

**Town of Mount Desert Planning Board
Regular Meeting Minutes
Meeting Room, Town Hall
6:00 PM, November 6, 2019**

Public Present:

Charles F. Wallace, Russell S. Wallace, David Trigg, Attorneys for the Applicant Katie Foster and Ed Bearor, Attorney for the Shencavitz' and Aylen's Daniel Pileggi, Attorney for the Applicant Frank T. McGuire, Pam Bowie, Keith Bowie, Gerald Shencavitz, Laurie Shencavitz, Dianne H. Young, Stephanie M. Clement, Elizabeth S. Roberts, Joanna Krasinski, Steve Krasinski, Jeanie Gilpin, Ellen Brawley, Francoise Leyman, Howard Colter, Joe Smullen L.E., Kelly O'Neil, Attorney for the Planning Board James E.J. Collier Esq., Jeff Gammel, Liz Graves, John Kelly, Seth Singleton, Charlotte Singleton, Jan Coates, Andrea Gilmore, David Gilmore, Maureen McGuire, H. Scott Stevens, Kim Heist, Andy O'Deen

Board Members Present:

Christie Anastasia, Chair Bill Hanley, Dave Ashmore, Joanne Eaton, Tracy Loftus Keller, Meredith Randolph

I. Call to order 6:00 p.m.

Chair Hanley called the meeting to order at 6:04 PM.

Board Members were noted.

Board Members were noted. Tracy Loftus Keller is an Alternate, Non-Voting Board Member

II. Quarrying License Application

Public Hearing:

A. Quarrying License Permit #001-2014

OWNER(S): Harold MacQuinn, Inc.

OPERATOR(S): Fresh Water Stone & Brickwork, Inc.

AGENT(S): Steven Salsbury, Herrick & Salsbury, Inc.

LEGAL REPRESENTATION: Edmund J. Bearor, Rudman Winchell

LOCATION: Off Crane Road, Hall Quarry

TAX MAP: 007 **LOT:** 075 **ZONE(S):** Residential 1 (R1)

PURPOSE: Quarry License Application – Section 6.2 Performance Standards for Existing Quarries – J. Noise

Adequate Public Notice and Abutters notification were confirmed. No conflict of interest was found.

Chair Hanley summarized that at the last meeting expert for the Applicant Joe Smullen presented his statements and Attorney for the Shencavitz' and Aylen's Dan Pileggi questioned Mr. Smullen on his presentation. It is now the turn of the Public to ask any questions they may have of Mr. Smullen.

1
2 Chair Hanley read Section J of the Quarrying Licensing Ordinance:

3
4 *"The best practicable means of reducing noise shall be employed which may including*
5 *(sic) the use of sound reduction equipment, acoustic enclosures or sheds, limiting on-*
6 *site speeds to no more than 10 mph, or other best industry practices for noise*
7 *attenuation, to the extent permitted by state and federal laws and regulations."*
8

9 Chair Hanley invited the public to ask questions of Mr. Smullen.

10
11 Attorney for the Applicant Frank McGuire urged the Chair, for efficiency sake, to
12 prioritize getting the expert testimony into the public record over additional general
13 statements.
14

15 Hall Quarry Betsy Roberts asked if ambient noise in the area was measured. Mr.
16 Smullen reported he measured the ambient noise at the time that his measurements
17 were taken. A 24-hour, seven-day measurement of ambient noise was not taken. Ms.
18 Roberts asked whether quarry equipment was being used at that time. Mr. Smullen
19 noted he would have to review his data to determine whether ambient noise without the
20 compressor running was measured. His intent at that time was to measure the
21 effectiveness of the shield.
22

23 Hall Quarry resident Howard Colter stated there were residents essentially encircling the
24 proposed quarry area. More homes are being built and there are a number of open lots
25 for sale. Mr. Colter asked Mr. Smullen if he felt such an industrial operation could exist
26 in harmony with the growing residential area. Is there a chance for good quality of life
27 living near a quarry, and is there a way for a quarry under these circumstances to
28 operate optimally? What will be necessary to create such a successful partnering of the
29 two?
30

31 Mr. Smullen clarified the question being discussed is whether the proposed quarry
32 operation is in compliance with the Town's Quarrying Licensing Ordinance. The only
33 criteria mentioned in that Ordinance is to use the Best Practicable Means to reduce the
34 noise. A quarry has noise. If the goal is to create a quarry so quiet that those living
35 nearby don't hear it, then that probably won't happen. Mr. Smullen believed noise
36 reduction could be achieved to a point where noise levels are acceptable to some
37 residents.
38

39 Mr. Ashmore asked whether using electrical equipment would reduce noise? Mr.
40 Smullen felt the engine for the compressor was relatively quiet and probably not an
41 issue. Noise comes from the hydraulic equipment and the banging of rock. A silencer
42 has been purchased to quiet the impulsive noise from the pneumatic driver for the drill.
43 Development is ongoing to create quieter equipment but is not available today.
44 Development of compressors has advanced. The compressor the Applicant currently
45 owns is quiet compared to others in the industry. The compressor was a minimal source
46 of noise.
47

1 Hall Quarry resident Fran Lehman asserted that the noise of the trucks in the quarry,
2 particularly the backup alarms, were another source of noise. Loading rock into the
3 trucks also creates loud noise.
4

5 Mr. Smullen noted these issues were discussed at the last meeting. Chair Hanley
6 agreed the issues have been addressed at previous meetings. However, he requested
7 the Applicants address it once again.
8

9 Attorney McGuire stated that backup alarms on the trucks have been replaced with what
10 is called "white noise" alarms. The stone the Applicants are quarrying is of high value.
11 Quarry operators try not to bang the stone against the equipment as it is loaded. A
12 frame of timbers at the bottom of the trucks help offset the noise of loading rock onto the
13 trucks.
14

15 Freshwater Stone owner Jeff Gammelin added that the wire saw operating with a diesel
16 motor has been replaced with a motor that runs via the electrical generator. A diesel
17 motor must be run to generate the electricity; however, it is one of the highest tiers in
18 noise efficiency. The generator was purchased in 2015.
19

20 Mr. Ashmore wondered if a specific route of travel could be developed to curtail excess
21 backing up of trucks. Mr. Gammelin asserted there are specific routes, and the trucks
22 do try to limit backing up.
23

24 Additionally, other large equipment with backup alarms have had their alarms replaced
25 with the white noise alternative.
26

27 Abutter Gerald Shencavitz argued that the noise of rock in trucks that the neighbors hear
28 is not due to finished stone being loaded. Rock being dropped into trucks is rubble and
29 surplus rock left from the quarrying. Additionally, Mr. Shencavitz alleged the quarry
30 operators used their loader to repeatedly ram the ledge to get to the better-quality rock.
31

32 Chair Hanley asked if there were sound-attenuating mats that could be put in buckets to
33 control the noise. Mr. Smullen did not know of any type of effective, lasting material that
34 could be put in a bucket to reduce noise.
35

36 Freshwater Stone employee Andy O'Deen described the process of removing rubble.
37 Rock removed during the cutting process must be removed to retain access to the rock.
38 Operators do not haul this rock away as described. Additionally, buckets are not
39 rammed into ledge.
40

41 Hall Quarry resident Charlotte Singleton asked whether sound has been measured for
42 each piece of equipment and have sound measurements been taken from various parts
43 of the quarry. Mr. Smullen noted no surveys of equipment have been done since the last
44 time measurements were taken. There are recordings that exist of the noise from the
45 measurements taken previously. All measurements made have been analyzed.
46

1 Ms. Singleton requested Mr. Smullen describe the sound levels using comparable noise
2 and not number systems. What other sounds in the environment are the equivalent of
3 the noise generated by the quarrying equipment? Mr. Smullen described the decibel
4 system. 90 decibels threatens serious hearing loss to workers exposed to it eight hours
5 a day. 85 decibels require workers to use hearing protection. Mr. Smullen opined these
6 levels might be found around the loudest piece of equipment.

7
8 40 decibels would be the equivalent of a quiet air conditioner. 45 to 50 decibels might
9 be equivalent to a louder air conditioning unit. Ms. Singleton asked what sound level a
10 90-decibel noise would register at 25 feet back from the source of the noise. How is this
11 change affected if multiple pieces of equipment are in use?

12
13 Mr. Smullen stated that If two pieces of equipment of equal sound levels are being used
14 then another three decibels can be added to the total sound level. Two pieces of
15 equipment at 90 decibels would be reduced to approximately 76 decibels at 25 feet
16 distance. The drill is the loudest piece of equipment. The next loudest is lower by
17 approximately 20 decibels. This would increase the noise by only a fraction of a decibel.

18
19 Ms. Singleton asked if the sound level was the same at all heights.

20
21 Mr. Smullen explained that there are atmospheric conditions that create more or less
22 attenuation. Stratification of temperature affects sound speed. Colder temperatures
23 aloft mean sound can travel faster and bend up, traveling higher into the air. Warmer
24 temperatures bend the sound down, and sound hugs the ground.

25
26 Hall Quarry resident Kim Heiss stated she bought land in Hall Quarry because of the
27 quiet. The noise of the quarry is disturbing. She wants the Town to protect the
28 residents.

29
30 Hall Quarry resident Betsy Roberts pointed out that future technology and changes are
31 secondary to the concerns residents have now.

32
33 Mr. Smullen reiterated that he has looked at the practicable means of controlling noise
34 available today.

35
36 Attorney Collier stated that the Town cannot set a decibel limit. Best Practicable Means
37 is simply doing the best that can be done, which is subjective. The struggle the Board is
38 tasked with is finding a standard - finding the Best Practicable Means. He asked Mr.
39 Smullen his opinion on what the standard of Best Practicable Means should be. Mr.
40 Smullen felt there was a choice made at some point about what limits there would be.
41 The Quarrying Licensing Ordinance appears to reflect a throwing up of the hands and a
42 "do the best you can".

43
44 Chair Hanley asked for further questions from the public. There were none.

45
46 Attorney McGuire asked if any additional sound reduction features or equipment had
47 been found since the last meeting. Mr. O'Deen reported that the search for ways to limit

1 sound continues. A newer-model hand-drill with a muffler-silencer has been found. The
2 search for quieter equipment options will be ongoing.

3
4 Mr. Ashmore pointed out that there are no restrictions on what can be used. Attorney
5 McGuire agreed. This shows that "Best Practicable Means" is a moving target. Setting
6 conditions on what specific equipment can be used could limit the Applicant's ability to
7 use better equipment at a future date. How does one craft a requirement exhorting the
8 Applicant to use Best Practicable Means, knowing those means may evolve over time?
9 A violation would have to show there is a practicable mean the Applicant quit using. The
10 Quarrying Licensing Ordinance appears to empower the Planning Board to do that.

11
12 Mr. Ashmore pointed out that the noise generated by loading quarry debris can be due
13 to the operator. It would be difficult to control the behavior and care an equipment
14 operator puts into the job.

15
16 Attorney McGuire felt that if, after all the work involved in getting the Application
17 approved, Freshwater Stone uses a careless operator that disregards the Best
18 Practicable Means to reduce noise, it could be considered a land-use violation. Mr.
19 Ashmore suggested the site be monitored audially and visually. Attorney Bearor felt the
20 Applicant would not object to monitoring. Mr. Ashmore felt that at the least, monitoring
21 will identify specific noise complaints as having come from the quarry or not.

22
23 Chair Hanley asked for further questions. There were none.

24
25 Attorney for the Shencavitz' and Aylen's Dan Pileggi pointed out that the Applicant's
26 stated intentions to reduce noise is not a standard and is not enforceable by Code
27 Enforcement. There must be enforceable standards within the confines of Best
28 Practicable Means of noise attenuation. The Board should have an independent expert
29 to assist with creating those standards.

30
31 Attorney Pileggi argued that the impact of combined operations had not been addressed.
32 Mr. Smullen was hired to measure the effect of a barrier on the operation of a single
33 piece of equipment but was not asked to address the impact of noise on the neighbors,
34 on Acadia Mountain, or across Somes Sound. He was not asked to address the impact
35 of combined operations. He was not asked to address the impact of noise as the
36 equipment moves around the property. There's been no effort to give the Board the
37 opportunity to understand the impact of the noise and what it means.

38
39 Noise expert for the Shencavitz' and Aylen's, Charles Wallace, presented examples of
40 impact using models based on the equipment known at the time. Mr. Wallace was not
41 given updated lists of equipment to measure at the time modeling was done.

42
43 The Modeling Mr. Wallace has done includes a number of pieces of equipment – a saw,
44 compressor, two drills, loader, excavator, Cat, and a dust collector - running in the
45 Northwest corner of the quarry with the berm in place. The noise near the Shencavitz
46 property, based on the described model, reached the mid-80s in decibels. Attorney
47 Pileggi reminded the Board that hearing protection is required for industrial use at that

1 level of noise. Near the Aylen property, the decibels were high 70s to low 80s in
2 decibels. At the Coates property line, the decibels were in the low 80s and in the 70s at
3 the house.

4
5 Attorney Pileggi maintained that modeling is the Best Practicable Means to ascertain
6 sound levels occurring at the properties. The Applicant should model the new
7 equipment noted and the sound barrier designed by Mr. Smullen.

8
9 Equipment was modeled in the middle of the site and showed noise levels to be in the
10 80s at the Aylens property, 70s at the Shencavitz property, and 80 without the barrier –
11 70s with the barrier at the Coates. The area's ambient sound had decibel readings of 40
12 or below. Every additional 10 decibels in sound is perceived by the human ear as
13 doubling the noise. The Applicants have made no attempt to prove their noise
14 attenuation techniques are Best Practicable Means, and there's no way to enforce the
15 Applicants' suggested changes. All efforts to limit noise should be modeled, and the
16 combined effect of a variety of equipment should be modeled so a standard can be
17 imposed.

18
19 80 decibels is the equivalent of a large diesel truck at 50 feet, or a lawnmower at 20 feet.
20 70 decibels is the equivalent of a vacuum cleaner at 10 feet away. These noise levels
21 are in the quarry continuously through the day.

22
23 Attorney Pileggi asserted there can and should be a standard, and the standard needs
24 to be modeled. The Board needs accurate, complete expert information. The
25 Application is not complete without it and the burden of proof is not met. Section 6.2.J of
26 the Ordinance requires proof of Best Practicable Means. The barrier designed muffles
27 noise in three directions but amplifies it in the fourth direction. There's been no modeling
28 to show the effect of this open area, or where that sound will go.

29
30 Discussion ensued regarding whether Mr. Wallace should be allowed to share hard copy
31 of a Powerpoint presentation he plans to discuss. After lengthy discussion, it was
32 agreed the Board could view the hard copy.

33
34 Expert Charles F. Wallace reminded the Board that his qualifications were provided at
35 earlier meetings. At previous meetings Mr. Wallace discussed the characteristics of an
36 enforceable noise ordinance and provided information in his submittals regarding the
37 creation of a noise ordinance. Mr. Wallace noted that sources of information relative to
38 Best Practicable Means include the Maine Department of Environmental Protection, the
39 World Health Organization, the U.S. Department of Labor, and the Mine Safety and
40 Health Administration. Mr. Wallace is a general environmental engineer and his
41 expertise goes beyond noise. Best Practicable Means can be quantified with a number
42 that another official group has chosen as having a margin of safety. Therefore Mr.
43 Wallace felt it is possible to have a quantitative definition of the qualitative standard. The
44 Quarrying Licensing Ordinance states that the Board can refer to other governmental
45 bodies and how they determine noise levels. The EPA, since 1974, has evaluated noise
46 in and around rural and urban areas. This information quantifies Best Practicable
47 Means.

1
2 Mr. Wallace measured pre-development ambient background noise at the Shencavitz
3 and Aylen properties in 2014. This was the only pre-quarry measurement of sound
4 taken in the area. Starting with pre-existing ambient sound is an accepted practice in
5 determining noise levels.

6
7 Mr. Wallace noted that “practicable methods” infers that technical, economical, and
8 regulatory feasibility have been considered.

9
10 The DEP has a standard of 10 decibels over ambient background noise. Mr. Smullen
11 testified that an increase of 10 decibels is perceived as a doubling of the noise level. Mr.
12 Wallace suggested 10 decibels over ambient background noise levels could be used as
13 a standard.

14
15 Mr. Wallace measured sound at the Shencavitz property. Fresh Water Stone stated
16 they were working at the quarry at the time Mr. Wallace measured. On that day sound
17 was measured at 39 decibels. Mr. Shencavitz stated that noise level – 39 decibels - was
18 an acceptable level.

19
20 Mr. Wallace clarified that he had never been allowed on the quarry property.

21
22 The numbers Mr. Smullen determined through his measurements far exceed 10 decibels
23 over background ambient noise.

24
25 Mr. Wallace explained that some of the sound is tonal or of short duration. Five decibels
26 are added for each time tonal or short duration noise is measured to obtain a
27 quantitative noise level.

28
29 The Applicant’s first noise expert, Mr. Reuter, did a complete analysis of all the
30 equipment that would be operating in the quarry. It is the only time all the equipment
31 operating at once was measured. Despite the berm already built in some areas of the
32 quarry, the noise was shown to be loud.

33
34 Mr. Smullen measured sound levels for three pieces of equipment operating
35 concurrently – a compressor, a drill, and a vacuum. These pieces of equipment can be
36 modeled, if they’ve all been measured separately, in advance of adding noise
37 attenuation measures. Mr. Wallace was unaware of these pieces being measured
38 individually and they were not modeled. These efforts do not demonstrate Best
39 Practicable Means for the specific barrier designed, or for those specific pieces of
40 equipment.

41
42 Mr. Wallace agreed with Mr. Smullen that 3 decibels’ change in the outdoor environment, based
43 on a population with good hearing, is barely perceptible by the human ear. Five decibels’
44 change is a noticeable difference. Ten decibels’ difference is perceived as twice as loud. Noise
45 attenuation efforts should begin at the lower end of the decibel spectrum and move up instead
46 of trying to lower noise from the top down. Lowering noise from 90 decibels to 80 can be
47 perceived to cut the noise in half. However, starting from the low end of 30 to 35 decibels

1 ambient sound, residents near the quarry have experienced a noise level increase of
2 approximately 40 or 50 decibels, as measured at property lines.

3
4 Mr. Wallace explained some of the physics of sound. Distance, then attenuation at the source,
5 then attenuation on the receiver's end, or placing a barrier between the noise and those hearing
6 it are the attenuation efforts in order of effectiveness. The Applicant has chosen a noise barrier,
7 however it has not been demonstrated the barrier works. Barriers work best closest to the
8 sound source or closest to the receiver. The noise created in the quarry is a hybrid of both point
9 source sound (in which the energy expands in a spherical pattern and dissipates sound levels as
10 it expands) and line source sound (sound spreads from side to side, as though in a cylindrical
11 line, but not vertically, and thus does not dissipate as quickly). Noise attenuation for one type of
12 noise is ineffective against the other.

13
14 Barriers are more effective closer to the source, or closer to the receiver. What testing the
15 Applicants have done show that with the barrier created, noise attenuation works in close
16 proximity but not at a distance.

17
18 Mr. Wallace asserted there is no information available on the individual pieces of equipment
19 that were measured collectively for the basis of the barrier demonstration. Those pieces were
20 not characterized individually to determine how each piece operates with or without any noise
21 attenuation treatments that might have been used on the equipment. The barrier is only a
22 partial barrier even on three sides. It did not enclose the full carriage of the equipment. The
23 pipes exposed in the pictures included in Mr. Smullen's report will make noise. The barrier
24 could be expanded, and its design changed to provide coverage on all four sides and provide
25 trucks with access and egress. Mr. Wallace opined that five-foot berms are not effective for
26 noise attenuation. He came to this conclusion by taking the noise measurements presented by
27 the Applicant and creating models for how sound is propagated in an outside environment. The
28 berm will not work due to terrain and elevation. Sound propagated out of the quarry has never
29 been demonstrated. Measurements of near-field equipment were not taken simultaneously
30 with measurements further afield to create a comparison of how sound travels. In one
31 direction, narrowly scoped, the proposed barrier works. But it does not meet Best Practicable
32 Means. Accurate measurements of individual pieces of equipment were not taken both before
33 and after noise attenuation treatments. There is a predominance of noise at the lower
34 frequency ranges. The proposed barrier is ineffective at noise attenuation for frequencies in the
35 lower ranges. No one has addressed the issues of the impact to human health caused by low
36 frequency, vibrational sound transmitted through the quarry stone to neighboring property.

37
38 Mr. Wallace created models using numbers included in the Application to come up with his
39 determinations.

40
41 Attorney Collier asked whether Mr. Wallace's report provides a list of the Best Practicable
42 Means that should be employed. Mr. Wallace stated he provided that list in his 2014 report to
43 the Board. Attorney Collier felt that a list of what Mr. Wallace felt were Best Practicable Means,

1 compared to what the Applicant stated they would do and an assessment of whether the Best
2 Practicable Means were met was necessary.

3
4 Attorney Pileggi asserted that the Applicant has promised nothing, measured nothing, modeled
5 nothing. Attorney Collier disagreed. The Applicant has promised to use certain pieces of
6 equipment. Attorney Pileggi argued that noise levels are not included with any of the proposed
7 equipment. A noise reading should be taken on all equipment the Applicant is proposing to use
8 and modeling of the noise both at the sourcepoint and at a distance should be done. The
9 Applicant has not done that. There was no way for others to do it because the equipment list
10 was not available prior to August, just prior to the last Planning Board Meeting. Mr. Wallace
11 used what equipment had been previously presented in the Application. The Applicant should
12 be required to come up with a list of what is being used, model the equipment being used, and
13 provide specific information on how close to ambient noise the Applicant can get. Attorney
14 Pileggi stated it was not the burden of the Hall Quarry residents to make these determinations.

15
16 Mr. Wallace stated that in 2014 the previous sound expert for the Applicant listed the
17 equipment and characterized the equipment as best he could and normalized the noise to fifty
18 feet. No further research was done. Mr. Smullen provided the work as per the charge given
19 him. He was not asked to determine if there was an attenuation treatment for the down-the-
20 hole drill at the source of the drill.

21
22 Mr. Wallace interpreted Section 6.2.J to mean the Board can use Best Industry Practices, to the
23 extent permitted by State and federal laws and regulations, meaning the Board can take their
24 guidance from these entities.

25
26 Attorney Collier asked how best the Town could enforce methodology to meet the charge of the
27 Purpose as stated in the Quarrying Licensing Ordinance. Should the Town simply set a decibel
28 level? Mr. Wallace opined that he would set a decibel level at 10 decibels over ambient
29 background noise.

30
31 Ms. Randolph felt setting a decibel limit would be a way to move forward without having to
32 remain updated on all technological advances. Recording devices could permanently monitor
33 the site and note when noise level exceeded a set decibel level. Mr. Wallace agreed there was
34 equipment that could be set up to monitor noise continuously.

35
36 Ms. Randolph felt that what the Board is allowed to do is still not clearly understood. She asked
37 if Mr. Wallace felt the Board could reject the Application because the information provided was
38 not adequate. Mr. Wallace clarified he did not feel the Application was complete, because the
39 Applicant did not completely demonstrate the requirement of using Best Practicable Means.
40 The Application was incomplete and so can be rejected, or the Applicant can be tasked with
41 further research and modeling.

42
43 Chair Hanley inquired whether either sound expert is aware of sound barriers attenuating noise
44 in three dimensional patterns. Mr. Wallace knew of temporary or permanent buildings

1 designed to encapsulate noise source. Additionally, Mr. Wallace felt individual pieces of
2 equipment such as drills could be individually treated. Such efforts would have to be tested and
3 modeled. He added that he'd submitted a list of independent experts with his earlier reports.
4 He suggested an independent expert be tasked with evaluating what has been submitted so far.
5

6 Chair Hanley asked if it was practicable to have a three-dimensional enclosure and would a
7 three-dimensional enclosure help mitigate the chimney effect of noise travel. Mr. Wallace felt it
8 depended on the size of the equipment. A barrier can be enclosed on the top and back to
9 further attenuate noise.
10

11 Mr. Ashmore asked if Mr. Wallace believed the operation could be run at 10 decibels above
12 ambient sound. Mr. Wallace noted his modeling suggested the quarry cannot be run at just 10
13 decibels above ambient sound with the barrier proposed. He felt a fully enclosed dome would
14 attenuate noise to that level. Such a dome would not be practicable. Mr. Ashmore noted the
15 Ordinance includes suggestions such as "acoustical enclosures or sheds". Mr. Wallace felt that
16 regardless of the equipment in an acoustical enclosure, any equipment used outside that
17 enclosure will be louder than 10 decibels above ambient noise. Each piece of equipment would
18 require their own noise attenuation treatment.
19

20 Ms. Randolph reiterated that the issue is a difficult one and a moving target. She wondered if it
21 were possible that the creation of a noise ordinance was what was required. Can the
22 Application process be put on hold while the Town creates a noise ordinance? Attorney Collier
23 stated it could not. Such a thing was above and beyond the Board's purview. Quantitative
24 standards were not included in the Quarrying Licensing Ordinance. A balance must be found
25 between what's reasonable and Best Practicable Means.
26

27 Ms. Randolph protested that the CEO cannot become an expert at quarrying and the equipment
28 involved. The Applicant is suggesting different noise attenuation efforts. Every possible
29 outcome regarding every possible piece of equipment cannot be considered. Every possibility
30 cannot be regulated. Simply being able to set a decibel limit would be the best way to maintain
31 an acceptable level of noise.
32

33 Chair Hanley asked whether the Board couldn't set as a condition a decibel level. Attorney
34 Collier stated the Board has wide latitude, given the Quarrying Licensing Ordinance is new, and
35 there are a multitude of concerns voiced from residents. The Board's ability to condition is
36 directly related to the amount of harm perceived. Perceived harm can be specifically addressed.
37 If the Board can tie the Conditions to the Purpose of the Quarrying Licensing Ordinance and also
38 to evidentiary information submitted by Hall Quarry residents, a quantitative condition can be
39 set. The Board must use quantitative evidence on potential harm, and how a quantitative
40 standard would assist in making conditions more enforceable and in finding a way to protect the
41 citizens from the harm previously determined. For example, if it is deemed that if a certain
42 noise decibel level is a limit that would meet all the concerns of the neighbors, and evidence can
43 be provided to that effect, the case for making such a condition would be stronger. If a certain

1 decibel level would be difficult to directly enforce by the Town on a regular basis and in a
2 practical way, and also protect the neighbors, then it would not be enforceable.

3
4 MS. EATON MOVED, WITH MS. RANDOLPH SECONDING, TO TAKE A SHORT RECESS. MOTION
5 APPROVED 5-0-1 (LOFTUS KELLER IN ABSTENTION.)

6
7 A short break ensued.

8
9 Attorney McGuire inquired of Mr. Wallace the cost of his work so far. Mr. Wallace declined to
10 answer. Attorney McGuire noted that expense is also part of what is Practicable. He asked if
11 Mr. Wallace felt cost was an important part of determining what is practicable. Mr. Wallace
12 agreed cost is always important. Attorney McGuire asked the cost of the modeling Mr. Wallace
13 has done so far. Mr. Wallace noted it was less than \$10,000.00. Attorney McGuire asked what
14 the cost was of Mr. Wallace's total analysis.

15
16 Attorney Pileggi protested the line of inquiry. It had nothing to do with the Ordinance standard.
17 His clients do not have the burden of proof. The information being requested has no bearing on
18 the applicable standard.

19
20 Attorney McGuire stated there is a difference between Best Practicable Means to control sound
21 or quarrying, and the best possible means to model acoustics under every conceivable iteration.
22 What the Board has been urged to do is hire an expert and require extensive acoustic modeling
23 using every variation of every piece of equipment in order to create a complete and total sound
24 picture. He suggested this was an attempt to crush the Application through excessive cost.
25 Therefore, cost is relevant. The term Practicable includes consideration of cost.

26
27 Attorney Collier disagreed. What abutters spend on attorneys and experts is not relevant.

28
29 Chair Hanley requested Attorney McGuire leave this line of questioning.

30
31 Attorney McGuire asked for confirmation that Mr. Wallace felt enclosing the quarry with a dome
32 was deemed a Practicable Mean of noise attenuation. Mr. Wallace noted a dome over the
33 entire quarry would not be practicable. Providing enclosures for each individual piece of
34 equipment would be practicable. Mr. McGuire noted that Mr. Wallace hasn't modeled such
35 individual enclosures. Mr. Wallace stated he has examined such individual enclosures in other
36 quarries.

37
38 Attorney McGuire pointed out that Mr. Wallace measured ambient background noise at
39 approximately 40 decibels. Mr. Wallace stated that was the number measured when the
40 Applicant stated they were working in the quarry. His ambient sound level was in the high
41 20s/low 30s decibel level. Ten decibels over that ambient sound level is approximately 40
42 decibels. Attorney McGuire referred to a letter from Acadia Law LLC, dated August 26, 2019,
43 Page 4, Paragraph 15. Mr. Wallace read the following:

1 *"The adjacent residential parcels to the North and East of the quarry are very quiet rural areas*
2 *with existing ambient sound levels without Hall Quarry operating of 38 to 40 dba daytime, that's*
3 *7AM to 7PM, and 27 to 28 nighttime. Reference Three above. These areas meet the current DEP*
4 *standards for quiet protected locations of 55 dba day down to 45 dba nighttime sound levels."*

5
6 Attorney McGuire clarified that the quarry would not operate at night. He restated the daytime
7 dba level was stated at 38 to 40 dba. Mr. Wallace stated it was a range measured during the
8 daytime and without equipment operating.

9
10 Attorney McGuire referred to several references made to the EPA standards of 1974. Those
11 standards were not intended to be regulatory standards. Mr. Wallace stated it was intended to
12 be a guideline for individual communities and individual states to set their own quantitative
13 standards with an adequate margin of safety and health using a quantitative method.

14
15 Attorney McGuire read a section of the document under the heading of Misuses and
16 Misunderstandings and Questions:

17
18 *"Perhaps the most fundamental misuse of a levels document is treatment of the identified levels*
19 *as regulatory goals. They are not regulatory goals. They are levels defined by a negotiated*
20 *scientific consensus. These levels were developed without concern for economic and*
21 *technological feasibility, are intentionally conservative to protect the most sensitive portion of*
22 *the American population and include an additional margin of safety."*

23
24 Mr. Wallace stated the document Attorney McGuire just read from was intended to be a
25 guideline that should be used with caution. Each community has the choice of how to use the
26 information. Mr. Wallace also mentioned the World Health Organization (WHO). The WHO is
27 also a guidelines organization and not a standards organization. The guidelines created by the
28 WHO are more restrictive than the 1974 EPA Standards.

29
30 Attorney McGuire asserted the EPA Standards state that the guidelines do not explicitly say how
31 much noise is too much noise because the determination of how much noise is too much noise
32 and for whom or for how long and under what conditions demand consideration of economic
33 political and technological matters beyond the intent of the levels document.

34
35 Mr. Wallace reiterated the document is a guideline document.

36
37 Attorney McGuire noted that in Mr. Wallace's presentation, reference is made to decibel levels
38 produced by modeling. Seven receiver points were used in that modeling. At those receiver
39 points the decibels resulting from the modeling with all the equipment operating is listed. Mr.
40 Wallace clarified that for the modeling in this instance, three pieces of equipment within the
41 barrier only were used. He would have to review his information to be sure. There are
42 differences in sound levels from the various directions, due to the barrier. The barrier will have
43 an impact on other properties in addition to abutting property depending on the direction in
44 which the barrier was aimed.

1
2 Attorney McGuire asked if these receiver points were at the abutting properties. Mr. Wallace
3 Mr. Wallace noted that five targets were on either Shencavitz or Aylen property and two were
4 on another abutter's property. Attorney McGuire listed the modeled decibel levels as 48.4,
5 48.1, 49.8, 56.7, 59.0, 50.0, and 47.2. These levels were far from testimony given as 80 decibels.
6 Mr. Wallace reiterated this was only three pieces of equipment. He had additional models using
7 all the equipment proposed, using three different centroids of activity within the quarry,
8 modeling each of the centroids at varying distances. Attorney McGuire noted these models did
9 not include the sound mitigation efforts presented in August 2019. Mr. Wallace confirmed
10 sound mitigation efforts were not modeled. There was no way to include those efforts. The
11 barrier was the only sound mitigation effort that could be modeled. Attorney McGuire noted
12 that Mr. Wallace's actual measurements appear to be in the 40s. Mr. Wallace asked Attorney
13 McGuire to clarify which measurements he referred to. Attorney McGuire noted it was the
14 Sound Measurements Document dated August 26, 2019. Mr. Wallace clarified those were the
15 measurements taken at the request of the Aylens and the Shencavitz' and with permission from
16 a third abutter, during an equipment test Mr. Wallace was not allowed to witness, measure, or
17 photograph. Testing was done from abutter property and by guessing when equipment might
18 have been operating.

19
20 Attorney McGuire noted meter positions 3A, MP3A and MP4. "Ambient levels" at MP3A were
21 31 to 55 decibels, arithmetic average of 43. "Equipment test with barrier" reads 33 to 45
22 decibels, arithmetic average of 37. "Equipment test without the barrier" reads 31 to 51
23 decibels, arithmetic average of 43. Mr. Wallace stated MP3A was set at several hundred feet
24 from the quarry. The site was on a large rock and taken from that site to create a comparison to
25 noise heard at the Shencavitz home's raised deck.

26
27 Attorney McGuire pointed out that position MP4 showed ambient levels of 36 to 46 decibels.
28 Mr. Wallace explained that original ambient conditions were never measured from the Coates
29 property. This was sound measured after quarry operation had shut down and the barrier had
30 been dismantled and removed. Attorney McGuire noted the noise with equipment was 40 to 53
31 decibels - less than 10 decibels from the recorded ambient sound. Equipment testing without
32 the barrier was 38 to 61 decibels. This test does not support the notion of 80 decibels of sound
33 previously stated. Mr. Wallace reiterated that only three pieces of equipment were being tested
34 at the time. It did not involve any of the other equipment listed.

35
36 A short discussion of decibel levels and sound energy ensued.

37
38 Chair Hanley hoped the Applicant could move his questioning along so the public had a chance
39 to talk. He reminded those in attendance that the Public will also have an opportunity to make
40 a presentation.

41
42 Attorney Collier noted there is usually a rebuttal as well.
43

1 Ms. Randolph asked the difference between twice the sound energy versus twice the
2 perceivable noise. What is the noticeable difference in a noise? Three decibels of noise is twice
3 the sound energy. What impact does such an increase have on those living near the noise. Mr.
4 Wallace explained that two engines' noise added together logarithmically is a three-decibel
5 change. Continuing this increase to ten decibels would be perceived as an annoying noise
6 increase.

7
8 Mr. Wallace suggested taking a week's worth of ambient background noise levels and creating a
9 noise level using a system called the L-90 and set a level at 10 decibels over that. This will
10 consider how the ear works and how the energy works.

11
12 Hall Quarry resident Maureen McGuire asked about low-frequency noise.

13
14 Mr. Wallace stated that sound source measured in the air shows sound coming onto the
15 property is dominated by low frequency. Low-frequency sound contributes to how much sound
16 is in the air, but it goes through stone as well. Mr. Wallace felt there was the possibility of
17 attenuating low-frequency noise. He has had experience putting a hammer into acoustic
18 padding to attenuate the noise generated. No measurements for low-frequency noise at the
19 quarry were taken to his knowledge. To reduce low-frequency noise, the source must be
20 isolated from the receiver.

21
22 Ms. McGuire asked if new equipment the Applicant has mentioned has been purchased.
23 Freshwater Stone representative Andy O'Deen noted there were plans to purchase the
24 equipment.

25
26 Ms. McGuire inquired whether the Town of Mount Desert was allowed to use other Town
27 Ordinances being used for quarry operation. Attorney Collier stated other Town's Ordinances
28 could not be used.

29
30 Chair Hanley asked for other questions from the public.

31
32 Hall Quarry resident Joanne Krasinsky asked about the length of time a steady, continuous noise
33 from the quarry might run. Continuous noise would be an issue. Would the quarry noise be a
34 continuous eight-hour occurrence?

35
36 Hall Quarry resident Scott Stevens noted that the noise can be felt in his house as well as heard.
37 How is the sound traveling? Mr. Wallace stated sound travels both through air and through the
38 ground. The Applicant could measure that sound.

39
40 Chair Hanley asked for other questions from the public. There were none.

41
42 Attorney McGuire requested time for Mr. Smullen to respond to the comments, to take
43 advantage of his presence at the meeting.

44

1 Mr. Smullen stated the data he used was from the original Reuter report submitted to the
2 Applicant and based on the equipment being used at that time. The loudest of the equipment
3 measured at that time was the drill at 98 decibels, at a distance of 50 feet. Other equipment,
4 except for the wire saw were quieter by more than 10 decibels.
5

6 Low-frequency impulse noise, such as pounding against rock, can be attenuated with the
7 silencers already purchased by the Applicant. High-frequency noise will still dominate, however
8 the solutions proposed will have a positive effect.
9

10 Chair Hanley asked if there were any questions from the Board.
11

12 Hall Quarry resident Kelly O'Neill asked why the Applicant did not allow Mr. Wallace to
13 participate in the noise testing that occurred at the quarry. She felt any study should be open.
14 Attorney McGuire disagreed; the tests were conducted on private property.
15

16 The next steps in the process were discussed.
17

18 At the next meeting, the public would have an opportunity to present, and after questions, the
19 Board would begin their deliberations. It was agreed that further consideration would be
20 needed by the Board before a decision on whether or not to hire an independent expert on
21 noise could ensue.
22

23 After some discussion, it was agreed to continue the meeting till November 20, 2019, with a
24 submittal deadline of November 13, 2019, and a rebuttal submittal deadline of November 15,
25 2019.
26

27 MS. RANDOLPH MOVED, WITH MR. ASHMORE SECONDING, APPROVAL OF A NOVEMBER 20,
28 2019 MEETING DATE, WITH A SUBMITTAL DEADLINE DATE OF NOVEMBER 13, 2019, AND A
29 REBUTTAL SUBMITTAL DEADLINE DATE OF NOVEMBER 15, 2019. MOTION APPROVED 5-0-1
30 (LOFTUS KELLER IN ABSTENTION).
31

32 MS. EATON MOVED, WITH MR. ASHMORE SECONDING, TO CONTINUE THE MEETING TO
33 NOVEMBER 20, 2019. MOTION APPROVED 5-0-1 (LOFTUS KELLER IN ABSTENTION).
34

35 The Meeting ended at 9:47 PM.
36