



Friends of Siamese Ponds
North River, NY

December 10, 2021

Robert Lore
NYS Adirondack Park Agency
PO Box 99
Ray Brook, NY 12977

Beth Magee
NYS Department of Environmental Conservation
232 Golf Course Rd.
Warrensburg, NY 12885

CC: Chuck Barton, Barton Mines Company

FOSP COMMENTS ON OCTOBER 15, 2021 BARTON MINE PERMIT APPLICATION

Dear Mr. Lore and Ms. Magee,

On behalf of the Friends of Siamese Ponds (FOSP) please find our preliminary comments on the Barton Mines Company DEC Mine Permit Modification-APA Major Project Application, received by APA on October 15, 2021 (Permit Application). These comments focus on additional information needed to help government officials and interested parties better understand potential impacts of the proposed mine expansion on the Siamese Ponds Wilderness Area, local residents and the regional economy. Comments are arranged by topic area for your convenience.

1. Noise Pollution. As background, over the past several years, daytime and nighttime noise from Barton's North River operations has become objectionable, interfering with the wilderness character of the Siamese Ponds Wilderness Area and the use and enjoyment of adjacent residential and commercial properties. In response to residents' concerns, discussions with Barton officials began in August 2019 and

continue to date. According to Barton officials, alterations over time to mine topography may be creating an “amphitheater effect,” allowing increasing levels of noise to propagate outward into the North River valley and adjacent wilderness area. Attempting to reduce sound levels, Barton has implemented some remedial actions, such as closing doors on the processing mill and installation of a noise-insulating jacket on a rock hammer. Recently, Barton has held several meetings with the public and interested parties to further discuss noise and other community concerns, pledging to address these concerns to the extent practicable.

2. Noise Pollution. Appendix P, Sound Study, Section 3.5, concludes the Barton August 2, 1979 Sound Study “simulated worst-case sound conditions.” As the mine was not operational at the time of the study, nor did it even exist, the applicant’s basis for this conclusion should be further explained. The applicant should explain the basis for their conclusion. For the mine expansion project, the applicant projects considerable increases in sound levels. Similarly, it is unclear if these projections represent future worst-case conditions.

3. Noise Pollution. Appendix P, Sound Study. It is unclear if generally accepted protocols were used for the measurement of sound levels, for example see ISO 3740 <https://www.iso.org/obp/ui/#iso:std:iso:3740:ed-3:v1:en>. For example, please confirm that all calculations of sound intensities excluded non-representative noises, as defined in standard noise measurement protocols (e.g., rustling leaves, chirping birds, barking dogs, human activity, etc.). Also, it is unclear if the measurements taken represent current worst-case noise conditions. For example, were most, if not all, noise generating sources operating simultaneously when measurements were taken?

4. Noise Pollution. The National Academies of Sciences, Engineering and Medicine addresses how to evaluate of “noise metrics for rural/naturally quiet areas, (<https://www.nap.edu/read/12928/chapter/5#24>). They state:

Neither day-night average sound level nor percent highly annoyed is an appropriate metric for measuring noise in naturally quiet areas. Because of the logarithmic nature of the decibel, short-duration sounds of high amplitude compared with background noise can significantly increase the day-night level, even though the sound remains at the background level most of the time. As for percent highly annoyed, this is hardly the best measure of satisfaction for areas where quiet and solitude are valued. In addition, it can be difficult to measure very low sound pressure levels. A-weighted levels of 40 dB are at the upper end of the range, and lower levels can be at or even below the levels measurable with conventional sound-level meters.

Nevertheless, some quantification of noise impact is clearly needed in these areas as a basis for establishing public policy, which usually means regulatory action. The classic definition of noise is “unwanted sound,” so the source of sound must be identified, either as part of the natural soundscape or not. Thus, simple metrics like sound pressure level are clearly not appropriate. For example, an airplane overflight may have a much lower sound pressure level and shorter duration than sound from a rushing stream, but the former is considered noise and the latter is considered sound. The method of assessment of the noise environment should also take into account the likely long-term impact on animals that use, for example, very low level sounds (perhaps inaudible or unnoticed by people) to locate prey or predators.

State Agencies should consider requiring the applicant to perform additional measurement and analysis as recommended in the NAS study.

5. Noise pollution. The applicant should provide confidence (or uncertainty) levels associated with Sound Study projections of future noise levels resulting from the mine expansion. Additionally, information on the acoustical training and expertise of the study authors, and demonstration of success in accurately estimating future sound levels for similar projects, is needed. General information, such as case studies or technical articles published in the literature, demonstrating the ability of acoustical engineers to project future sound levels from similar types of projects would also be helpful.

6. Noise Pollution. The applicant should propose mitigation options in the event noise levels at some point during the 75-year expansion are greater than anticipated, and the criteria upon which deployment of mitigation would be required.
7. Noise Pollution. Applicant should explain what factors unique to this acoustically complex, mountain-top mining operation may influence projections of future sound levels. For example, noise will depend not only on the stationary or moving sources but also on variable and complex topographies, which may result in unique patterns of reflection, refraction, or absorption of sound waves. Residents and local businesses, and users of the Siamese Ponds Wilderness Area have noticed how topographical features adjacent to receptor locations, and meteorological factors, such as wind direction, humidity and especially the unique vertical temperature gradients found in mountain locations, influence the intensity of sound from the mine.
8. Noise Pollution. Industrial noise above natural ambient levels may be impacting wildlife in the Wilderness Area and surrounding lands. As described in Chapter Four of [Environmental Impact of Mining and Mineral Processing](#), “Noise pollution has a negative impact on wildlife species by reducing habitat quality, increasing stress levels, and masking other sounds. Chronic noise exposure is especially disruptive for species that rely on sound for communication or hunting (Bayne et al., 2008). Animals that use noise for hunting, such as bats and owls, and prey species that rely on noise to detect predators may have decreased patterns of foraging, reducing growth and survivability (Barber et al., 2010; Kight and Swaddle, 2011). Additionally, bird species that rely on vocal communication and other various species, such as nocturnal animals, have been shown to avoid areas with noise pollution (Barber et al., 2010; Bayne et al., 2008). Reductions in bird populations and foraging activities can, in turn, negatively impact seed dispersion, affecting ecosystem services and diversity (Francis et al., 2012). Because much of the noise pollution in natural habitats is caused by vehicle traffic, generators, and development in general, noise pollution

often exacerbates the problems associated with habitat destruction and fragmentation (Barber et al., 2010).” (Note that the Permit Application states the mine location is habitat for the Northern Long Eared Bat.) An analysis of potential ecosystem impacts from mine operations should be conducted.

9. Noise Pollution. Barton officials expressed surprise when residents and Wilderness users first raised the issue of increasing noise levels. To facilitate improved early, open, and effective communication between mine operations and the local community on future mine issues, the applicant should propose a community communications plan.

10. Residuals Piles Dust Migration. On windy, dry days large dust plumes blow off the residuals piles, often migrating downwind into the valley below (see picture on next page and video attached to the email transmitting these comments). This current situation needs to be mitigated. DEC should evaluate if measurement of air particulates (Total Particulate Matter, PM2.5 and PM10) is warranted.



11. Residuals Piles Dust Migration. At the November 16, 2021 Barton public meeting at the Tannery Pond Center, company officials discussed the potential use of a biodegradable cover material to reduce dust migration. Apparently, this material can be sprayed on the tailings piles to reduce dust migration yet has no associated environmental impacts. This alternative does not appear to have been included in the

Barton permit application. This material should be evaluated as an alternative mitigation option for dust migration.

12. Viewshed Impacts. Many of the photos presented in the Viewshed Analysis (Appendix O) are either hazy or backlit, making analysis of potential impacts more difficult. For example, compare the views below of the Appendix O backlit photo of the mine from 13th Lake Road versus a recent sunlit photo from the same location. Better quality photos should be provided.



Photo 13A. View from Thirteenth Lake road looking west towards the Ruby Mountain Mine site (55mm lens)



13. Viewshed Impacts. The Viewshed Analysis should evaluate the impact of the tall, semi-permanent conveyors and earth-moving equipment located on the tops of the tailings piles, not just the tailings piles themselves.

14. Viewshed Impacts. The NYSDEC and APA criteria for the selection of locations to evaluate viewshed impacts include properties on or “eligible” for inclusion in the National or State Register of Historic Places. The applicant’s viewshed analysis should include views from the Log House at Garnet Hill Lodge and the remnants of Hooper Mine. The Hooper Mine, a popular destination, may have the most direct visual and audible impacts from mine operations in the Forest Preserve. Mine views from Gore Mountain Ski area were included in the Viewshed Analysis, even though Gore is outside the five-mile radius used in the Analysis to limit the view locations, yet views from the recent additions of land on Moxham Mountain, and its popular hiking trail to the summit were not included. Visual renderings from this location should also be presented.

15. Viewshed Impacts. The Viewshed Study concludes there are no “new” locations where the proposed mine expansion would impact the viewshed, stating “The visual assessment study has found that the proposed project would not cause an increase in the number of public use areas that have visibility of mining activities associated with the proposed project.” Yet in the last phase of the proposed mine plan, a view of the mine from the east shore of 13th Lake (not currently visible from the lake and which will not be visible under the current APA permit) becomes visible (Photo Station #4). This should be corrected.

16. Viewshed Impacts. Page 38 of the application compares the existing and proposed tailings piles to a “*natural landscape*” such as talus pile “found at the toe of numerous steeped sloped areas of the Park.” Whereas the tailings pilea will be at the top of mountain, not at the toe, and composed of tailings, not talus, this comparison is

questionable. Please request visual examples comparing tailings piles to natural landscapes to support their conclusion. Similarly, the application states the closed mine “will be viewed as a hill/mountain that is covered in trees, much like the mountains surrounding the current Site.” The final topography as described in the plan may be incongruous with the surrounding landscape and appear more like a closed landfill rather than a natural feature. For the final closure design, the applicant should present options for creating various landforms that may be more consistent with the surrounding landscape and its wilderness character.

17. Final Closure Design. Page 45 of the application states “During the final phase of mining, fine-grained residual minerals will be deposited in the northern most portion of the mine (area that enters the CEA). Once the mined-out area is filled with fines it will be reclaimed with topsoil and vegetation.” However, it is our understanding that the fine-grained residuals are inherently unstable and cannot be covered with topsoil. Please request clarification on this point.

18. Surface Water Impacts. Browns Pond Brook, Thirteenth Brook and their tributaries are NYSDEC designated as C(TS), habitat for native brook trout spawning. Best that we can determine, the last time these streams were surveyed by DEC biologists was in 1979 pursuant to the initial permit application for the Barton North River mine. Recent reports from fishermen indicate a decline in the brook trout fishery in Thirteenth Brook. Observations of recent water conditions indicate frequent low flows and warm water temperatures that likely stress the fishery. Water temperatures will likely increase, and the nature of stream flow change with climate change. As part of the application process, we request a new survey of stream conditions be conducted. If the study confirms a deterioration of brook trout habitat and populations, the possible impact of current and future permitted Barton water withdrawals and discharges into Browns Pond Brook and Thirteenth Brook should be evaluated.

19. Wetland Impacts. Throughout the terms such as “wetlands,” “permitted wetlands,” and “mapped wetlands,” are sometimes used inconsistently, making it difficult to understand the scope of possible wetland impacts. For example, Page 41 of the application states “Barton has designed a plan that will avoid any impacts to any mapped surface water or wetland feature. Moreover, in accordance with the Warren County Soil and Water District stream setback guidelines, a 100-foot buffer in which vegetation will remain preserved has been incorporated into the Modification.” Page 5 in Appendix J states, “A wetland delineation was completed for selected areas within the Site in North Creek, New York using the “Routine Method” outlined by the ACOE. A total of approximately 1.0 acres of wetland were delineated. Approximately 0.5 acres of wetlands were identified within the proposed Affected Area limits where proposed Site activities may impact wetlands.” In the November 2019 Wetland and Stream Delineation Report, Wetland #5 is assumed to be non-regulated (Note: this wetland may contain the NYS Threatened Species *Rhodora*) and “would be entirely excavated as part of the quarry expansion” (see page 5 of the Full Environmental Assessment Form). For the Finger Valley Wetland, which in 1988 APA reserved the right to restrict or prohibit use to store RM, it is unclear if it will be impacted due to alterations of the site’s stormwater retention pond system (See Figure 2, page 2247). Requesting the applicant to prepare a concise narrative with maps clearly describing current conditions and potential wetland disruptions would be helpful to better understand the totality of impacts.

20. Climate Change Impacts. Past climate data alone can no longer be used as a proxy for future conditions. Projections on how climate change will likely affect New York State are available (<https://nysclimateimpacts.org/>). With respect to climate change impacts to Barton operations, observed and projected future increase in extreme precipitation events in New York State (for example, see https://ag.ny.gov/sites/default/files/extreme_precipitation_report9214b.pdf) need to be evaluated. Fortunately, state-of-the-art guidance on incorporating climate change into

project design is available online at [CRRA Flood Risk Management Guidance](#), [NY Projected IDF Curves](#) and the recently issued draft [DEC Commissioner's Order CP-49](#). For mine infrastructure vulnerable to changing hydrologic conditions (e.g., stormwater retention basins, culverts, residual piles) Barton should incorporate this best available information into project design.

21. Mitigation of Greenhouse Gas Emissions. The New York Climate Leadership and Community Protection Act (CLCPA) requires State agencies to evaluate how permit or other decisions may interfere with meeting NYS greenhouse gas (GHG) emissions reduction requirements and, if so, require mitigation of emissions. Given the potential for significant GHG emissions over the proposed 75-year life-of-mine plan, the agencies should require quantification of current emissions, and estimation of future GHG emissions, along with an evaluation of emission mitigation options. [NYSDEC Commissioner's Order CP-49](#) provides guidance for quantifying GHG emissions. Depending upon the results, mitigation should be required as appropriate.

Thank you for considering FOSP's comments as you move forward with the completeness review of the Barton Mine application. Please feel free to contact us at FriendsOfSiamesePonds@gmail.com or 518-867-6911 if you have any questions.

Very truly yours,

Alan Belenz

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On Behalf of the Friends of Siamese Ponds