

Halifax ZBA Meeting

24JUN2015

**Proposed Quarry Noise  
concerns**

# Sound Basics

- Unit of measure is the Decibel (dB)
- dB uses a logarithmic scale where a 10 dB increase in sound is 10 times the sound pressure, 20 dB is 100 times the sound pressure, etc.
- 0 dB is threshold of human hearing
- A quiet forest measures about 30 dB

## **Sound Basics Continued**

- Living room conversation measures about 60 dB
- OSHA requires hearing protection at 95 dB

## **How much noise will the proposed quarry produce?**

- This depends on how much rock is extracted, the applicant has not committed to the rate of extraction or the total amount to be extracted.
- This depends on the equipment and techniques used to do the extraction. We don't know what the equipment is today or will be in the future.

## **How much noise will the proposed quarry produce? (continued)**

- The proposed rock drill alone produces 127 dB of noise continuously. This almost 90 dB or 1 billion times more sound pressure than a quiet forest.
- Many other pieces of equipment are required for the operation including air compressor, generator, wire saw, pneumatic hand drill, etc.

## **How much noise will the proposed quarry produce? (continued)**

- Transportation of the extracted stone requires the use of large, heavy diesel trucks.
- These trucks are very loud and run close to many residences

# RSG Sound Test

- Exhibit 18 ANR Act 250 Application
- Sound sources were not placed at high elevation where rock drill will be working
- Foliage was at peak density
- Not all equipment that would be used was running during test
- Not all equipment was representative of the equipment that would be used

## Noise Concerns

- Quarry walls will reflect and concentrate sound
- Sound will carry farther at higher elevation (line of sight)
- Can anyone stand 70 dB at their home?
- Can anyone stand 50 dB at their home?
- “70 dB at property line” in the zoning regulations is unreasonable in a forest environment

## **Noise Concerns (continued)**

- The noise produced by the quarry does not belong in the Conservation District
- Wildlife will be displaced
- Many residents will be able to hear the proposed quarry operation above the very quiet ambient sound levels now present in

Halifax

## **Noise Concerns (continued)**

- Trucks will be loud, especially when pulling uphill and when using engine brake when descending.
- Noise levels at surrounding properties has not be adequately studied. Faulty sound test needs to be repeated with all correct equipment running at the correct location and elevation.