



Santa Barbara County  
Air Pollution Control District

JUN 05 2009

Certified Mail 7006 3450 0003 7934 0078

Return Receipt Requested

Sara Wallon  
Celite Corporation  
2500 Miguelito Road  
Lompoc, CA 93436-0000

FID: 00012  
Permit: P 12091-01  
SSID: 01735

Re: Final Permit to Operate 12091-01

Dear Ms. Wallon:

Enclosed is the final Permit to Operate (PTO) No. 12091-01 for the milling circuit plant located at the Lompoc Plant in the existing System 7 Dry End at 2500 San Miguelito Road in Lompoc. This permit serves as the single, non-confidential Permit to Operate for the milling circuit plant, and supersedes the confidential and redacted versions of the original Permit to Operate.

Please carefully review the enclosed documents to ensure that they accurately describe your facility and that the conditions are acceptable to you. Note that your permitted emission limits may, in the future, be used to determine emission fees.

You should become familiar with all APCD rules pertaining to your facility. This permit does not relieve you of any requirements to obtain authority or permits from other governmental agencies.

This permit requires you to:

- Follow the conditions listed on your permit. Pay careful attention to the recordkeeping and reporting requirements.
- Ensure that a copy of the enclosed permit is posted or kept readily available near the permitted equipment.
- Promptly report changes in ownership, operator, or your mailing address to the APCD.

If you are not satisfied with the conditions of this permit, **you have thirty (30) days from the date of this issuance to appeal this permit to the Air Pollution Control District Hearing Board** (ref: California Health and Safety Code, §42302.1). Any contact with APCD staff to discuss the terms of this permit will not stop or alter the 30-day appeal period.

Please include the facility identification (FID) and permit numbers as shown at the top of this letter on all correspondence regarding this permit. If you have any questions, please contact David Harris of my staff at (805) 961-8824.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Goldman". The signature is fluid and cursive, with the first name "Michael" written in a larger, more prominent script than the last name "Goldman".

Michael Goldman, Manager  
Engineering & Compliance Division

enc: Final PTO 12091-01  
Final Permit Evaluation  
Air Toxics "Hot Spots" Fact Sheet APCD Form 12B

cc: Celite Corporation 00012 Project File NC/SC  
ECD Chron File  
Gerardo Rios, Acting Chief, USEPA Region 9 (AIRS - 3) (via e-mail)  
Craig Strommen (Cover letter only)  
David Harris (Cover letter only)

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Permit to Operate 12091-01  
And  
Part 70 Minor Modification 12091-01

Page 1 of 13

EQUIPMENT OWNER:

Celite Corporation

205129

EQUIPMENT OPERATOR:

Celite Corporation

EQUIPMENT LOCATION:

2500 Miguelito Rd, Lompoc

STATIONARY SOURCE/FACILITY:

Celite Corporation

SSID: 01735

FID: 00012

AUTHORIZED MODIFICATION:

This permit modifies APCD Permit to Operate 12091 issued to Celite for Milling Circuit operations. Changes have been made only to the Equipment List and Engineering Evaluation in order to make the permit document into a single, non-confidential version that meets Part 70 requirements. No changes have been made to permit conditions. This public version supersedes the confidential and non-confidential versions previously drafted.

EQUIPMENT DESCRIPTION:

The Milling Circuit Plant equipment subject to this permit is listed in the Equipment List section 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 Milling Circuit Plant allows Celite to reprocess and classify dry end material to specific product specifications to satisfy specific customer requirements.

The Celite Facility ID is 0012 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.

- (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*]

- 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/voke/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*]

A.11 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for the APCO to petition for permit revocation pursuant to California Health & Safety Code Section 42307 *et seq.*

**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 Ringlemann 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.** Mass emissions and concentrations of PM and PM<sub>10</sub> from the exhaust stack of the Milling Circuit Plant baghouses (Dev Nos 108935, 108940 and 110203) shall not exceed the limits listed below. Compliance shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.

a. Baghouse Mass Emission Limits:

**Table 1a. Baghouse Mass Emission Limits**

Device Name	Celite ID	Dev No	PM			PM <sub>10</sub>		
			lb/hr	lb/day	TPY	lb/hr	lb/day	TPY
Feed Bin BH	BH901	108935	0.11	2.62	0.48	0.11	2.62	0.48
Mill Circuit BH	BH916	108940	0.57	13.62	2.49	0.57	13.62	2.49
Baghouse	BH912	110203	0.56	13.37	2.44	0.56	13.37	2.44

b. Baghouse Particulate Matter (PM/PM<sub>10</sub>) BACT Emission Limits. Particulate (PM/PM<sub>10</sub>) concentration in the exhaust from any baghouse listed in Table 1.a above shall not exceed 0.005 grains/dscf. Compliance with this condition shall be based on source testing and the monitoring conditions of this permit.

**C.2. Operating Limitations.** The following operating limitations shall apply to the Milling Circuit Plant baghouses listed in condition 1.a.

- a. Baghouse Stack Flow Rate: The maximum exhaust flow rate shall not exceed 2,550 dscfm for Dev No.108935, 13,243 dscfm for Dev No 108940 and 13,000 dscfm for Dev No 110203.
- b. Baghouse Pressure Drop: The baghouse pressure drop for each baghouse shall not exceed 6 inches H<sub>2</sub>O. This limitation does not apply during startup operations (defined as powering up the exhaust blower associated with the baghouse and ending with the pressure drop across the baghouse reaching steady state or when the elapsed time since powering up reaches 3 hours, whichever is sooner).
- c. Feedrate: Product throughput as measured at the weigh bin (Dev No 108942) shall not exceed 10 dry short tons per hour (9.1 mt/hr).
- d. Enclosed Equipment (BACT): mill (Dev No 108936), classifiers (Dev No 108937 and Dev No 110202), waste bin (Dev No 111058) and all product transport lines, screw conveyors, and transfer points serving this equipment shall be completely enclosed and vented through a baghouse control device.
- e. Visible Emissions: Fugitive emissions from facility equipment shall not exceed 10% opacity or no visible fugitive emissions shall be emitted from the building enclosing these operations.

- C.3. **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:
- a. Each baghouse shall be equipped with APCD-approved pressure monitoring instrumentation to monitor the pressure drop across the baghouse, in inches H<sub>2</sub>O;
  - b. Celite shall obtain a daily reading of the pressure drop when each baghouse is operational. If the pressure drop readings fall outside the permitted range specified in condition 9 C.2.b., immediate corrective action shall be taken to return the pressure drop to the range stated in condition 9 C.2.b.
  - c. Celite shall monitor tons per hour throughput to the Milling Circuit Plant. Celite shall implement monitoring equipment and procedures approved by the APCD.
  - d. Once each calendar quarter, Celite shall perform a fugitive emission inspection for a one-minute period on Milling Circuit Plant equipment. 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.
  - e. Once each calendar quarter, Celite shall use EPA Method 22 to obtain a reading of visible emissions from any building enclosing plant operations. The Method 22 readings shall be a minimum of five minutes and shall be taken from buildings where plant operations are being conducted.
- C.4 **Compliance Assurance Monitoring (CAM).** The baghouses contained within this permit are subject to 40 CFR Part 64 CAM requirements, and the conditions below:
- a. Celite shall implement all requirements of the APCD-approved CAM Plan. This plan is hereby incorporated by reference as an enforceable part of this permit. Recordkeeping and reporting shall be consistent with the CAM Plan requirements as summarized below.
  - b. Visible Emissions: Celite shall conduct daily observations for visible emissions and quarterly EPA Method 9 visible emissions observations. An excursion for visible emissions is defined as any daily observation of visible emissions.
  - c. Differential Pressure: Celite shall measure and record the differential pressure range of each baghouse on a daily basis. The averaging time for this measurement will be one minute. An excursion is defined as any daily pressure drop reading outside the permitted limits.
  - d. Quality Improvement Plan: Celite shall submit for APCD-approval a Quality Improvement Plan (QIP) consistent with 40 CFR 64 section 64.8(b) within 30-days of notification by the APCD that a QIP threshold has been exceeded. A QIP threshold is defined as a number of exceedances or "excursions" (within a continuous 12-month period) of a monitoring parameter limit, per emission unit, above which triggers submittal and implementation of a QIP for the affected unit. The QIP threshold for all CAM monitoring parameters is five (5), e.g. after a specific baghouse fails five visible emissions observations and/or inspections, submittal of a QIP is required.

- C.5. **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 and shall be made available to the APCD upon request:
- a. Milling Circuit Product throughput in tons per hour.
  - b. Celite shall record whether or not daily visible emissions are present or the date and initials of a responsible person when the baghouse is non-operational.
  - c. Daily pressure drop across the baghouse, when operational.
  - d. For a period of 3 months following the issuance of this permit, Celite shall submit baghouse continuous pressure drop and milling circuit feed rate data to the APCD on a weekly basis for each day of operation. If determined necessary by the APCD based upon this data, Celite shall modify the *Baghouse Inspection and Maintenance Plan* (I & M Plan) to include enhanced monitoring or maintenance as specified by the APCD. Celite shall submit a revised *Baghouse I & M Plan* for APCD review and approval within 10 days of notification by the APCD.
  - e. For all baghouse malfunction, maintenance, pressure drop and visible emission correction activities:
    - i) Date of malfunction, preventive maintenance activity or pressure drop correction activity;
    - ii) Description of activity;
    - iii) Date and time taken to remedy the malfunction or perform maintenance;
    - iv) If equipment is shut down because the visible emissions could not be eliminated within 24 hours, the date and time of shutdown of the equipment the affected baghouse serves, and the date and time of startup of the equipment served.
  - f. For each quarterly Method 9 opacity reading required by Conditions 3.d and 7.b: the name and most recent Method 9 certification date of the reader, the name of the baghouse, the date and time of the reading, and the reading.
  - g. For each quarterly Method 22 fugitive reading required by Condition 3.e: the date and time of the reading, and whether visible emissions were observed.

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.6. **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. Monthly summaries of the peak throughputs of the Milling Circuit Plant in units of tons/hour.
  - b. *Visible Emission Observations.* Results of daily visible emission observation for which visible emissions were detected for all baghouses.

- c. *Visible Emission Inspections (Method 9)*. For all baghouses, the results of the quarterly 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, baghouse name, individual interval readings required by Method 9, and the final reading. The same records apply for Milling Circuit plant equipment if a Method 9 inspection is triggered by condition 3.d.
- d. *Visible Emission Inspections (Method 22)*. For fugitive emissions, the results of the quarterly USEPA Method 22 inspections which include the date and time of reading, name of reader, equipment item and whether fugitive emissions were observed.
- e. *Pressure Drop for Baghouses*. The days the pressure drop exceeds the maximum allowed, the actual readings and all corrective actions implemented.
- f. *Hours of Operation*. On a monthly basis, the operating hours for each baghouse.

**C.7. Baghouse Maintenance and Inspection.** Celite shall comply with the following baghouse maintenance and inspection practices:

- a. Visible Emission Observations: For Milling Circuit baghouses, permittee shall observe baghouses daily when operational. On any day a baghouse is not operating, Celite shall have a responsible person make a written entry in the applicable baghouse operation log noting that the baghouse was not in operation. The responsible person shall certify the entry by initialing or signing their name next to the entry. Celite shall perform a visual inspection of each baghouse and baghouse exhaust once per day. If visible emissions are observed during the daily observation, corrective action shall be immediately implemented. If visible emissions are not eliminated within 24 hours, Celite shall shut down the equipment controlled by the baghouse until corrective action that eliminates visible emissions is completed or obtain a variance from the APCD Hearing Board.
- b. Visible Emissions Inspections (Method 9): Once each calendar quarter, permittee shall use EPA Method 9 performed by a certified observer to obtain a reading of visible emissions from the stack of each baghouse. The Method 9 readings shall be taken in calendar quarters during which the baghouse operated and shall be taken when the baghouse is operating due to operation of some or all of the equipment it serves.

If five (5) consecutive quarters of Method 9 inspections of each enclosed baghouse results in 0% opacity, Celite may submit a request in writing to the APCD to reduce the frequency of Method 9 inspections to semi-annual. Celite shall include documentation supporting the request to reduce the inspection frequency for each baghouse. Upon APCD written approval, the semi-annual inspection frequency becomes effective.

- c. Each baghouse shall be maintained and operated consistently with the APCD-approved *Baghouse Inspection and Maintenance Plan*. This Plan shall define the scheduling, methodology, recordkeeping and reporting of the visual inspections required by this permit. The Plan shall also include the manufacturer details of the baghouse pressure drop instrumentation, including the range and calibration and maintenance procedures and frequencies and shall identify the specific diagnostic procedures to be implemented when the baghouse is found to be operating outside the visible emission or pressure drop limits listed in permit condition 9.C.2. Celite shall make the plan available for inspector use during

inspection.

C.8. **Source Testing.** The following source testing provisions shall apply:

Celite shall conduct annual source testing of the Milling Circuit Plant baghouses in accordance with Table 8a. at the end of this condition.. The test anniversary date shall be April.

The permittee shall submit a written source test plan to the APCD for approval at least thirty (30) days prior to initiation of source testing. The source test plan shall be prepared consistent with the APCD's Source Test Procedures Manual (revised May 1990 and all subsequent revisions). Written APCD approval of this plan shall be obtained prior to commencement of source testing. The APCD shall be notified at least ten (10) calendar days prior to the start of source testing activity to arrange for a mutually agreeable source test date when APCD personnel may observe the test.

Source test results shall be submitted to the APCD within forty-five (45) calendar days following the date of source test completion and shall be consistent with the requirements approved within the source test plan. Source test results shall document the permittee's compliance status with the permitted emission limits. All APCD costs associated with the review and approval of all plans and reports and the witnessing of tests shall be paid by the permittee as provided for by Rule 210.

A source test for an item of equipment shall be performed on the scheduled day of testing (the test day mutually agreed to) unless circumstances beyond the control of the operator prevent completion of the test on the scheduled day. Such circumstances include mechanical malfunction of the equipment to be tested, malfunction of the source test equipment, delays in source test contractor arrival and/or set-up, or unsafe conditions on site. Except in cases of an emergency, the operator shall seek and obtain APCD approval before deferring or discontinuing a scheduled test, or performing maintenance on the equipment item on the scheduled test day. If the test cannot be completed on the scheduled day, then the test shall be rescheduled for another time with prior authorization by the APCD. Once the sample probe has been inserted into the exhaust stream of the equipment unit to be tested (or extraction of the sample has begun), the test shall proceed in accordance with the approved source test plan. In no case shall a test run be aborted except in the case of an emergency or unless approval is first obtained from the APCD. Failing to perform the source test of an equipment item on the scheduled test day without a valid reason and without APCD's authorization shall constitute a violation of this permit. If a test is postponed due to an emergency, written documentation of the emergency event shall be submitted to the APCD by the close of the business day following the scheduled test day.

The timelines listed above may be extended for good cause provided a written request is submitted to the APCD at least three (3) days in advance of the deadline, and approval for the extension is granted by the APCD.

**Table 8a. Source Test Requirements <sup>a</sup>**

Eq. ID	Equipment or Product	Test Requirements (units)	USEPA Method	Pollutants
Dev No 108935, 108940, and 110203	Feed Bin Mill Circuit Baghouse	Mass emission rate (lb/hr)	5	PM/PM <sub>10</sub>
		Outlet concentration (gr/dscf)	5/17	PM/PM <sub>10</sub>
		Outlet flow rate (dscfm)	2	

<sup>a</sup> PM is total suspended particulates; and use of PM:PM<sub>10</sub> ratio = 1 allows testing for PM only.

C.9. **Testing Facilities.** The permittee shall provide testing facilities at each baghouse in accordance with Rule 205.E and as specified below:

- a. Sampling ports adequate for test methods applicable to the equipment being tested. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow as demonstrated by applicable EPA, CARB and APCD test methods and procedures.
- b. Safe sampling platform(s).
- c. Safe access to sampling platform(s).
- d. Utilities for sampling and testing equipment.

C.10. **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. Baghouse Inspection and Maintenance Plan (approved 10/28/2008)
- b. Compliance Assurance Monitoring (CAM) Plan (approved 08/18/2008)

C.11. **Modification Requirements.** Prior to making any modifications to the packing stations permitted herein, including tie-ins to any other processing equipment or processing lines at the facility, Celite shall obtain a new Authority to Construct (ATC) permit or modification to this PTO 12091.

C.12. **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.13. **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.14. **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.15. **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force.
- C.16. **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.
- C.17. **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.18. **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.19. **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.20. **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.



AIR POLLUTION CONTROL OFFICER

JUN 05 2009

Date

Permit to Operate No. 12091-01

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Notes:

(1) Next Reevaluation Due: March 2010

(2) This permit supersedes ATC 12091, ATC 12091-01, ATC 12091-02, ATC 12091-03 and PTO 12091

Attachment: Permit Evaluation for PTO No. 12091-01

**EQUIPMENT LIST**

PTO 12091 / FID: 00012 Celite Corporation / SSID: 01735

**A PERMITTED EQUIPMENT**

**1 System 7 Milling Circuit**

**1.1 Feed Bin**

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<i>Device ID #</i>	<b>108934</b>	<i>Device Name</i>	<b>Feed Bin</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	11.02 Tons
<i>Manufacturer</i>	Acerforma-2	<i>Operator ID</i>	BN901
<i>Model</i>	Ecutec 06.046-FS1	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

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**1.2 Feed Bin Baghouse BH901**

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<i>Device ID #</i>	<b>108935</b>	<i>Device Name</i>	<b>Feed Bin Baghouse BH901</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	2550.00 scf/Minute
<i>Manufacturer</i>	Airjet SA	<i>Operator ID</i>	BH901
<i>Model</i>	81-S-6-TRL-A	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>	Controls emissions from Feed Bin BN901; baghouse blower is a CBI SA Model CHB13 9HP blower (BL901); contains 81 polyester felt-type bags; each bag 5in D x 6 ft L		

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**1.3 Mill BM906**

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<i>Device ID #</i>	<b>108936</b>	<i>Device Name</i>	<b>Mill BM906</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	4.00 Tons/Hour
<i>Manufacturer</i>		<i>Operator ID</i>	BM906
<i>Model</i>	BM18/42 R01 DC02	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>	Drum size 5.9 ft Dia X 13.2 ft Long; powered by a 72.4 HP motor		

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Permit to Operate No. 12091-01

**1.4 Classifier 910**

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<i>Device ID #</i>	<b>108937</b>	<i>Device Name</i>	<b>Classifier 910</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	22.50 Tons/Hour
<i>Manufacturer</i>		<i>Operator ID</i>	CL910
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Powered by a 60 HP electric motor.		

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**1.5 Classifier 913**

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<i>Device ID #</i>	<b>110202</b>	<i>Device Name</i>	<b>Classifier 913</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	22.50 Tons/Hour
<i>Manufacturer</i>		<i>Operator ID</i>	CL913
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Powered by a 60 HP electric motor.		

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**1.6 Cyclone**

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<i>Device ID #</i>	<b>108939</b>	<i>Device Name</i>	<b>Cyclone</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Ecotec	<i>Operator ID</i>	CY914
<i>Model</i>	KEZ1900	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Max dia 5.25 ft; collects and sizes product.		

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**1.7 Baghouse BH916**

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<i>Device ID #</i>	<b>108940</b>	<i>Device Name</i>	<b>Baghouse BH916</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	13243.00 scf/Minute
<i>Manufacturer</i>	Airjet SA	<i>Operator ID</i>	BH916
<i>Model</i>	280-M-10-TRL-B2R	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Captures product from Cyclone CY914; baghouse blower is a 180HP Reitz Model KXE160-040030-00 blower (BL919); contains 280 polyester felt-type bags; each bag 5in D x 10 ft L		

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**1.8 Enclosed Screw Conveyors (6)**

<i>Device ID #</i>	<b>108941</b>	<i>Device Name</i>	<b>Enclosed Screw Conveyors (6)</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Sinfimasa	<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Celite ID and electric motor HP drive rating: SC902 (3 HP), SC904 (3 HP), SC907 (7.5 HP), SC909 (7.5 HP), SC912 (7.5 HP), SC916 (4 HP)		

**1.9 Weigh Bin**

<i>Device ID #</i>	<b>108942</b>	<i>Device Name</i>	<b>Weigh Bin</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	50.50 Cubic Feet
<i>Manufacturer</i>		<i>Operator ID</i>	BN904
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>			

**1.10 Blower**

<i>Device ID #</i>	<b>108946</b>	<i>Device Name</i>	<b>Blower</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	600.00 scf/Minute
<i>Manufacturer</i>	Sutorbilt	<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Product mover powered by a 60 HP electric motor.		

**1.11 Waste Bulk Bag**

<i>Device ID #</i>	<b>108948</b>	<i>Device Name</i>	<b>Waste Bulk Bag</b>
<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 Description</i>	Totally enclosed semi-bulk bag		

**1.12 Blower**

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<i>Device ID #</i>	<b>109438</b>	<i>Device Name</i>	<b>Blower</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	300.00 scf/Minute
<i>Manufacturer</i>	Sutorbilt	<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Product mover powered by a 30 HP electric motor		

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**1.13 Baghouse BH912**

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<i>Device ID #</i>	<b>110203</b>	<i>Device Name</i>	<b>Baghouse BH912</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	13000.00 scf/Minute
<i>Manufacturer</i>	Mikropul	<i>Operator ID</i>	BH912
<i>Model</i>	RAF II	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	Captures product from Classifier, baghouse blower 200 HP electric motor, contains 320 polyester PTFE coated bags; each bag 4.625 in D x 10 ft L		

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**1.14 Waste Bin**

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<i>Device ID #</i>	<b>111058</b>	<i>Device Name</i>	<b>Waste Bin</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	500.00 Pounds
<i>Manufacturer</i>	Millerick Engineering	<i>Operator ID</i>	BN930
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>			

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PERMIT EVALUATION for  
PERMIT TO OPERATE No. 12091-01

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**1.0 BACKGROUND**

- 1.1 General: 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 Celite Facility ID is 00012 and the Stationary Source ID is 1735.
- 1.2 Project Description: ATC 12091 was issued October 26, 2006 for the construction of the Milling Circuit Plant to allow Celite to reprocess dry end material to specific product specifications to satisfy customer requirements. ATC 12091 was modified on March 26, 2007 to authorize additional Milling Circuit Plant inlet and outlet tie-ins to the product processing lines in the Lompoc Plant. ATC 12091-01 SCDP for the Milling Circuit Plant began on May 7, 2007. Operations during SCDP found that the CL913 classifier was not compatible with the Milling Circuit Plant process. Also, additional product inlet and outlet lines connected to the product process lines located in other areas of the Lompoc Plant were needed and the process line handling the Milling Circuit Plant waste required redesign. ATC 12091-02 was issued September 25, 2007 to authorize the replacement of Classifier CL913 with a new classifier design, install a new process baghouse, allow milling circuit plant waste to be directed to the Lompoc plant central waste system, and modify the Milling Circuit Plant inlet and outlet product tie-ins to the main processing lines. ATC 12091-03 was issued June 6, 2008 to allow for increased airflow through the process baghouse, install a new waste collection bin to the exhaust line, and to determine minimum baghouse pressure drop during the initial system startup. Permit to Operate 12091 was issued on December 24, 2008, in both a confidential and redacted (public) version, to address confidential information claims by Celite. On February 13, 2009, Celite applied to modify this permit to create a single, non-confidential document. This permit is the result of that modification, and supersedes all previous permits issued for the Milling Circuit
- 1.3 Compliance/SCDP: The Milling Circuit was inspected during SCDP and found in compliance with the terms and conditions of ATC 12091. Source testing of the following baghouses was conducted on the dates noted in accordance with the SCDP and source testing conditions of ATC 12091: BH901 (3-31-08), BH912 (7-1-08), and BH916 (3-31-08). All tested baghouses were found in compliance with the PM and PM10 emission limits in ATC 12091 and stack opacity limits.

**2.0 ENGINEERING ANALYSIS**

- 2.1 Equipment/Processes: The Milling Circuit is comprised of the following equipment: one (1) Mill BM906 (APCD Dev No 108936), two (2) classifiers, CL 910 and CL 913 (APCD Dev Nos 108937 and 110202), one (1) Cyclone (APCD Dev No 108939/Celite ID: CY914), one (1) Weigh Bin (APCD Dev No 108942/Celite ID: BN904), one (1) Feed Bin (APCD Dev No 108934/Celite ID: BN901), Waste Bin (APCD Dev No 111058) and six (6) screw conveyors. Particulate emissions from the Feed Bin will be controlled by Feed Bin Baghouse BH901 (APCD Dev No 108935),

## PERMIT EVALUATION

### Permit To Operate No. 12091-01

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particulates from Classifier CL913 will be sent to process baghouse BH912 (APCD Dev No 110203) and particulates from the process line and Cyclone will be controlled by the Milling Circuit Baghouse BH916 (APCD Dev No 108940). Additional equipment includes product handling equipment, i.e., one 300 cfm and one 600 cfm Sutorbilt electric motor driven product blowers (APCD Dev Nos 109438 and 108946). A list of equipment appears in this permit.

The Milling Circuit Plant process starts with dry DE pneumatically fed to the Feed Bin from one of the product inlet tie-ins noted below:

Inlets: #1 Bulk Bin (Dev No 106107)  
#2 Bulk Bin (Dev No 106107)  
601 Dry End Baghouse (Dev No 103364)  
602 Dry End Baghouse (Dev No 103365)  
Swing Air Sifters (Dev No 103414) – Product Handling  
Product Silos (BN101-BN108)  
Silos Disposition Bins

The maximum designed feedrate is 10 dry short tons per hour to the Milling Plant. From the Feed Bin, material is routed through the Milling Circuit using screw conveyors and pneumatic transport. Product from Classifier CL913 is controlled by the process baghouse while waste material is pneumatically conveyed through the waste storage bin to the central waste system of the Lompoc Plant. Finished products are pneumatically conveyed using a Sutorbilt Blower to one of the product outlet tie-ins noted below:

Outlets: #2 Bulk Bin (Dev No 106107)  
#7 Bulk Bin (Dev No 103325) – Product Storage  
#8 Bulk Bin (Dev No 103325) – Product Storage  
East Sifter Bin (Dev No 103325) – Product Storage  
Coarse Bin (Dev No 103325) – Product Storage  
Swing Air Sifters (Dev No 103414) – Product Handling  
Product Silos (BN101-BN108)  
Silos Disposition Bins

Feedrate to the Milling Circuit is 10 dry short tons per hour (9.1 mt/hr). When the material reaches the desired characteristics, it is captured and collected.

The waste from the Milling Circuit will be comprised of DE sized outside the desirable range. The waste will be gravity fed through flexible tubing into a self-contained semi-bulk bag closed to the atmosphere or to the central waste system. Waste from classifier CL912 will be transported to a 500 pound capacity Waste Bin (APCD Dev No 111058) and the waste from this bin pneumatically transferred to the central waste system. Milling Circuit waste will be handled by the existing central waste system controlled by the Preseparator Waste Baghouse (APCD Dev No 136) or by the General Waste Baghouse (APCD Dev No 137).

- 2.2 Emission Controls: The Milling Circuit Plant incorporates three particulate fabric filter controls in its design: (1) Airjet Milling Circuit Baghouse will operate under negative pressure with a flow of 2,250 scfm, (2) Airjet Feed Bin Baghouse will operate under negative pressure at ambient temperature with a flow of 13,243 scfm, and (3) Mikropul RAF II Process Baghouse will operate under negative pressure at ambient temperature with a maximum flow of 13,000 scfm. All Plant

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Permit To Operate No. 12091-01

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baghouses are designed to limit the particulate matter concentration in the exhaust to atmosphere to a level not to exceed 0.005 grains per dry standard cubic foot (gr/dscf). The pressure drop across each plant baghouse shall not exceed 6 inches of water.

- 2.3 Emissions: Because the Milling Plant emissions are based on baghouse airflow and exhaust PM emission limits, the increase in Plant production rate does not result in an increase in emissions for the Plant. Potential PM/PM<sub>10</sub> emissions from Plant baghouses are based on the maximum rated airflow for the baghouse exhaust blower as documented in section 2.2, the guaranteed outlet grain loading concentration (0.005 gr/dscf) and an operating schedule of 8,760 hours per year. The general equation for particulate matter emissions is:

$$E_{(lb/day)} = EF_{(gr/scf)} \times Q_{(scf/min)} \times 1440_{(min/day)} / 7000_{(gr/lb)}$$
$$E_{(ton/yr)} = EF_{(gr/scf)} \times Q_{(scf/min)} \times 60_{(min/hr)} \times 8760_{(hr/yr)} / 7000_{(gr/lb)} / 2000_{(lb/ton)}$$

where: E = mass emission rate  
EF = emission factor  
Q = exhaust flow rate

The grain loading concentration is a guaranteed limit provided by the manufacturer. A copy of this guarantee is located in the project file. For permitting purposes, Celite has assumed that the PM/PM<sub>10</sub> ratio is 1:1.

Based on the above baghouse operating and design parameters, the permitted emission limits are listed in revised permit condition 1 and emission tables referenced in Attachment A of this permit. Source testing shall be conducted to verify the grain loading concentrations, air flow rate and mass emissions.

- 2.4 Reasonable Worst Case Emission Scenario: 24 hours per day and 8,760 hours per year.
- 2.5 Special Calculations: There are no special calculations.
- 2.6 BACT Analyses: Because the Milling Circuit Plant installation is part of the larger System 7 modification (ATC 12105), Best Available Control Technology was triggered since the entire project emissions exceed the Rule 802 25 lb/day BACT threshold for PM emissions. In addition, the proposed operations under PTO 12091 result in the Milling Circuit Plant project alone exceeding the PM/PM<sub>10</sub> BACT emission threshold of 25 pounds per day. The PM/PM<sub>10</sub> control technology and emission standard proposed by Celite qualifies as BACT for the Milling Circuit Plant:
1. The particulate concentration from project baghouses not to exceed 0.005 gr/dscf.
  2. Mill (Dev No 108936), classifiers (Dev No 108937 and Dev No 110202), waste bin (Dev No 111058) and all product transport lines, screw conveyors, and transfer points serving this equipment are completely enclosed and vented to a Milling Plant baghouse.

## PERMIT EVALUATION

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2.7 Enforceable Operational Limits: The permit has enforceable operating conditions to ensure compliance with APCD rules and regulations.

2.8 Monitoring Requirements:

1. This permit requires the monitoring of the pressure drop across the baghouse. The permitted pressure drop maximum is 6 inches of water for baghouses BH901, BH916 and BH912. Data provided by Celite during SCDP was inconclusive for setting a lower pressure drop bound. Therefore, a condition has been added to collect further delta P data to assess whether additional measures, including more frequent visible emissions inspections are necessary. The condition requires a reopener to the Baghouse I&M Plan, and is intended to address pressure declines that indicate problems with the bags or potential dusting. Periodic source testing of this unit is also required.
2. Compliance Assurance Monitoring: The Celite Lompoc Plant is a major source that is subject to the USEPA's Compliance Assurance Monitoring (CAM) rule (40 CFR Part 64). The baghouses contained within this permit (Dev Nos 108935, 108940, and 110203) satisfy the criterion established by 40 CFR Part 64 that subject these units to additional compliance monitoring, i.e., (1) these units have precontrol emissions of at least 100% of the major source amount (PM/PM<sub>10</sub>); (2) are subject to a federally enforceable emissions standard, and (3) use a control device to achieve compliance with this standard.

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

## PERMIT EVALUATION

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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 Milling Circuit unit is a milling operation and 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.

4.3 NEI Calculations: The emissions from this project constitute a net emissions increase (NEI). The project emission increase ("I") and stationary source PM/PM<sub>10</sub> NEI total is shown in Attachment C. The total PM/PM<sub>10</sub> NEI does not trigger the PM<sub>10</sub> offset threshold of 80 pounds per day.

### 5.0 AQIA

This permitting action does not trigger the requirement for conducting an AQIA.

### 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 (see 6.1 above).

6.3 ERCs: This permitting action does not generate emission reduction credits (see 6.1 above).

### 7.0 AIR TOXICS

Based on the 1994 toxic emissions inventory for the Lompoc plant, cancer and non-cancer toxics risks off the property were estimated to be below the APCD's AB2588 significance thresholds.

### 8.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REVIEW

This project is exempt from CEQA pursuant to the Environmental Review Guidelines for the Santa Barbara County APCD (revised November 16, 2000). Appendix A (*APCD Projects Exempt from CEQA and Equipment or Operations Exempt from CEQA*) provides an exemption specifically for permits to operate and reevaluations thereof. No further action is necessary.

### 9.0 SCHOOL NOTIFICATION PROCESS

A school notice pursuant to the requirements of H&SC §42301.6 was not required.

### 10.0 PUBLIC and AGENCY NOTIFICATION PROCESS

This project was not subject to public notice. Celite submitted comments on the draft PTO on October 3, 2008. The APCD responses to those comments appear in Attachment D of this permit.

### 11.0 FEE DETERMINATION

Fees for the APCD's work efforts are assessed on a cost reimbursement basis. The Project Code is 205129.

PERMIT EVALUATION  
Permit To Operate No. 12091-01

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**12.0 RECOMMENDATION**

It is recommended that this permit be granted with the conditions as specified in the permit.

<u>David Harris</u> AQ Engineer	<u>6/3/2009</u> Date	<u><i>Bin Alley</i></u> Engineering Supervisor	<u>6/3/09</u> Date
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ATTACHMENTS

- A. Emission Tables
- B. IDS Tables
- C. NEI Table

**ATTACHMENT A**

**EMISSION TABLES**

**Operating Equipment Description**  
**PTO 12091**  
**Celite Corporation - Lompoc Plant - System 7 Milling Circuit**

Equipment Description			Equipment Specification		Operating Limitations		
Equipment Item	Process Line	APCD DeviceNo	Size	Units	On-line		
					(hr/day)	(hr/qr)	(hr/yr)
Feed Bin Baghouse (BH901)	Line 7	108935	2,550	scf/minute	24	2190	8760
Baghouse (BH916)	Line 7	108940	13,243	scf/minute	24	2190	8760
Process Baghouse (BH912)	Line7	110203	13,000	scf/minute	24	2190	8760

**Equipment Emission Factors Federally Enforceable**  
**PTO 12091**  
**Celite Corporation - Lompoc Plant - System 7 Milling Circuit**

Equipment Description			Emission Factors						Units	References
Equipment Item	Process Line	APCD DeviceNo	NOx	ROC	CO	SOx	PM	PM10		
Feed Bin Baghouse (BH901)	Line 7	108935					0.005	0.005	gr/dscf	PTO 12091
Baghouse (BH916)	Line 7	108940					0.005	0.005	gr/dscf	PTO 12091
Process Baghouse (BH912)	Line7	110203					0.005	0.005	gr/dscf	PTO 12091

**Short Term Emissions**  
**PTO 12091**  
**Celite Corporation - Lompoc Plant - System 7 Milling Circuit**

Equipment Description			NOx		ROC		CO		SOx		PM		PM10	
Equipment Item	Process Line	APCD DeviceNo	lb/hr	lb/day										
Feed Bin Baghouse (BH901)	Line 7	108935	--	--	--	--	--	--	--	--	0.11	2.62	0.11	2.62
Baghouse (BH916)	Line 7	108940	--	--	--	--	--	--	--	--	0.57	13.62	0.57	13.62
Process Baghouse (BH912)	Line7	110203	--	--	--	--	--	--	--	--	0.56	13.37	0.56	13.37

**Long Term Emissions**  
**PTO 12091**  
**Celite Corporation - Lompoc Plant - System 7 Milling Circuit**

Equipment Description			NOx		ROC		CO		SOx		PM		PM10	
Equipment Item	Process Line	APCD DeviceNo	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY
Feed Bin Baghouse (BH901)	Line 7	108935	--	--	--	--	--	--	--	--	0.12	0.48	0.12	0.48
Baghouse (BH916)	Line 7	108940	--	--	--	--	--	--	--	--	0.62	2.49	0.62	2.49
Process Baghouse (BH912)	Line7	110203	--	--	--	--	--	--	--	--	0.61	2.44	0.61	2.44

**ATTACHMENT B**

**IDS TABLES**

**IDS Database Emission Tables**

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

**PTO 12091 Milling Plant Modification**

	<b>NOx</b>	<b>ROC</b>	<b>CO</b>	<b>SOx</b>	<b>PM</b>	<b>PM<sub>10</sub></b>
<b>lb/day</b>	0.00	0.00	0.00	0.00	29.62	29.62
<b>tons/year</b>	0.00	0.00	0.00	0.00	5.40	5.40

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

	<b>NOx</b>	<b>ROC</b>	<b>CO</b>	<b>SOx</b>	<b>PM</b>	<b>PM<sub>10</sub></b>
<b>lb/day</b>	53841.07	6507.22	4129.59	57964.66	26980.04	26909.10
<b>tons/year</b>	9222.14	1187.17	747.30	10533.41	4919.66	4907.11

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

	<b>NOx</b>	<b>ROC</b>	<b>CO</b>	<b>SOx</b>	<b>PM</b>	<b>PM<sub>10</sub></b>
<b>lb/day</b>	20891.70	10174.39	36769.01	48287.33	7379.27	7352.92
<b>tons/year</b>	3812.74	1856.83	6710.34	8812.44	1343.74	1339.10

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

	<b>NOx</b>	<b>ROC</b>	<b>CO</b>	<b>SOx</b>	<b>PM</b>	<b>PM<sub>10</sub></b>
<b>lb/day</b>	0.00	2.49	85.66	0.00	76.77	75.50
<b>tons/year</b>	0.00	0.46	14.44	0.00	9.56	10.97

**ATTACHMENT C**

**NEI TABLE**

**TABLE - Stationary Source NEI**  
**Part 70/APCD PTO 5840**  
**Cellite 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										
<b>Totals</b>		<b>0.00</b>											

**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 <sup>1</sup>	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 12208	Jan-07									19.84	3.62	19.84	3.62
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 <sup>2</sup>	Aug-07									0.00	0.00	0.00	0.00
PTO 12398	Nov-07									23.15	4.22	23.15	4.22
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
PTO 12091 <sup>3</sup>	Sep-08									29.62	5.40	29.62	5.40
<b>Totals</b>		<b>48.53</b>	<b>8.86</b>	<b>10.74</b>	<b>1.96</b>	<b>292.81</b>	<b>52.15</b>	<b>88.23</b>	<b>15.68</b>	<b>358.98</b>	<b>62.52</b>	<b>332.63</b>	<b>57.88</b>

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 12208-01 as PTE under ATC 12208; therefore, no increase in PTE.  
 3. PTE includes ATC 12091, ATC 12091-1, ATC 12091-2, and ATC 12091-3.

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

Enter all stationary source "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
<b>Totals</b>		<b>28.06</b>	<b>5.12</b>	<b>6.21</b>	<b>1.13</b>	<b>85.25</b>	<b>15.56</b>	<b>12.68</b>	<b>2.32</b>	<b>81.08</b>	<b>14.78</b>	<b>81.08</b>	<b>14.78</b>

**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 <sup>1,2</sup>	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
<b>Totals</b>		<b>20.47</b>	<b>3.74</b>	<b>2.04</b>	<b>0.37</b>	<b>121.90</b>	<b>22.15</b>	<b>75.55</b>	<b>13.36</b>	<b>201.13</b>	<b>38.18</b>	<b>176.05</b>	<b>32.13</b>

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

D Term Adjustment  
 Total Reductions from ATC 12105 ("D" Term)  
 1 ÷ (P1-P2) on June 11, 2007 (issue date of ATC 12105)  
 Add 1 Term from ATC 12105-01  
 Subtract Above P2 Decrease  
 Remaining Reductions subject to DOI 047 application

NOx		SOx		PM	
lb/day	TPY	lb/day	TPY	lb/day	TPY
65.82	12.01	1147.42	209.40	355.87	64.95
48.53	8.86	88.23	15.68	224.18	42.38
				57.79	10.55
28.06	5.12	12.68	2.32	80.84	14.75
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: 1 + (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	358.98	62.52	332.63	57.88
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
<b>NEI-90</b>	<b>0.00</b>	<b>0.00</b>	<b>2.49</b>	<b>0.46</b>	<b>85.66</b>	<b>14.44</b>	<b>0.00</b>	<b>0.00</b>	<b>76.77</b>	<b>9.56</b>	<b>75.50</b>	<b>10.97</b>

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