



Proposed

Part 70 Minor Permit Modification 5840-05

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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

AUTHORIZED MODIFICATION:

This modification implements monitoring measures to ensure ongoing PM/PM₁₀ emissions compliance of the #5 system Venturi Scrubber. These measures stemmed from a failed PM source test and a subsequent Variance Order. . The measures addressed in this permit are:

- 1) Monitoring of the pressure drop across the scrubber demister pad with a pressure differential gauge, and appropriate corrective measures.
- 2) Routine internal inspections of the demister pad.
- 3) More frequent PM/PM₁₀ source testing of the scrubber.

This modification authorizes changes to PTO 5840-R3 permit conditions by adding permit condition 9.C.4 (c)(x)(4) and 9.C.9 (a)(iii)(a) and changing permit condition 9.C.4 (d)(x)(1) and (3). No other changes to those permitted under PTO 5840-R3 are authorized.

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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 Celite Facility ID is 0012 and the Stationary Source ID is 1735.

CONDITIONS:

9.A Standard Administrative Conditions

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

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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.6 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.7 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.8 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

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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.9 **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.10 **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.11 **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

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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*]

- A.12 **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

- 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.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*]

9.C Requirements and Equipment Specific Conditions

The specified subsections of the condition in this section supersede the same specified subsections of the numbered condition in PTO/Part-70 Permit 5840-R3 as a result of this permitting action. All other permit conditions in PTO/Part-70 Permit 5840-R3 remain unchanged and in full force.

9.C.4. Combustion Equipment - Kilns and Furnaces of Lines 3, 5, 6, and 7.

- (c) **Monitoring:** The following monitoring conditions apply to the kilns and furnaces:

- (i) *Source Testing (CHEAF)* - Emissions from the kilns and furnaces are treated by the control devices listed for each in the last column of Table 9.1 above. Annual source testing shall be completed by November 1st for each control device, and shall be performed on a fuel approved by the District considering such factors as the predominant fuel used in the most recent year and the results of previous testing on the various fuels permitted. Celite shall propose the fuel for testing in the source test plan for APCD consideration. Celite shall perform source testing of air emissions and process parameters listed in Table 9.11 (*Source Test Requirements for External*

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Combustion Units) and in accordance with permit condition 9.C.9 (*Source Testing*).
[Ref: ATC 9367, ATC 9353; ATC 10361]

- (ii) *Source Testing (System #5)* - Source testing of the #5 System shall be conducted with the Venturi wedge set in the worse case (maximum airflow) condition, i.e., the wedge shall be positioned zero inches from the lowest possible point to which it can travel.
[Ref: ATC 10361-01]
- (iii) *Fuel Metering* - The volumetric flow rates of the fuel oils and fuel gases used by the kilns and furnaces of Lines 3, 5, 6, and 7 shall be monitored by use of dedicated, instantaneous fuel meters. These meters shall be operated consistent with Celite's APCD-approved *Process Monitor Calibration and Maintenance Plan*. [Ref: ATC 9353 & 9367 PC 2; ATC 10361]
- (iv) *Heat Input Tracking(Main Burners)* - Each month Celite shall determine the peak heat input per hour for each furnace and kiln in MMBtu/hr and identify the fuel type associated with this peak rate. Hourly heat input for each furnace and kiln shall be determined dividing the total daily heat input to each unit by the number of operating hours of each furnace and kiln unit for the corresponding day. [Ref: ATC 10361-01; 40 CFR 70.6]
- (v) *Heat Input Tracking (Pilots)* - Celite shall monitor the hourly pilot fuel rate (scf) for each furnace and kiln pilot.
- (vi) *Diatomaceous Earth (DE) Sulfur Content Testing* - Once every calendar quarter, Celite shall measure the total sulfur content of the DE in Lines 3, 5, 6, & 7, before the furnace and after the kiln. The analysis of the DE before the furnace shall be done in accordance with Celite Method LO-412-413 as specified in the APCD approved SO_x Protocol. The analysis of the DE after the kiln shall be done in accordance with ASTM D-5016-89 or an equivalent reference method that has been previously approved, in writing, by the APCD. Celite shall also measure for each sample the amount of soda ash being added during sampling. [Ref: ATC 935 , ATC 9367]
 - (1) In quarters when source testing is conducted on the CHEAFs or the #5 Venturi Scrubber, Celite shall not be required to complete sulfur content sampling after the kilns. The sulfur content results from the source tests will be used in place of the standard quarterly samples.
- (vii) *Continuous Emission Monitoring* - Celite shall monitor the hourly SO_x emissions from the #3, #5, #6 and #7 system CHEAFs and the Venturi Scrubber consistent with the District-approved *SO_x Compliance Monitoring Protocol*. See permit condition 9.C.11.
- (viii) *Visible Emissions Observations* - Celite shall perform a visual inspection of each CHEAF stack and the 5 HEV stack exhaust once per day. If visible emissions are observed during the daily inspection, corrective action shall be immediately implemented. If visible emissions are not eliminated within 24 hours, Celite shall

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shut down the equipment controlled by this equipment until corrective action that eliminates visible emissions is completed or obtain a variance.

- (ix) *Visible Emissions Inspections (Method 9)* - Once each calendar quarter, Celite shall use EPA Method 9 performed by a certified observer to obtain a reading of visible emissions from the stack of each CHEAF and the 5HEV. The Method 9 readings shall be taken in calendar quarters during which the CHEAF or HEV is operated and shall be taken when a furnace or kiln served by the CHEAF or HEV is operating. If visible emissions are observed during the quarterly Method 9 inspection, corrective action shall be immediately implemented. If visible emissions are not eliminated within 24 hours, Celite shall shut down the equipment controlled by this equipment until corrective action that eliminates visible emissions is completed or obtain a variance.

- (x) *System #5 Venturi Scrubber* – Celite shall monitor the following parameters for the System #5 Venturi Scrubber [Ref: ATC/PTO 11221]:
 - (1) *System #5 Slurry Measurement* - The volume (gpm) of slurry pumped to the venturi scrubber from the slurry tank shall be measured through the use of a calibrated meter or an APCD-approved alternate method. The meter shall be calibrated according to manufacturer's specifications. Calibration records shall be made available to the APCD upon request.
 - (2) *System #5 Pressure Differential* - The pressure differential across the venturi scrubber (psia) shall be monitored through the use of a calibrated monitor. The monitor shall be calibrated according to manufacturer's specifications. Calibration records shall be made available to the APCD upon request.
 - (3) *System #5 Slurry Pressure* - The slurry line pressure (psia) shall be monitored through the use of a calibrated monitor. The monitor shall be calibrated according to manufacturer's specifications. Calibration records shall be made available to the APCD upon request.
 - (4) *System #5 Venturi Scrubber Demister Pad* – Particulate matter control effectiveness of the demister pad shall be monitored and maintained by implementation of the following:
 - (a) The pressure differential across the demister pad (inches wc) shall be monitored through the use of a calibrated pressure differential monitor. The monitor shall be calibrated according to manufacturer's specifications. Calibration records shall be made available to the APCD upon request.
 - (b) Visible inspections of the demister pad shall be conducted at least every twenty-one days and the results of the inspection recorded and available to the APCD upon request. Evidence of gaps or openings in the pad, thinning of the pad thickness, or blinding of the pad through

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particulate buildup shall trigger corrective action established in the revision to the sections of the Celite Lompoc Plant *Compliance Assurance Monitoring Plan* specified in condition 9.C.4 (c) (x) (4) (c) below.

- (c) Within 30 days of the date of issuance of this permit, permittee shall submit for APCD approval a revision to the Celite Lompoc Plant *Compliance Assurance Monitoring Plan* sections addressing the Venturi Scrubber. The revision shall include adding a column to table 7 for the Demister Pad Differential Pressure along with specification of pressure differential values and/or trends that trigger corrective action or additional source testing. Corrective actions to be implemented shall be described and prioritized in the Plan revision. In addition, the Plan shall address monitoring frequency, data collection, data averaging, recordkeeping and QA/QC procedures.
- (d) Recordkeeping: Celite shall maintain the following records for the kilns and furnaces:
 - (i) *Heat Input Tracking* - Celite shall record monthly the peak heat input per hour for each furnace and kiln in MMBtu/hr for each fuel type. [Ref: 40 CFR 70.6]
 - (ii) *Fuel Gas Usage (Burner Pilots)* - Celite shall record the total daily volume of pilot gas used by each furnace and kiln pilot in units of standard cubic feet (scf).
 - (iii) *Fuel Data* - Celite shall record the higher heating value of each fuel oil and fuel gas burned by the furnaces and kilns annually. Documentation of the sulfur content shall be maintained in accordance with 9.B.7. [Ref: ATC 9353, ATC 9367]
 - (iv) *Fuel Oil Usage* - The monthly and annual usage of fuel oil #2, #4 and #6 in units of gallons, including the date that a change of fuel is made and the fuel types prior to the change and after the change for each kiln and furnace. [Ref: ATC 9353; ATC 9367; ATC 10361]
 - (v) *Natural Gas and Propane Fuel Usage* - The monthly and annual usage of natural gas and propane in units of thousand standard cubic feet (Mscf), including the date that a change of fuel is made and the fuel types prior to the change and after the change for each kiln and furnace. Celite shall record such usage in a format that District personnel are able to use the data to verify compliance during a typical District inspection. [Ref: ATC 9353; ATC 9367; ATC 10361]
 - (vi) *Diatomaceous Earth Sulfur Content* - Celite shall record the results of the measurements of the total sulfur content of the DE processed before the furnace and after the kiln of Lines 3, 5, 6, and 7 once every quarter. Total sulfur results shall be reported as percent by weight. Celite shall also report for each sample the location and amount of soda ash being added during sampling and the difference between the inlet and outlet samples. [Ref: ATC 9353, ATC 9367]

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- (vii) *Visible Emission Observations* - Celite shall record whether or not daily visible emissions are present from the CHEAFs and 5HEV or the date and initials of a responsible person when a CHEAF or 5HEV is non-operational. If visible emissions are present, Celite shall record the corrective action taken to eliminate visible emissions within 24 hours. [Ref: 40 CFR 70.6]
- (viii) *Visible Emissions Observations (Method 9)* - Celite shall record the following for the readings obtained by the use of USEPA Method 9 for all CHEAFs and the 5HEV: date of reading, name of reader, most recent Method 9 certification date of reader, control device name, individual interval readings required by Method 9, and the final reading. [Ref: 40 CFR 70.6]
- (ix) *Sulfur Emissions Monitoring* - Celite shall adhere to the recordkeeping requirements listed in the APCD approved *SO_x Compliance Monitoring Protocol*.
- (x) *System #5 Venturi Scrubber* – Celite shall maintain the following records for the System #5 Venturi Scrubber [Ref: ATC/PTO 11221]:
 - (1) Daily records of the slurry rate, venturi differential pressure, slurry flow line pressure and the differential pressure across the demister pad.
 - (2) Each instance in which operation outside any of the parameters listed in permit condition C.4(b)(ix) and (x) occurred, the reason for non-operation, how long it persisted and the corrective actions taken to resume operation within these parameters.
 - (3) Dates of inspection, replacement, and each corrective action taken for the demister pad.
 - (4) On a quarterly basis, the number of non-operational hours of each monitor/meter and the DRE of each monitor/meter.
 - (5) All records required by the Calibration and Maintenance Plan.
- (e) 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 required by condition 9.C.13 of this permit (*Semi-Annual Monitoring/Compliance Verification Reports*). [Ref: APCD Rules 311.C and 1303, ATC 9353 and ATC 9367, 40 CFR 70.6]

9.C.9 Source Testing. In addition to the source test requirements specified in condition 9.C.2(c)(i), 9.C.3(c)(ii), 9.C.4(c)(ii), 9.C.5(c)(viii), and 9.C.6(c)(ii), the following source testing provisions shall apply:

- (a) Frequency - Celite shall perform third party source testing of air emissions and process parameters listed in Table 9.11 (*Source Test Requirements for External Combustion Units*), and Table 9.12 (*Source Test Requirements for Baghouses and Rotoclones*). At least one item from each equipment group listed in Table 9.10 shall be tested biennially.

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Group Nos. 1 and 3 tests shall be completed in 2007 and Group Nos. 2 and 4 tests shall be completed in 2008. Baghouse 378 (APCD Device No. 109) shall be the first unit of Group No. 3 to be tested.

- (i) *Boiler Test Schedule* – Boiler #1 and Boiler #2 shall be source tested biennially with May 1st as the anniversary date. The specified month of testing for the above noted equipment units may be modified if approved in advance by the APCD. In addition, any unit that was unable to be tested due to non-operation in the previous cycle, shall be tested within 90 days of startup.
- (ii) *Baghouse Test Schedule* - The 3 Automatic Packing Station Baghouse (345BH) shall be source tested annually with April 1st as the anniversary date. The Crushing Plant Ventilation Baghouse (CRVBH) shall be source tested triennially with April 1st as the anniversary date. The specified month of testing for the above noted equipment units may be modified if approved in advance by the APCD. If an equipment item in Table 9.10 can not be tested due to non-operational status, and all operational equipment units have been tested in the group, (i.e. a cycle completed) Celite shall commence the next cycle of testing. In addition, any unit that was unable to be tested due to non-operation in the previous cycle, shall be tested within 90 days of startup. [Re: ATC 8202]
- (iii) *CHEAF and Scrubber Test Schedule* – The CHEAFS and System #5 Venturi Scrubber shall be source tested annually by November 1st.
 - (a) Celite shall conduct quarterly source tests for PM and PM₁₀ in the #5 Venturi Scrubber stack in accordance with the most recent APCD approved #5 venturi test protocol. Testing shall be conducted in the first quarter 2008. If the first quarter 2008 test or the test completed in October 2007 documents non-compliance with permitted PM/PM₁₀ emission limits, testing shall proceed on a calendar quarterly basis until test results from two consecutive calendar quarters document compliance. The source test schedule for the #5 Venturi Scrubber shall return to annual upon two consecutive passed quarterly tests. The first quarter 2008 test does not fulfill the annual test requirement for 2008.
- (iv) *Rotoclone Test Schedule* – The Chromosorb Rotoclone shall be tested every six years.
- (v) *Coverage* - Except in the case of non-operational equipment, Celite shall test each unit in the group listed in Table 9.10, thereby completing a full test cycle, before any unit within that group is source tested a second time, and test each unit a second time before any unit is tested a third time.

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Table 9.10 Baghouse Equipment Source Test Grouping

Group No.	Device Name	Type	Celite ID	APCD DeviceNo
1	Silicate Plant Flash Dryer Baghouse	Enclosed	SPFDBH	103474
1	Pellet Plant Ventilation Baghouse - Hot	Enclosed	PPHVBH	148
1	Recirculating System Ventilation Baghouse ¹	Enclosed	RBH	135
1	978 Baghouse	Enclosed	978BH	110
1	Silicate Plant Production Baghouse	Enclosed	SPPBH	141
2	6 Automatic Packing Station Baghouse (678)	Enclosed	6APVBH	103363
2	Silicate Plant Ventilation Baghouse (Pack)	Enclosed	SPVBH	142
2	General Waste Baghouse ¹	Enclosed	GWBH	137
2	Chromosorb Ventilation Baghouse - South ¹	Enclosed	CPVBHS	149
2	11 Mill Ventilation Baghouse (1178)	Enclosed	11VBH	102
3	378 Baghouse/ 3 Dry End	Enclosed	378BH	109
3	5 Automatic Packing Station Baghouse (578)	Enclosed	5APVBH	119
3	Mortar Plant Ventilation Baghouse	Enclosed	MPVBH	146
3	Silicate Plant Lime Baghouse	Enclosed	SPLBH	139
4	616 Ventilation Baghouse	Enclosed	616VBH	128
4	Preseparator Waste Baghouse ¹	Enclosed	PSWBH	136
4	Silicate Plant Feed Mix Baghouse	Enclosed	SPFMBH	138
4	Pellet Plant Ventilation Baghouse - Cold	Enclosed	PPCVBH	147

Notes: _____

¹Baghouses which are production rate independent. See Condition 9.C.9.b.

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(b) Load for Source Testing:

- (i) *Baghouses Subject to Source Testing* - Celite may test the baghouses identified in Table 9.10 as production rate independent, at loads less than full capacity operation of the equipment served by the baghouse, as long as some of the equipment served by the baghouse is operating.
- (ii) *CHEAFs and Scrubber* - Although Celite may test these units at loads less than full capacity operation of the equipment served by the CHEAF or System #5 Venturi Scrubber, the furnace and kiln served by the CHEAF or System #5 Venturi Scrubber must be operating during the source test.
- (iii) *Boiler #2* - The source test shall be performed at the maximum attainable firing rate allowed by this permit or Boiler #2 shall not be operated in excess of 110% of the hourly heat input rate at which it was source tested and found to be in compliance.

AIR POLLUTION CONTROL OFFICER

DATE

Attachments:

- Permit Evaluation for Permit to Operate Modification 5840-05.

Note:

1. Next Reevaluation Due: March 2009



PERMIT EVALUATION FOR
PERMIT TO OPERATE MODIFICATION 5840-05

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1.0 BACKGROUND

- 1.1 General: The application for a modification to PTO 5840 was received on September 26, 2007. The application was submitted in accordance with Variance Order H.B. Case 30-07-E. Regulatory coverage under a variance was secured by the permittee after exceedances of the permitted particulate emission limits for the #5 Venturi Scrubber were documented in a source test conducted August 22, 2007. The modification entails instituting a scrubber source test schedule for PM/PM₁₀ for a specified period of time until continued compliance can be assured. Additional monitoring of effective operation of the scrubber will be verified by monitoring the pressure drop across the scrubber demister pad with a pressure differential gauge and through visual inspections.
- 1.2 Permit History: See Section 1.2.2 of Part 70 Operating Permit and Permit to Operate 5840-R3.
- 1.3 Compliance History: See Section 3.5 of Part 70 Operating Permit and Permit to Operate 5840-R3.

2.0 ENGINEERING ANALYSIS

- 2.1 Equipment/Processes: 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.
- 2.2 Emission Controls: The particulate emissions from the #5 system process line kiln are controlled by the #5 Venturi Scrubber.
- 2.3 Emission Factors: Emission factors for each equipment item are based on those used in PTO 5840-R3.
- 2.4 Reasonable Worst Case Emission Scenario: Worst case emissions are based on operation of this facility 24 hours/day, 365 days per year at maximum permitted throughput levels.
- 2.5 Emission Calculations: None.
- 2.6 Special Calculations: None.
- 2.7 BACT Analyses: Best Available Control Technology was not required for this project.

PERMIT EVALUATION FOR
PERMIT TO OPERATE MODIFICATION 5840-05

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- 2.8 Enforceable Operational Limits: The permit has enforceable operating conditions that ensure the control device is operated properly.
- 2.9 Monitoring Requirements: Monitoring of the equipment's operational limits are required to ensure that these are enforceable. This permit requires monitoring the pressure differential across the demister pad at the outlet of the System 5 Venturi Scrubber.
- 2.10 Recordkeeping and Reporting Requirements: The permit requires that the data which is monitored 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 202. Exemptions to Rule 201
- Rule 205. Standards for Granting Permits
- Rule 303. Nuisance
- Rule 505. Breakdown Procedures
- Rule 801. New Source Review
- Rule 802. Nonattainment Review
- Rule 803. Prevention of Significant Deterioration

- 4.2 Rules Requiring Review: None

- 4.3 NEI Calculations: The net emission increase calculation is used to determine whether certain requirements must be applied to a project (e.g., offsets, AQIA, PSD BACT). There is no increase to the stationary source NEI as a result of this permit modification.

5.0 AQIA

The project is not subject to the Air Quality Impact Analysis requirements of Regulation VIII.

6.0 OFFSETS/ERCs

- 6.1 General: The emission offset thresholds of Regulation VIII is not exceeded as a result of this permit modification.
- 6.2 Offsets: Offsets are not required for this permitting action.
- 6.3 ERCs: This source does generate emission reduction credits

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this permitting action.

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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.1 (*APCD Projects Exempt from CEQA*) specifically exempts Permits to Operate. 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/COMMENTS ON DRAFT PERMIT

This project was not subject to public notice. The permittee was issued a draft PTO Modification 5840-05 on October 15, 2007 and responded on October 25, 2007 with no comments.

11.0 FEE DETERMINATION

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

12.0 RECOMMENDATION

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

_____ Al Ronyecz AQ Engineer	_____ Date	_____ Engineering Supervisor	_____ Date
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