO		SOx		PM		PM10	
	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1	48.53	8.86	10.74	1.96	292.81	52.15	88.23	15.68	358.97	63.95	332.62	58.56
P2	28.06	5.12	6.21	1.13	85.25	15.56	12.68	2.32	81.08	14.78	81.08	14.78
D	20.47	3.74	2.04	0.37	121.90	22.15	75.55	13.36	201.13	38.18	176.05	32.13
NEI-90	0.00	0.00	2.49	0.46	85.66	14.44	0.00	0.00	76.76	10.99	75.49	11.65

Notes: Per Rule 801, "In no event shall the net emission increase for a stationary source be less than zero."

ATTACHMENT D
RESPONSE TO COMMENTS

The following are the APCD responses to comments on the draft permit by Celite in the letter dated February 6, 2009:

1. Celite Comment: Page 7, Condition 9.C.2.i. During SCDP inspection, it was found that fugitive dust could be controlled with the total flow to the water supply lines of 8 gpm. Celite requests the District modify this value.

APCD Response: After review of SCDP documentation, it was determined that the water flow rate varies with the number of nozzles which are activated. Permit Condition 9.C.2.i has been modified to allow for the minimum total flow rate to the water supply lines to vary with the number of active nozzles.

2. Celite Comment: Page 7, Condition 9.C.3.c. The SCDP condition 9.c was part of the ATC; this condition may be more clear to simply reference the plan: "Water line pressure and water flow..... displayed by a flow meter approved by the APCD in the Crude Ore Fugitive Emission Control Plan."

APCD Response: Condition 9.C.3.c revised to reference approved Crude Ore Fugitive Emission Control Plan.

3. Celite Comment: Page 8, Condition 9.C.3.g. Celite can not agree to providing the APCD at least 1 week advance notice prior to startup of transfer conveyors (Dev. No.s 110497, 110498 and 110499) to allow for witnessing a Method 9 inspection. The conveyor belts will be placed into service as needed; and, a 1 week advance notice may not be possible. Celite will be happy to notify the APCD when these conveyors are put into service to allow for an inspection, but a 1 week notice may not always be feasible.

APCD Response: Condition 9.C.3.g revised to require notice of startup within 24 hours and to complete a Method 9 inspection, witnessed by APDC staff, within 7 days.

4. Celite Comment: Page 8, Condition 9.C.4.b. Please clarify to note that the permit condition referenced is permit condition "9.C.2" (not only 2.c)

APCD Response: Reference clarified to "9.C.2".

5. Celite Comment: Page 9, Condition 9.C.5.b. Please clarify to note that the permit condition referenced is permit condition "9.C.2.c" (not only 2.c).

APCD Response: Reference clarifies to "9.C.2.c"

6. Celite Comment: Page 10, Contrition 9.C.b. The second, third, and fourth sentence of this condition reference determinations outstanding at the time of ATC issuance regarding the placement of the wind monitor. As required by ATC 12315, Condition 9.c, the Offsite Fugitive Dust Monitoring Plan included specifications of the wind monitoring and data logging instrumentation, and as part of that Plan's approval, the monitor location was approved by APCD. The Offsite Fugitive Dust Monitoring Plan and wind monitor location was approved by APCD on August 18, 2008. Please replace these sentences in draft permit Condition 9.C.b with reference to the approved Plan.

APCD Response: Condition 9.C.7.b revised to reference wind sensor location specified in the approved Offsite Fugitive Dust Monitoring Plan.

7. Celite Comment: Table 2.b. For consistency, the emission factor values could be revised to show three or four significant digits instead of six.

APCD Response: Emissions factors revised to show 3 significant figures for consistency.

8. Celite Comment: Table 5A. Please note that Celite does not monitor individual water flows as depicted in Table 5A. Only the system's total water flow is monitored.

APCD Response: Comment noted.