



PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:

CHESTER HILL HOLDING COMPANY
INCORPORATED
28 GOLDEN AVE

PO BOX 1351
GREENWOOD LAKE, NY 10925
(845) 222-6556

Facility:

CHESTER HILL HOLDING QUARRY

BLACK MEADOW RD - 560 FT W OF ELKAY
DR
CHESTER, NY 10918

Facility Location: in CHESTER in ORANGE COUNTY

Facility Principal Reference Point: NYTM-E: 559.88 NYTM-N: 4576.717
Latitude: 41°20'23.0" Longitude: 74°17'03.6"

Project Location: E side of Black Meadow Road, Town of Chester

Authorized Activity: Commence the mining and processing (crushing and dry screening) of shale from a maximum of 11.0 acres of a 35.0-acre total life of mine boundary area, situated on 47.2 acres controlled by the permittee in accordance with the plans and reports referenced in Mined Land Reclamation Permit Condition #1 of this permit and as conditioned herein. Initial operations involve the construction of the 2-acre access road, the 2.4-acre detention pond, and parking area, as well as commencement of excavation of the 6.6-acre Phase 1 area of the mine site.

Permit Authorizations

Mined Land Reclamation - Under Article 23, Title 27

Permit ID 3-3322-00056/00003

(Mined Land ID 30658)

New Permit

Effective Date: 12/19/2014

Expiration Date: 12/18/2019

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: REBECCA S CRIST, Deputy Regional Permit Administrator

Address: NYSDEC REGION 3 HEADQUARTERS
21 SOUTH PUTT CORNERS RD
NEW PALTZ, NY 12561 -1620

Authorized Signature: _____

Date 12/19/2014



Distribution List

Supervisor, Town of Chester
M. Davin, DEC Division of Mineral Resources
H. Duda, DEC Division of Mineral Resources via email
R. Budnik, Roy T. Budnik & Associates, Inc.
D. Gaugler, DEC Bureau of Habitat via email

Permit Components

MINED LAND RECLAMATION PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Permit Attachments

Blasting Chart - Ground Vibration Limits

MINED LAND RECLAMATION PERMIT CONDITIONS

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 the effective date of this permit and consist of the following items:

The following plans and reports were prepared by Roy T. Budnik & Associates, Inc. or as indicated:

- a) Mining Map dated June 28, 2012 and last revised October 4, 2013;
- b) Reclamation Map dated June 28, 2012 and last revised October 4, 2013;
- c) Cross Sections dated June 28, 2012 and last revised June 21, 2013;
- d) Mined Land Use Plan and Reclamation Plan Narrative dated June 28, 2012 and last revised October 28, 2013;
- e) Blasting Plan dated January 12, 2012 and last revised June 24, 2013;
- f) Spill Prevention Plan dated May 29, 2012;
- g) Fugitive Dust Control Plan dated May 29, 2012 and last revised June 24, 2013;



- h) Noise Impact Assessment dated May 25, 2012 and last revised March 31, 2014;
- i) Visual Impact Assessment dated May 25, 2012 and last revised June 25, 2013;
- j) Stormwater Pollution Protection Plan dated June 28, 2012;
- k) Herpetological Assessment of the 47-acre Chester Hill Holdings Property in the Town of Chester, New York, dated May 21, 2013, prepared by Randy Stechert, Herpetologist;
- l) Traffic Study, dated April 27, 2012 and last revised November 27, 2013, prepared by Tim Miller Associates, Inc.

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 Termination Notice If the permittee decides to discontinue operation, a termination notice must be filed 60 days prior to the scheduled temporary or permanent cessation of mining.

4. Mine Operation Periods All mining, reclamation and associated activities (including but not limited to: excavating, grading, processing operations, stockpiling operations, haulage operations, and maintenance operations) shall be limited to the following times: Monday through Friday 7:00 a.m. to 5:00 p.m., Saturdays 8:00 a.m. to 3:00 p.m. Operation of the mine is prohibited on Sundays and the following legal holidays: New Year's Day, Memorial Day, Independence Day (July 4th), Labor Day, Thanksgiving and Christmas.

5. Blasting Hours Blasting shall be conducted between the hours of 10:00 a.m. to 2:00 p.m. Exceptions from these hours will require prior Department approval. No blasting will occur on Sundays or legal holidays.

PRE-CONSTRUCTION REQUIREMENTS

6. Install Gates at Entrances Prior to the commencement of any mining related activity, a gate shall be installed at all entrances and exits to this mine which shall be kept locked when the mine is not in operation.

7. Protection of Adjacent Sanitary Disposal System The IWS Transfer Systems sanitary disposal system, located adjacent to the facility access road (see approved Mining Map), shall be fenced prior to the commencement of mining activities at the site.

8. Construction of Water & Erosion Control Features All water and erosion control features shall be constructed as outlined in the Mined Land Use Plan. In addition, all such features shall be continuously maintained, including the regular removal of sediment, and stabilized throughout the life of this mining operation.



9. **Install Grade Markers** Within 60-days of issuance of this permit, the permittee shall install and maintain grade markers or other suitable devices to ensure that mining does not extend below the final floor elevation depicted on approved plans. Additional markers shall be installed as mining operations progress.

10. **No Mining Below Final Grade** There shall be no mining below the grades shown on the approved map and/or cross sections in any area of the mine. There shall be no backfilling in any mine floor area in order to achieve the final grades.

11. **Installation of Area Markers for Permit Term** All permanent markers used to identify and delineate the permit term shall be installed within 30 days of the effective date of this permit.

12. **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.

AREA RESTRICTIONS

13. **No Disturbance Allowed Within Buffer Areas** There shall be no disturbance of any kind, including traversing with any motorized equipment, within the DEC-regulated freshwater wetland or adjacent area or the property line setbacks, as identified in the Mined Land Use Plan.

14. **No Disturbance of Trees Outside Mine** There shall be no disturbance of trees or any other vegetation surrounding the mine site or outside the designated affected mine boundaries.

15. **Protection of Wetland** All necessary precautions shall be taken to prevent the contamination of DEC freshwater wetlands by silt, sediment, fuels, debris or any other pollutant associated with mining and the operation of the mine.

There shall be no discharge of stormwater from the 100-year, 24-hour storm event into DEC freshwater wetlands in accordance with the Stormwater Pollution Prevention Plan.

16. **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.

17. **Maintain Work Above Groundwater** A minimum of 5 feet of undisturbed material shall be maintained above seasonal high groundwater elevation at all locations.

GENERAL REQUIREMENTS

18. **Maximum Limit of Affected Lands** There shall be no more than 8 acres of land affected by mining activities at any time during the life of this mining operation.



19. 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.

20. Stripping of Cover Material Stripping of cover material (topsoil) shall be limited to the area necessary for one season of mining to help provide for visual screening and to limit the acreage exposed to wind and water erosion.

21. No Undermining of Topsoil Resources There shall be no undermining of stored topsoil resources that have been stored in perimeter berms for use in reclamation. The active face shall remain far enough away from these topsoil storage berms to make possible the safe recovery of these topsoil resources by heavy equipment.

22. Topsoil Removal from Site Prohibited There shall be no sale or removal of topsoil from the mine site.

23. No Wastes at Mine There shall be no disposal, storage, transfer or processing of trash or garbage, demolition debris, or other wastes regulated under the Environmental Conservation Law in the mine.

24. No Importing or Processing Off-Site Materials There shall be no importation, storage, disposal or processing of materials, of any kind, originating from outside the limits of the life of mine, without first applying for and obtaining a modification to this permit.

25. 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.

26. Dust Control on Haul Roads The permittee shall apply crushed shale to all internal access routes (haul roads) to reduce the generation of fugitive dust.

27. Dust Control for Processing Water sprays shall be utilized on all processing equipment to control fugitive dust.

28. Noise Mitigation All company-owned mobile mining equipment (e.g., excavators, loaders, dozers, scrapers, graders, back hoes, off-road trucks, haul trucks, etc.) shall be equipped with MSHA-approved radar- or infrared-activated low frequency ("white noise") back-up alarms which will activate only when motion, or objects, are detected to the rear of the equipment.

29. Keep Roads Clean The surface of any paved road that intersects with the entrance/exit to the mine and the entrance/exit areas shall be kept free of any spilled and/or tracked materials which can cause dust, slippery conditions or any other condition that is unhealthy or unsafe.

30. 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.



BLASTING

31. **Pre-blast Survey** Prior to conducting any blasting operations at the site, the permittee shall conduct a pre-blast survey upon request of any homeowner for any residence within 1,000 feet of the project limits. The permittee shall contact all homeowners within 1,000 feet of the project limits and seek permission to conduct the pre-blast survey on each residential structure. Prior to initiating blasting, documentation to show compliance with this condition shall be provided to the NYSDEC Region 3 Mined Land Reclamation Specialist.

32. **Blast Notification** The permittee shall maintain a list of residents, located within 1,000 feet of the project limits, who request to be notified prior to each blast event. The permittee shall notify the interested parties on the morning of each blast. The notice shall include the expected time of the blast and shall identify the name and telephone number of the contact person representing the permittee that the interested parties may contact to answer questions or to file a complaint. The permittee shall add or remove names of interested parties to the list upon request of any party. A copy of the notification list shall be provided to the Department upon request.

33. **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.

34. **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.

35. **Ground Vibration Limits** Ground vibration shall not exceed the limits as per the attached ground vibration limits graph from the U. S. Bureau of Mines Report of Investigation 8507 (Figure B-1, Safe levels of blasting vibration for houses using a combination of velocity and displacement). 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.

36. **Air Blast Limits** Air blast shall not exceed 133 dB at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.

37. **No Flyrock Beyond the Property Line** There shall be no flyrock beyond the property line including flyrock that travels in the air or along the ground. In the event of flyrock beyond the property line, 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.

38. **Prevent Injury** Blasting shall be conducted in a manner to prevent injury to persons and damage to public or private property outside the permit area.

39. **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



RECLAMATION

40. Commencing Reclamation Reclamation shall commence within the affected area when either two-acres of the mine floor, or a final bench has reached final grades and is no longer needed for mining purposes.

41. Reclamation of Mine Floor and Haulroads The final mine floor and any haulroads to be reclaimed shall be ripped, disked, plowed, or otherwise scarified prior to the replacement of subsoil or topsoil.

42. Reclamation of Perimeter Benches The perimeter benches shall be reclaimed sequentially from highest to lowest as mining progresses. Each bench shall be over-drilled by approximately three feet to insure the development of a 3-6 foot section of fragmented rock along each bench. A minimum of one (1) foot of cover material (topsoil) shall then be applied over each bench to promote vegetation growth.

43. Ongoing Reclamation The permittee shall provide that reclamation will be an ongoing continuous process to the extent practical that will not interfere with safe and efficient operation of the mine. Reclamation will commence immediately upon completion of mining. The site shall be satisfactorily revegetated no later than two years after the mining ceases.

44. Standard for Approvable Reclamation The standard for approvable reclamation in all mined areas shall be as specified in 6 NYCRR Part 422.3.

FINANCIAL SURETY

45. 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.

46. Standard for Release of Financial Security The standard for release of the financial security shall be a fully graded and vegetated site which conforms with the data and descriptions contained in the approved plans and reports referenced in Mined Land Reclamation Permit Condition #1 of this permit. A certified "as built" plan by the design consultant may be required to release the financial security at the Department's discretion.

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 3 HEADQUARTERS
21 SOUTH PUTT CORNERS RD
NEW PALTZ, NY12561 -1620

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

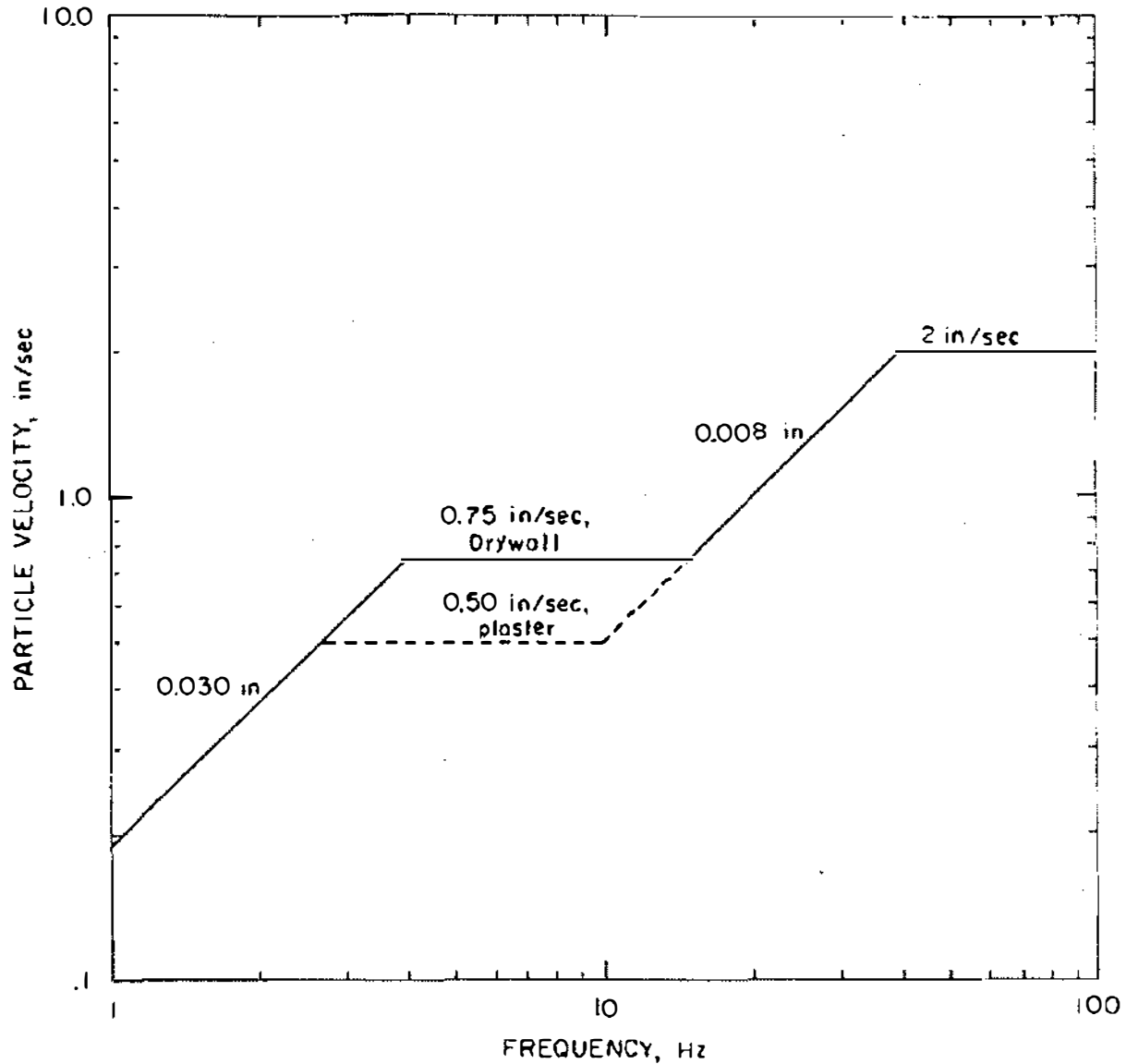
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

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.

Item E: SEQR Type I Action, DEC Lead Agency, No Significant Impact Under the State Environmental Quality Review Act (SEQR), the project associated with this permit is classified as a Type I Action with the Department of Environmental Conservation designated as the lead agency. It has been determined that this project will not have a significant effect on the environment.

BLASTING CHART - GROUND VIBRATION LIMITS



RI-8501 Figure B-1. Safe levels of blasting vibration for houses using a combination of velocity and displacement.

From: Siskind, D. E., Stagg, M. S., Kopp, J. W., and Dowding, C. H., 1980, Structure Response and Damage Produced by Ground Vibration From Surface Mine Blasting, Bureau of Mines Report of Investigation RI-8507, United States Department of the Interior, 74 p.