

**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



Joe Martens  
Commissioner

May 26, 2011

Mr. Timothy Lachell  
Norlite Corporation  
628 South Saratoga Street  
Cohoes, New York 12047

RE: **PERMIT MODIFICATION -  
EXTENSION OF TIMEFRAMES  
FOR CONDITION 16**  
Mined Land Reclamation Permit  
Norlite Corporation  
DEC # 4-0103-00016/00019  
MLF # 4-0002  
T/Colonie & C/Cohoes, Albany County

Dear Mr. Lachell:

As requested in the letter from Spectra Environmental Group, Inc., dated May 25, 2011, Condition 16 of the above referenced permit is hereby changed to the following (**revised dates are in bold**):

*16. **Permittee Shall Conduct a Follow-up Noise Study** Once all construction equipment has been retrofitted with broadband back-up alarms, the permittee shall conduct a follow-up noise study. The noise study shall be conducted while construction equipment is backing up and the broadband back-up alarms are in operation at the Southern Overburden Storage Area. The follow-up noise study shall replicate the study conducted by Vibra-Tech in 2004 for receptors A (8 Kirkner Lane) and B (Niagara Mohawk Right-of-Way / 173 Boght Road). In addition, sound levels shall be collected at a distance of 50 feet from a broadband back-alarm while in operation at the Southern Overburden Storage Area.*

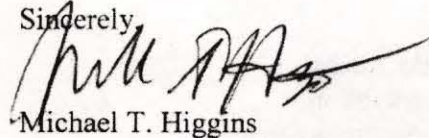
*Sound level readings shall be recorded by **June 30, 2011** and a report which compares the new data to the results of the 2004 and 2005 Noise Projection Models prepared by Spectra Environmental Group, Inc., shall be prepared and submitted to the Department by **August 1, 2011**. The new noise data shall be used to determine compliance with Conditions #1, 14, and 15.*

Please attach this letter to your original permit as proof of this modification.

All other terms and conditions of the modified permit issued on March 25, 2011, remain in full force and effect.

If you have any questions, please feel free to contact Karen Gaidasz at 518-357-2459 or [kmgaidas@gw.dec.state.ny.us](mailto:kmgaidas@gw.dec.state.ny.us).

Sincerely,



Michael T. Higgins  
Deputy Permit Administrator

Enclosures: Spectra Environmental Group, Inc letter dated May 25, 2011  
Norlite Corporation Mined Land Reclamation Permit dated March 25, 2011

cc via mail: Town of Colonie  
City of Cohoes  
Gregory P. Gifford, Gifford Engineering

cc via email: Jason C. Kappel, P.G., Spectra Environmental Group, Inc.  
Thomas Van Vranken, Norlite Corporation  
Kevin Young, Young, Sommer & Moore, LLC  
Bill Clarke, NYSDEC R4 DEP  
Alan Hewitt, NYSDEC R4 Mining



ENVIRONMENTAL GROUP, INC.  
ENGINEERING, ARCHITECTURE AND SURVEYING, PC

May 25, 2011

Ms. Karen Gaidasz  
Environmental Analyst  
New York State Department of Environmental Conservation  
Division of Environmental Permits, Region 4  
1130 North Westcott Road  
Schenectady, New York 12306-2014

**Subject: Norlite Corporation - Cohoes Mine Site  
Town of Colonie/City of Cohoes, Albany County, New York  
Mined Land Reclamation Permit – Condition 16  
Request for Extension**

Dear Ms. Gaidasz:

In accordance with the Mined Land Reclamation Permit (#4-0103-00016/00019) for Norlite Corporation's (Norlite) Cohoes mine site, Norlite and Spectra Environmental Group, Inc. (Spectra) have arranged for completion of a follow-up noise study in the Southern Overburden Storage Area. Condition 16 of the permit requires the noise study to be completed by May 31, 2011 and submitted to the New York State Department of Environmental Conservation (NYSDEC) by June 30, 2011. Spectra is submitting this request for a one-month extension of the prescribed timelines on behalf of Norlite.

Due to the consistently wet weather over the past several months, overburden materials across the site have remained saturated and unworkable. The Southern Overburden Storage Area has not been in operation yet this season. As the month of May is coming to a close and there is yet to be any activity on the Southern Overburden Storage Area this season, completion of the noise study in accordance with the timeline specified in Condition 16 is unfeasible. Spectra and Norlite respectfully request an extension for completion and submittal of the noise study. We anticipate that collection of sound level data can be successfully completed by June 30, 2011 and the required report compiled and submitted to NYSDEC by August 1, 2011.

Should you have any questions please do not hesitate to contact me at (518) 782-0882.

Sincerely,  
SPECTRA ENVIRONMENTAL GROUP, INC.

Jason C. Kappel, Director  
Mining, Minerals and Environmental Permitting

cc: A. Hewitt, NYSDEC Region 4  
T. Lachell, Norlite  
K. Young, Young Sommer & Moore, LLC

JCK/ED/em  
G:\2008\08002\Correspondence\Noise Extension Req 5-25-11.doc

ONE CIVIC CENTER PLAZA, SUITE 401  
POUGHKEEPSIE, NY 12601  
(845) 454-9440  
FAX (845) 454-9206

19 BRITISH AMERICAN BOULEVARD  
LATHAM, NY 12110  
(518) 782-0882  
FAX (518) 782-0973

307 SOUTH TOWNSEND STREET  
SYRACUSE, NY 13202  
(315) 471-2101  
FAX (315) 471-2111

WWW.SPECTRAENV.COM



**Distribution List**

ALAN A HEWITT, JR  
TOWN OF COLONIE  
CITY OF COHOES  
SPECTRA ENVIRONMENTAL GROUP INC  
YOUNG, SOMMER, & MOORE, LLC  
GIFFORD ENGINEERING

**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**

**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:

- A. Order on Consent, file #R4-0768-90-01, executed on June 21, 1990.
- B. "Mined Land Use Plan Modification, Norlite Corporation, Inc., Cohoes, New York", prepared by Spectra Environmental Group, Inc., dated November 2004 and all enclosed Figures, Tables, Plates and Appendices.
- C. "Stormwater Pollution Prevention Plan and Best Management Practices Plan", for the Norlite Corporation, prepared by Sterling Environmental Engineering, P.C., dated November 18, 2004.
- D. "Mine Plan Map" for Norlite Corporation - Cohoes Mine Site, prepared by Spectra Environmental Group, Inc., dated May 2, 2004, last revised February 28, 2005.
- E. "Notice of Incomplete Application Response, Norlite Corporation, Inc., Cohoes, New York",



prepared by Spectra Environmental Group, Inc., dated July 2005 and all enclosed Figures, Tables, Plates and Appendices.

F. "Response to Notice of Incomplete Application, Norlite Corporation, Inc., Cohoes, New York", prepared by Spectra Environmental Group, Inc., dated December 21, 2005.

G. Letter "Re: Norlite Rezoning", prepared by Robert L. Sweeney of Whiteman, Osterman & Hanna, LLP, dated January 22, 2007.

H. "Addendum to Stormwater Pollution Prevention Plan (SWPPP)" prepared by Spectra Environmental Group, Inc., dated November 2007 and received on December 4, 2007, including all enclosed Figures, Plates and Appendices.

I. "Southern Overburden Storage Area, Structural Overburden Berm Construction, Norlite Corporation", letter prepared by Spectra Environmental Group, Inc., dated April 30, 2010.

J. "Mined Land Permit Modification - Southern Overburden Storage Area, Norlite Corporation", letters prepared by Spectra Environmental Group, Inc., dated July 28, 2010 and September 13, 2010.

The following plans are provided for reference purposes and are effective only to the extent that the above documents do not modify them:

K. Mined Land-Use and Reclamation Plans prepared by Mark Zdunczyk of Dunn Geoscience (Map 8439), dated July 17, 1989, as revised by Mark Zdunczyk of Greenbush Resources, Inc., as part of the mining renewal application, dated October 14, 1997.

L. "Modification Application for Permit to Mine", dated August, 1992, including narrative, Mining Plan, Final Grade Profiles, and Mining Plan with Temporary Reclamation Area, all dated August 14, 1992.

M. Letter from Griggs-Lang Consulting Geologists, Inc., dated October 30, 2002, which serves as a mining narrative.

N. Mine Plan Map prepared by Spectra Environmental Group, Inc., dated December 17, 2002, and subsequently revised on May 25, 2003.

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. Renewal Application Shall Contain a Comprehensive MLUP** At least 30 days prior to the expiration date of this permit, the permittee shall submit three (3) copies of the renewal application package to the Department. The 2013 renewal application package shall include a comprehensive Mined Land Use Plan which provides updated drawings and narrative and which incorporates all relevant information and documents referenced in previous plans and drawings prepared for the mine.

**5. 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.

**6. 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

**7. 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

**8. Hours of Operation** The hours of operation within the mining affected area (application documents in Condition 1) 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.

**9. 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. As stated in the application documents (Condition 1), 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).

**10. 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.



**11. 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.

**12. 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.

**13. 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.

**14. Noise/Visual** The permittee shall adhere to conclusions stated and approved by the Department in the Visual Impact Analysis and Assessment and Mitigation of Noise Impact Analysis as contained in the permit application. All berms, buffer areas and vegetated areas shall be implemented as specified in the application documents (Condition 1). Operating hour limitations and seasonal restrictions on the placement of fill in the Southern Overburden Storage Area shall be adhered to by the permittee.

**15. 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. All existing mobile equipment used in the Southern Overburden Storage Area shall be retrofitted with a broadband back-up alarm by April 15, 2011. Any additional or new mobile equipment brought to the Southern Overburden Storage Area after April 15, 2011 shall be equipped or retrofitted with a broadband back-up alarm prior to operating within the Southern Overburden Storage Area.

**16. Permittee Shall Conduct a Follow-up Noise Study** Once all construction equipment has been retrofitted with broadband back-up alarms, the permittee shall conduct a follow-up noise study. The noise study shall be conducted while construction equipment is backing up and the broadband back-up alarms are in operation at the Southern Overburden Storage Area. The follow-up noise study shall replicate the study conducted by Vibra-Tech in 2004 for receptors A (8 Kirkner Lane) and B (Niagara Mohawk Right-of-Way 173 Boght Road). In addition, sound levels shall be collected at a distance of 50 feet from a broadband back-alarm while in operation at the Southern Overburden Storage Area.

Sound level readings shall be recorded by May 31, 2011 and a report which compares the new data to the results of the 2004 and 2005 Noise Projection Models prepared by Spectra Environmental Group, Inc., shall be prepared and submitted to the Department by June 30, 2011. The new noise data shall be used to determine compliance with Conditions #1, 14, and 15.

A handwritten signature in black ink, appearing to be 'AAI'.



## EROSION CONTROLS

17. **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.

18. **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.

19. **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.

20. **Fugitive Dust Plan** Permittee shall implement and maintain conformance with Norlite's Fugitive Dust Plan/Best Management Practices Plan.

21. **Revegetation** Revegetation shall be conducted in accordance with specification set forth in Norlite's March, 1993 narrative submission under item 4.0 "Revegetation".

## BLASTING

22. **Blasting Hours** Blasting shall only occur between the hours of 9:00 AM and 4:00 PM, Monday through Friday, excluding federal holidays.

23. **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.

24. **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.

25. **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.





**26. 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.

**27. 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

**28. 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.

**29. 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.

*Handwritten signature*



**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 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**

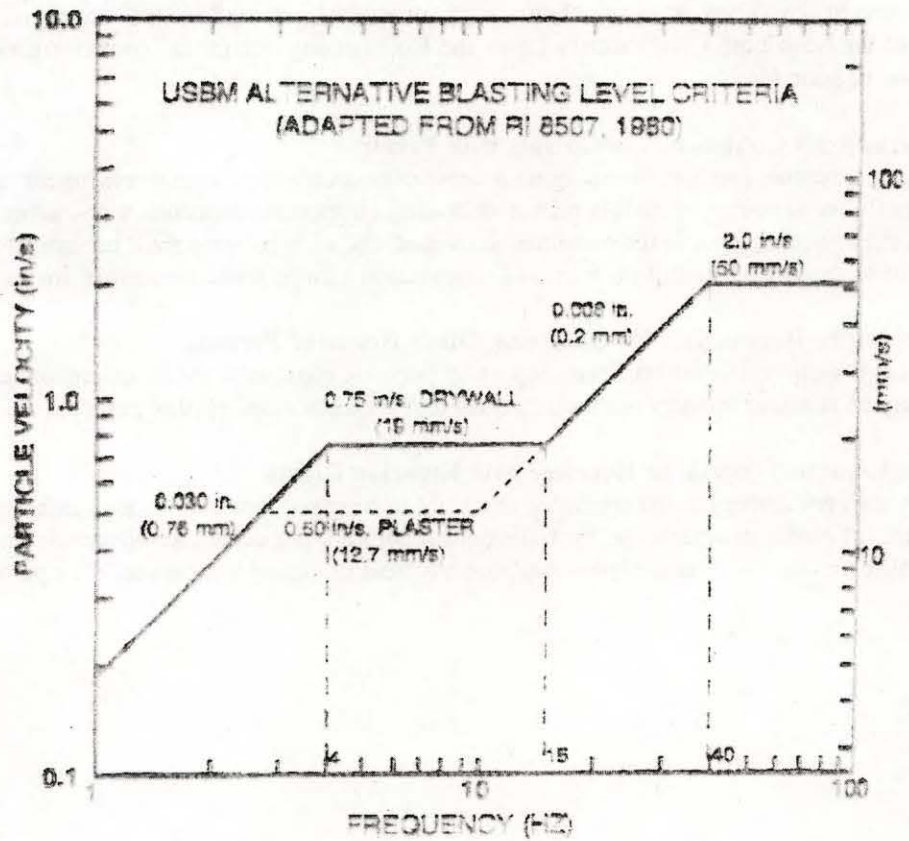
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject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



Source: United States Bureau of Mines Report of Investigation 2507, "Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting."