

## Revised Blasting Mitigation Measures

The following are edits to the language starting on page 3-41 of the DEIS.

### Mitigation Measures

Where blasting is required, the following mitigative measures are proposed in addition to the mitigation measures discussed in Section 3.3 in regards to blasting and groundwater resources.

1. Blasting will be conducted only between the hours of 9:00 a.m. to 5:00 p.m. on weekdays only. Explosives will not be detonated on weekends or the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
2. All blasting will be done by a person licensed to blast in New York State.
3. Blasting will be controlled so the vibrations (Peak Particle Velocity) satisfy the particle velocities v. frequency limits recommended by the U.S. Bureau of Mines Report-8507 (November 1980). If measurements are made at other than the nearest residential structure, the measurements shall be interpreted in accordance with U.S. Bureau of Mines 8507 Report entitled "Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting."
4. Blasting Notification
  - a) All owners of non-vacant property within ¼ mile of the blast location will be notified prior to blasting activities) The Windham Police Department will be notified prior to blasting.
  - c) Owners and the Police Department will be notified at least 24 hours in advance of blasting activities. A record of notifications will be maintained and will be available for inspection by the Windham Police Chief.
  - d) Before each blast the blaster shall follow this procedure:
    - 5 minutes before the blast the area will be cleared and secured
    - 2 minutes before the blast the blaster will blow 3 short blows from a horn to warn of the blast
    - 1 minute after the blast the blaster will blow 1 long blow from a horn to signal the all clear.
5. All explosives shall be stored in an approved tamper-proof explosive storage unit. If vehicle storage is utilized, the vehicle storing the explosives shall not be left unattended at any time while on site nor shall the vehicle remain on site overnight. Any explosive storage unit to be utilized that is not contained within a vehicle shall be secured to the satisfaction of the Town of Windham Police Chief.
6. All persons who conduct blasting operations will comply with all applicable State and federal laws governing the use of explosives.

7. Blasting will be conducted in a manner that prevents injury to persons and damage to public or private property outside the project area.
8. A record of the blast will be made, retained by the operator for at least three (3) years and made available for inspection by the Town on demand. The record is to be completed by the end of the work day during which the blast occurred, including the seismograph reading, if available, and will contain the following:
  - a) Name of operator conducting the blast.
  - b) The location, date and time of the blast.
  - c) Name, signature and license number of the licensed blaster.
  - d) Type of material blasted.
  - e) Number of holes, burden and spacing.
  - f) Diameter and depth of holes.
  - g) Type of explosives used.
  - h) Total weight of explosives used.
  - i) Weight of explosives per hole.
  - j) Maximum weight of explosives detonated within any eight (8) millisecond period.
  - k) Maximum number of holes or decks detonated within any eight (8) millisecond period.
  - l) Initiation system, including number of circuits and the time interval, if sequential timer is used.
  - m) Type and length of stemming (deck and top).
  - n) Type and detonator and delay periods used, in milliseconds.
  - o) Distance and scaled distance to the closest protected structure.
9. Maximum peak particle velocity will not exceed limits as set by U.S. Bureau of Mines 8507 Report at the location of any dwelling, public building, school, church or community or institutional building outside the blast area.
10. All blasting will be done with small charges and with the following protective best management practices, whenever feasible:
  - a) Two to four feet of rippable material will be left over the solid material to be blasted to serve as a cover to prevent excessive fly rock. Blasting mats may be used if overburden is not available. The blasting mats must be of suitable size and material to dampen noise and contain blasted materials.
  - b) The size of the shot will be limited by sound and vibration control levels and amount of area that can be blasted with good results.
  - c) Small diameter drilling with high speed equipment will be used to reduce the amount of explosives used in each hole.
  - d) The use of delay blasting techniques will be used to reduce vibrations associated with the blast.
  - e) Material stockpiles will be placed to help block blasting and material processing noise transmission off-site.
  - f) Blasting shots will be designed to minimize ground vibration and air blast.

11. Blasting will not occur during adverse weather conditions, such as high winds, unless a loaded charge must be detonated before the end of the day for safety reasons.