New York State Department of Environmental Conservation Division of Environmental Permits, Region 4

1130 North Westcott Road, Schenectady, New York, 12306-2014

Phone: (518) 357-2069 • FAX: (518) 357-2460

Website: www.dec.ny.gov



March 20, 2013

Mr. Thomas VanVranken Norlite Corporation 628 South Saratoga Street Cohoes, New York 12047

> RE: MINED LAND PERMIT RENEWAL

Mined Land Reclamation Permit Norlite Corporation DEC # 4-0103-00016/00019 MLF # 4-0002

T/Colonie & C/Cohoes, Albany County

Dear Mr. VanVranken:

As requested, enclosed is the renewed Mined Land Reclamation Permit for the above referenced facility. This permit becomes effective on March 20, 2013, and expires on March 19, 2018. Please read it carefully and note the special conditions that are included in it. The permit is valid for only those activities expressly authorized therein. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and be subject to appropriate enforcement action.

Be advised, the Uniform Procedures Regulations (6NYCRR Part 621), provide that an applicant may request a hearing if a permit contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of this transmittal and must be addressed to the Regional Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Applications for permit renewal must be made in advance of the permit expiration date. Please refer to the general conditions listed in the permit for specific instructions. The number listed above pertains to this permit and should be referenced on all correspondence related to this permit and any future applications for permits associated with this facility or project.

Sincerely,

Nancy M. Baker

Deputy Regional Permit Administrator

Burton, Burton

Emelosure:

Norlite Corporation Mined Land Reclamation Permit Renewal dated March 20, 2013

cc via mail

Town of Colonic City of Cohoes

ce via email:

Tita LaGrimas, Tradebe

J. Hadersbeck, NYSDEC R4, Division of Environmental Remediation

Edward Davidson, Spectra Environmental Group, Inc.

Alan Hewitt, NYSDEC R4 Mining

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PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To: NORLITE LLC

PO BOX 694

COHOES, NY 12047-0694

(518) 235-0401

Facility:

NORLITE LLC

628 S SARATOGA ST

COHOES, NY 12047

Facility Location: in COHOES in ALBANY COUNTY

Facility Principal Reference Point: NYTM-E: 606.159

NYTM-N: 4734.382

Latitude: 42°45'16.6" Longitude: 73°42'09.8"

Project Location: 628 S. Saratoga Street, Cohoes

Authorized Activity: Continued operation of a 132 acre shale and clay mine, including on-site

processing, for which a previous permit has been issued under Article 23, Title 27 of the Environmental

Conservation Law (Mined Land Reclamation). Of the 132 acre life of mine area, 98 acres are

authorized to be affected by excavation and 34 acres comprise the Southern Overburden Storage Area.

Permit Authorizations

Mined Land Reclamation - Under Article 23, Title 27

Permit ID 4-0103-00016/00019

Renewal

Effective Date: 3/20/2013

Expiration Date: 3/19/2018

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: NANCY M BAKER, Deputy Regional Permit Administrator

Address:

NYSDEC REGION 4 HEADQUARTERS

1130 NORTH WESTCOTT RD SCHENECTADY, NY 12306 -



Permit Components

MINED LAND RECLAMATION PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

MINED LAND RECLAMATION PERMIT CONDITIONS

GENERAL REQUIREMENTS

- 1. Conformance With Plans All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such plans were approved by the Department on various dates and consist of the following items: "Mined Land Use Plan, Norlite, LLC, Cohoes, New York," prepared by Spectra Environmental Group, Inc., December 2012, revised January 2013.
- "Fugitive Dust Plan," prepared by Sci-Tech, Inc., August 1990, last revised July 2012.
- "Stormwater Pollution Prevention Plan and Best Management Practices Plan for the Norlite Corporation," prepared by Sterling Environmental Engineering, P.C., November 18, 2004, last revised February 29, 2012.
- "Addendum to Norlite Corp. Southern Overburden Storage Area Construction SWPPP, prepared by Spectra Environmental Group, Inc., February 2010.
- "Stormwater Pollution Prevention Plan, Revision 2," prepared by Spectra Environmental Group, Inc., March 2009.

Where the approved plans and conditions of this permit conflict, the permit conditions shall supersede the approved plans.

- 2. No Deviation From Approved Plan The permittee shall not deviate or depart from the approved mined land use plan without approval by the Department of an alteration or modification thereto.
- 3. File a Termination Notice If the permittee decided to discontinue operation, a termination notice shall be filed 60 days prior to the scheduled temporary or permanent cessation of mining.
- 4. Permit Does Not Apply to Structures and Safety Aspects Unless expressly provided for, the issuance of this permit does not apply to any structures contained on the plans or in the specifications, nor does this permit apply to safety aspects of the operation and/or reclamation plan.



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5. Human or Archaeological Remains If any human remains or archaeological remains are encountered during excavation, the permittee must immediately cease, or cause to cease, all work in the area of the remains and notify

Regional Permit Administrator NYSDEC REGION 4 HEADQUARTERS 1130 NORTH WESTCOTT RD SCHENECTADY, NY12306 -

Work shall not resume until written permission to do so has been received from the Department.

FINANCIAL SURETY

6. **Bond, Surety to Remain in Force** Any required reclamation bond or other surety, in an amount determined by the Department, shall be maintained in full force and effect. Such a bond or other surety shall not be terminated until the reclamation of the mined area is approved by the department in writing.

OPERATIONS

- 7. **Hours of Operation** The hours of operation within the mining affected area shall be limited to 6:00 AM to 9:00 PM Monday through Saturday. There shall be no operation (including, but not limited to the startup or operation of motorized equipment, trucks, and/or mining equipment) within the mining affected area on Sundays and the following holidays: New Years Day, Memorial Day, July 4, Labor Day, Thanksgiving Day and Christmas Day.
- 8. Hours of Operation for Southern Overburden Storage Area The operation of the Southern Overburden Storage Area shall be limited to 7:00 AM to 6:00 PM, Monday through Friday and on Saturday between 7:00 AM to 4:00 PM. After placement of the initial berm (Berm 1), the operation of the Southern Overburden Storage Area shall be limited to November-through April, with the exception of the construction of Structural Berms 2 through 6 which is authorized during the summer months (May through October).
- 9. Maintain Area Markers for Permit Term The permittee shall provide permanent markers such as stakes, posts or other devices acceptable to the Department to identify and delineate the permit area, as outlined on the approved Mining Plan Map. These markers are to be installed prior to the start of mining and shall be maintained for the duration of the permit term.
- 10. Fueling of Equipment and Reporting of Spills Fueling of equipment shall be controlled to prevent spillage. Any spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the Department's Spill Hotline number (1-800-457-7362) within 2 hours. The permittee shall retain the Department's Spill Response number for immediate access in the permittee's office and at the mine site.
- 11. Importation of Materials Except as provided in the application documents/approved plans (Condition 1), materials originating from outside the mine may not be imported into the mine without Department approval.
- 12. No Disposal of Waste at Mine There shall be no disposal in the mine of any material regulated as a solid waste under 6 NYCRR Part 360.



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13. All Equipment in the Southern Overburden Storage Area Shall be Equipped with Broadband Back-up Alarms All mobile construction equipment working within the Southern Overburden Storage Area, including but not limited to, dump trucks, haul trucks, excavators, backhoes, loaders, bulldozers, and graders, shall be equipped with a broadband back-up alarm in lieu of a standard tonal back-up alarm. The broadband alarms shall use a multifrequency sound as more fully described in correspondence provided by Spectra dated September 13, 2010.

EROSION CONTROLS

- 14. Strip and Stockpile Soils for Reclamation Prior to the excavation of previously undisturbed areas, topsoil and overburden shall be stripped, stockpiled separately, and used for reclamation of mined areas. These stockpiles shall be seeded to establish a vegetative cover within 30 days, or as soon as practicable following their construction. The permittee shall locate all overburden stockpiles within the permitted area of the approved Life of Mine. Sufficient quantities of topsoil must be retained on the site for use in reclamation, unless prior approval is granted by the Department.
- 15. No Unpermitted Discharge Outside Limits of Mine There shall be no natural swales or channels or constructed features such as ditches, pipes, etc., that are capable of discharging waters to any offsite areas or to any areas outside the limits of the Life of Mine except those explicitly described and shown in the narrative and graphic portions of the approved Mined Land Use Plan. All silt laden water and storm water generated on, or running across, the site shall be retained within the approved project area. The permittee must comply with all applicable State Pollutant Discharge Elimination System (SPDES) permit requirements and provide necessary notifications for off-site point source discharges.
- 16. **Dust Control** Water or other approved dust palliatives must be applied to haulageways and other parts of the mine, as often as necessary, to prevent visible dust from leaving the mine property.
- 17. Fugitive Dust Plan Permittee shall implement and maintain conformance with Norlite's Fugitive Dust Plan/Best Management Practices Plan.

BLASTING

- 18. Blasting Hours Blasting shall only occur between the hours of 9:00 AM and 4:00 PM, Monday through Friday, excluding federal holidays.
- 19. Blasting Shall Prevent Injury and Property Damage Blasting shall be conducted in a manner that will prevent injury to any person and damage to public or private property outside the life of mine. In the event that an off-site property owner makes a claim of structural damage due to a blasting event or mining activities, the permittee shall immediately notify the Department, investigate the loss claim with the property owner, and provide the Department with a written report within 7 days of the complaint.
- 20. No Flyrock Beyond the Life of Mine Boundary There shall be no flyrock beyond the life of mine boundary including flyrock that travels in the air or along the ground. In the event of flyrock beyond the life of mine boundary all blasting shall cease immediately and the flyrock incident shall be reported within 24 hours to the Regional Mined Land Reclamation Specialist. Blasting shall not resume until written approval to resume blasting is obtained from the Department.



- 21. Licensed Blaster Required All blasting shall be undertaken, monitored and recorded by a blaster licensed by the New York State Department of Labor. The permittee shall maintain copies of all blasting records. Such records shall be made available to the Department (NYSDEC) upon request.
- 22. Seismograph Monitoring All blasts shall be monitored with a properly calibrated seismograph. Seismographs shall be installed at the nearest residential receptor and any locations identified within the approved Mined Land Use Plan or locations determined by the Department. Seismograph records shall be provided to the Department upon request.
- 23. Air Blast Limits Air blast shall not exceed the maximum limits listed below at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.

| 0.1 Hz high-pass system | 134 dB |
|---|--------|
| 2 Hz high-pass system | 133 dB |
| 5 or 6 Hz high-pass system | 129 dB |
| c-slow (events not exceeding 2-sec. duration) | 105 dB |

- 24. Ground Vibration Limits Blasting shall be controlled so that ground vibrations (Peak Particle Velocity) shall not exceed the limits of the Variable Particle vs. Frequency Limits recommended by the U.S. Bureau of Mines Report of Investigation 8507 (refer to attached graph). Maximum peak particle velocity shall not exceed these limits at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area. If measurements are made at other than the nearest residential structure, the measurements shall be interpreted in accordance with U.S. Bureau of Mines Report 8507.
- 25. Storage of Explosives Storage of explosives on site shall conform to State of New York, Department of Labor Industrial Code Rule 39, found at 12 NYCRR 39:

Part 39.6 General Provisions for the Storage and Handling of Explosives

Part 39.8 Construction and Maintenance of Magazines

Part 39.9 Location of Magazines

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.



A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

- 2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.
- 3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator NYSDEC REGION 4 HEADQUARTERS 1130 NORTH WESTCOTT RD SCHENECTADY, NY12306 -

- 4. **Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Mined Land Reclamation.
- 5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:
 - a. materially false or inaccurate statements in the permit application or supporting papers;
 - b. failure by the permittee to comply with any terms or conditions of the permit;
 - c. exceeding the scope of the project as described in the permit application:
 - d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
 - e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.
- **6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

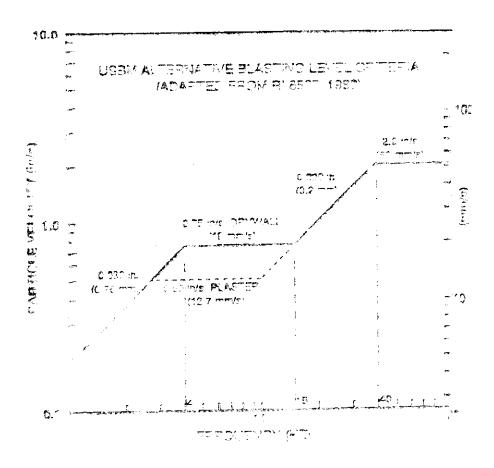
Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

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Source: United States Bureau of Mines Report of investigation 250% : Security Resource and Demage Produced by Ground Vibration from Station Mine Biotring."