

850 Route 28: Noise comments

Noise Report Summary

Two Noise Reports were performed for the 850 Route 28 Proposed Site Development by H2H Geoscience Engineering. The initial Noise report dated February 2019 was performed to evaluate the noise impacts of the 850 Route 28 site developments at the residences on the end of Waughkonk Road. The conclusion of the first report found that there will be an increase in noise at the residences during construction, the increase in noise shall be minimal with the proposed sound mitigations. The February 2019 report also states that the long-term concrete and steel manufacturing facilities can be operated with no disturbance to the neighboring residences from the noise produced from the normal manufacturing operations.

The second Noise study dated November 2019 was performed to evaluate the noise impacts of the 850 Route 28 construction on adjacent New York State (NYS) Lands. Unlike the nearby residences, the New York State Lands are closer to the proposed site development. The Town of Kingston does not have a noise ordinance. The largest sound produced from construction with proposed mitigations is proposed to be 67.7 dBA at Pickerel Pond. We are proposing to restrict the hours of crushing and drilling to be from 7a.m. to 7p.m. on weekdays only and no holidays. The the largest construction noise on a weekend would then be 55.4 dBA at the North-East property corner. Therefore, the larger construction noises should not affect the majority of visitors to the neighboring New York state lands. The October 2019 Noise report recommends installing temporary and permanent noise barriers. The noise barrier placement can be found on sheet PH-2 of the Site Plans. With mitigations in place the largest increase from the ambient noise levels to the loudest construction noises at either Onteora Lake or the existing trails on New York State Lands is 9.8dBA. Furthermore, the rock removal and blasting operations are to occur for no more than 2 to 3 years.

The October 2019 report states that the sound generated by the proposed long-term operation is consistent with the sound that is currently generated on site by tractor trailers. All proposed manufacturing processes are to take place within the two proposed buildings. In addition, a permanent sound fencing, and sound berms will be installed along the perimeter of the facility to mitigate sound generated by on-site truck traffic. Below is a summary of comments from the public on the Noise Reports with our responses.

Noise Report Comments

1. *COMMENT: "The noise study did not place receptors on the Onteora Lake Addition property, where recreational trails are planned to be constructed just east of the Project boundary. This study fails to note the sound impacts that visitors to these trails will experience."*¹

RESPONSE: OSI's purchase of the Onteora Lake Addition and public release of the proposed trail network occurred after the original noise study was conducted. The November 2019 Noise

study has been prepared in order to analyze the potential noise impacts to the users of closest existing trail locations

It should be noted that the Eastern Material's quarry, located approximately 2,000' northeast of the Onteora Lake Addition, uses crushers as part of their ongoing daily operations, whereas the noise generated during the construction phase of the proposed project is temporary and will cease once site preparation is complete. Noise produced as part of the proposed manufacturing operation is expected to be minimal, because all of the fabrication processes will be conducted within the proposed buildings.

2. *COMMENT: "Mobile Batch Plant and crusher plants are located outside of the buildings. This will be a severe noise concern. Block wall around the plants should be installed to reduce noise impact to residence(s)."*²

RESPONSE: The revised site plan relocates the mobile batch plant to the inside of Proposed Building 1. Noise will be further mitigated by the placement of berms and a sound fencing, supplementing the existing vegetative buffers around the perimeter of the site. The rock crusher is to be used only during construction, has been moved to a location that minimizes the effect on neighboring receptors and will have rock sound berms placed around the crusher location. (Site Plan, Sheet SP-1).

3. *COMMENT: "We need high barriers on the inclined road that goes between the buildings to mitigate the sound of truck traffic."*³

RESPONSE: The road between the proposed buildings is to be cut 15 to 20 feet into the bedrock, thus creating a stone wall between the proposed road and neighboring properties.

4. *COMMENT: "The Applicant only measured the ambient noise from 8 am to 2:30pm. The noise study should have been 24 hours since the project is open and operation 24 hours a day."*

RESPONSE: The first noise study dated February 2019 was looking mainly at the noise impacts at the two closest residents at the end of Waughkonk Road, which are considered noise sensitive receptors. The ambient sound at the two closest residents were of 37.7 dB and 39.3 dB with the predominate noise coming from NYS Route 28. The second noise study dated November 2019 took noise readings for 12-hours and had ambient noise levels of 44.4dB, 52.2dB, and 44.0 dB, with the predominate noises coming from NYS Route 28. A 24-hour study of ambient noise would mainly be created from the traffic of NYS Route 28. In the summer near the Onteora Lake and Pickerel insect noise would contribute to a louder ambient noise at night. Also, public use of the adjoining state lands around Onteora lake will be limited between sunset and sunrise.

Construction noise will be limited by restricting work hours from 6 AM to 7 PM, Monday through Sunday. We are also proposing that drilling and blasting be limited from 7AM to 7PM only Monday through Friday. While we are proposing to operate 24 hours, most of the work at night will be inside the manufacturing buildings. We are only proposing that some trucks would have to be loaded and leave during the night. On page 10 of the November 2019 report lists the sound levels at the property lines to be used outside of the fabrication buildings during the manufacturing phase of the project. The highest sound level was at the southwestern property boundary was 44.4 dBA. This proposed sound level is close to the ambient noise levels collect for the October 2019 Noise study.

The Town of Kingston does not have a Noise Ordinance. The two Noise Ordinances referenced in the November 2019 Noise Study report were the Town of Ulster and the City of Kingston. On page 2/4 and 3/4 in Appendix B (Town of Ulster Noise Ordinance) of the November 2019 Noise study list a maximum sound level of 66 dBA between 10:00 PM to 7:00 AM. We are proposing to stay over 20 dBA lower than the allowed noise level in the Town of Ulster. On page 1 in Appendix C (City of Kingston Noise Ordinance) of the November 2019 Noise Study list a maximum sound level limit from 10:00 PM to 7:00 AM as 55 dBA for residential areas. We are proposing to stay 10 dBA lower than the allowed noise level in the City of Kingston. We are only proposing to continue to be allowed to use the property as it is currently allowed to be used, but with several sound berms and sound fences

5. *COMMENT: 'The Logging Stations 13, 14, and 15 on page 6 of the study should state the closest receptor is and how far away it is.'*

RESPONSE: Figure 2 in the May 6, 2019 response letter from H2H Associates shows the Loggins Stations 13, 14, and 15 in relation to the receptors.

6. *COMMENT: The document state that adverse impacts are expected at Receptor 1. (Page 9)*

RESPONSE: The same February 2019 report on page 10 states "The highest projected sound level was at Receptor 1 while the crushing plant is in operation with a value of 48.0dB (an increase of 10.8 dB above ambient) at the Receptor. Though this is a large increase in sound level, 48.0 dB is still average for a residential area.

7. *COMMENT: On Page 10, Section 5.0 "on should be "no" with respect to impacts. It would also be helpful to have some data to back up the conclusory state that there are no impacts, especially since the prior section on page 9 stated that there would be an adverse impact.*

RESPONSE: The word is section 5 should be "no". Section 5 of the report is talking about Long Term Site Operations. In Section 4.1, the report is talking about the 10.8 dB increase due to the crushing plant. The crushing plant is not a long-term site operation. While the 10.8 dB is a large increase in ambient sound level, the overall sound level of

48.0 dB caused by the crushing plant at Receptor 1 is still an average sound level for a residential area. The largest noise level proposed for the long-term operation of the facility is the unloading of material into the storage bins. The noise created from the unloading of material is like the Front-end loader. The front-end loader causes little to no change in the ambient sound levels at receptor 1 and 2 as shown in Table 6 of the February 2019 Noise Study.

8. Comment: We need high barriers on the inclined road that goes between the buildings to mitigate the sound of truck traffic.

Response: The road between the proposed buildings is currently proposed to be excavated 15 to 20 feet into the rock. Therefore, there will be a rock barrier between the road and neighboring properties to the south of the project area.

9. Comment: How will we know if the proposed mitigation measures are enough without actual readings taken on all equipment? We need to schedule intermittent reviews.

Response: A front end loader was used to load shot rock into a tractor trailer while sound levels were being monitored. Please see the February 2019 Noise study by H2H Associates. The other sound levels used for the crusher and drill rig were taken from real machinery.

Response to Steve Mallory comments on February 2019 Noise Study:

From 2019 04 15 Malloy, with M&E (5/14/19) and H2H (5/6/19) responses

- Comment: Page 5 of the report notes that equivalent sound level measured at logging stations 11-14 during the day periods (8:30am to 12:30pm). This data was supplied but the monitoring results of the front-end loader loading shot rock into a tractor trailer between 12:26pm- 1:50pm was not provided. This information should be in the report and your analysis. The report also contains a small graph which is very hard to read noting times from prior to 12:00pm -2:00pm. It should reflect the template used in the ambient background report.

Response: The monitoring results of the front end loader loading shot rock into a tractor trailer between 12:26-1:50pm is provided in the Noise Study Dated February 2019 (Noise report) for logging stations 11, 12, 13 and 15 on pages 60, 69, 74 and 79 respectively. The data collected between 12:26 pm -1:50pm is in section 2.5.1 of the Noise Report. The analysis is also included in section 2.5.1 of the Noise Report. Sound data was collected between 8:00am -2:30pm on December 26, 2018. Data from prior to 12:00 pm-2:00 pm is shown in the Ambient Survey Monitoring Results Section 2.4, and in Appendix C of the Noise Report.

- Comment: One minute reading on the data collection seems to be long in duration. I would like to see what seconds would look like. One minute reading may not take into account the higher db levels and/or is used to average out the peak noise.

Response: The sound level meters collect data a rate of 16 times per second. The logging interval for the study is one minute meaning that the measurements collected over each one minute period are averaged into one LAeq sound level. A one minute logging interval is used to allow for the data to be analyzed more effectively while still recording the maximum sound levels. This method does not affect the maximum sound level recorded during the study.

- Comment: An actual site DB reading should be provided for the following on site equipment; material crusher, mobile batch plant and a tractor trailer, going up and down the inclined roadway between proposed buildings. A dozer with the blade running across bedrock and a sample blasting readings should be taken and recorded to understand what the residence will hear, as well as any other outside equipment that will be used during the construction and operation of the proposed plants.

Response: Collecting an actual on site sound level to understand what the residence will hear is not feasible given none of the equipment listed above will be on site until the project is started. H2H used sound levels collected from similar operations to best predict what the residence will hear. Based on H2H's findings shown in the Noise Report the largest anticipated increase in ambient sound levels at Receptor 2 (Steve Malloy residence) was while the crushing plant is in operation. Based on the fact that the crushing plant operates at 96.0 dB, and the above mentioned site equipment operates at a lower sound level (Table D of the NYSDEC "Assessing and Mitigating Noise Impacts" guidance document, Attachment A of Noise Report) H2H does not believe the above mentioned site equipment will have a greater impact on the Malloy residents than the primary crusher used in the Noise Report.

- Comment: The report does not note where the front end loader loading into the tractor trailer was in relation to the logging stations. That should be noted on the drawing showing distances to residence.

Response: A revised Figure 2 is attached showing the location of the front end loader loading shot rock into a tractor trailer, and the distances to each residence.

- Comment: We need an order and action plan whereby work will stop when sound levels are exceeded.

Response: The Town of Kingston Code Enforcement Officer will have the ability to stop work for excessive sound levels.

From June 12, 2019 OSI letter with CHA review attached

- Comment: The noise study did not place any receptors in the lands, or at the property lines, to the north of the Site. These areas should be analyzed because of the existing or planned recreational trails in this area.

Response: The second noise study dated November 2019 was developed to analyze the effects of noise from the proposed project on the public lands and existing trails.

- Comment: The noise study only performed measurements for 6 hours (8:00 AM to 2:30 PM). There is no way to know if this is the peak noise level that may be experienced during the day. We recommend that 24-hour noise measurements be taken.

Response: The ambient noise levels from the February 2019 Noise study were slightly lower than the ambient noise levels from the November 2019 noise levels. The difference is probably due to the time of year. Furthermore, the studies ambient noise levels were taken with no operations running at the site. All of the increases in noise levels are taken as if the current site does not currently have any operations producing noise.

- Comment: Noise surveys should conduct measurements during ambient conditions (no onsite operations), existing conditions (typical onsite operations occurring), and proposed conditions. During the noise study at the Site, "ambient" measurements were taken with a "Liebherr 586 front end loader loading shot rock into a tractor trailer".

Response: The Liebherr 586 front end loader loading shot rock was not included in the ambient noise levels.

- Comment: Table 2 shows Logging Station information was collected, but it does not specify the hours. It is hard to know what ambient levels were recorded under such a sample size. If measurements were obtained, we would know the high and low noise levels to compare against.

Response: Table 2 shows the Total Run Time for each Logging Station. The ambient Sound levels were collected between 8:00 AM to 12:00 PM.

- Comment: The projected sound levels look at the possible noise levels only from the one operating piece of equipment. Noise emitted from multiple pieces of equipment operating simultaneously with trucks idling and/or transporting materials on and off site

should be evaluated. Noise receptors could experience a significantly higher noise level if multiple operations are occurring at once.

Response: Table 7 of the February 2019 Noise report provides the Projected Sound Levels for the Front-end Loader and Blast Hole Drill Rig together. And Section 3 of the November 2019 Noise report discusses the combination of multiple machines running.

- Comment: The report does not specify how or why they only projected sound level changes to Receptors R-1 and R-2. This does not seem to fully evaluate the entire project Site and property boundaries.

Response: Section 2.2 of the February 2019 Noise report talks about the selection of the “noise-sensitive” receptors.

- Comment: Mitigation measures recommended moving the crushing pan farther to the north: this will have a negative effect on users of the existing and planned recreational trails in the lands to the north of the Site. This would also have a negative impact to the serene and natural conditions surrounding the recreational trails.

Response: The proposed construction of the facility will produce noises similar to the Eastern materials Rock mining operation North-east of the existing and proposed recreational trails. However, after construction is completed, the noise generated on site will be similar to the existing noises coming from NYS Route 28 site.

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