May 31, 2023

John M. Burth
Adirondack Park Agency
PO Box 99
Ray Brook, NY 12977

Beth Magee
New York State Department of Environmental Conservation
Region 5
232 Golf Course Rd.
Warrensburg, NY 12885

RE: Comments on Appendix O: Visual Impact Assessment
APA Project 2021-245: Barton Mines Expansion
Town of Johnsburg, Warren County

Dear Mr. Burth and Ms. Magee:

Protect the Adirondacks ("PROTECT") submits these comments concerning the revised Appendix O, Visual Impacts Analysis ("VIA") prepared by H2H Geoscience Engineering, PLLC for the proposed expansion by Barton Mines Corporation, LLC ("Barton") of the Ruby Mountain Mine in the Town of Johnsburg, Warren County. PROTECT's comments on the revised Appendix O are fully set forth in the attached report prepared by Dr. Richard Smardon. As noted in our prior comments on the VIA, Dr. Smardon is a Distinguished Service Professor Emeritus at the State University of New York College of Environmental Science and Forestry in Syracuse, New York, where he has taught for over 36 years. He is a certified environmental professional with over 40 years of experience in visual impact assessments, and has written three professional reference books on the subject. These comments supplement PROTECT's prior submissions in June 2021, July 2022 and November 2022 concerning the proposed mine expansion.

As set forth in the attached report, the VIA is remains deficient because it (i) fails to include a publicly accessible site on private lands (Garnet Hill Lodge); (ii) fails to consider the industrial machinery and heavy duty motor vehicles that are visible at and near the summit of the residual materials ("RM") pile; (iii) fails to include cross sections and simulations for all mining phases: (iv) fails to quantify the severity or significance of

the visual impacts of the mine expansion; (v) does not adequately detail or explain the proposed measures to mitigate visual impacts; (vi) fails to adequately address the visual impacts from blasting and wind-blown dust; and (vii) fails to evaluate the visual impacts of Barton's proposal to remove approximately 43,000 trees from a 67-acre portion of the mine property.

On behalf of the Board of Directors of Protect the Adirondacks, please let me express our gratitude for the opportunity to submit these comments.

Sincerely,

Christopher Amato
Conservation Director and Counsel
Protect the Adirondacks! Inc.
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Supplemental Report on H2H Geoscience Engineering Amended Appendix 0:
Visual Impact Assessment, Barton Mines
Town of Johnsburg, Warren County, NY

By Richard Smardon MLA PhD CEP

Introduction

Barton Mines Corporation, LLC (Barton) submitted a Visual Impact Assessment ("VIA") dated June 2021 as part of applications to the Adirondack Park Agency (APA) and the Department of Environmental Conservation (DEC) for the proposed expansion of Barton's Ruby Mountain Mine located in the Town of Johnsburg, Warren County, New York in the Adirondack Park. The VIA was prepared by H2H Geoscience Engineering, PLLC ("H2H").[1] I was retained by Protect the Adirondacks! Inc. ("Protect") to prepare a report evaluating the VIA, and that report was submitted to the APA and DEC under cover of letter dated November 22, 2022 as part of Protect's comments on the proposed Barton expansion.

Under cover of letter dated May 1, 2023, Barton submitted additional application materials to the APA and DEC, including changes to the VIA which H2H describes as "updates . . . made to Figures associated with minor reclamation geometry changes to RM pile and Quarry." This supplemental report evaluates the additional materials submitted in support of the VIA.

My original report identified significant deficiencies in the VIA, including that it:

(i) does not include two publicly accessible viewpoints on Forest Preserve lands and one publicly accessible viewpoint on private lands (Garnet Hill Lodge) with existing views of the mining operations. Two publically accessible viewpoint simulations and cross sections were added in the revised VIA but did not include Garnet Hill Lodge.

(ii) fails to consider the industrial machinery and heavy duty motor vehicles that are visible at and near the summit of the residual materials ("RM") pile. The revised VIA still does not address this issue.

(iii) fails to include key simulations and cross sections to address visual impacts of the proposed mining operation expansion phases. The revised VIA does include additional cross sections and simulations but not for all mining phases.

(iv) fails to quantify the severity or significance of the visual impacts of the mine expansion as required by agency guidance for assessment of visual impacts. The revised VIA still does not adequately address the severity and significance of visual impacts.

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[1] H2H Geoscience Engineering, PLLC, Visual Impact Assessment, Barton Mines, Town of Johnsburg Warren County New York, NYS DEC Mine Permit #5-5230-00002/00002 Mine File #50483, APA Permit No. P79-140, P70-356, P87-39, P87-39A, P87-39B, P88-393, P88-393A.

(v) does not adequately detail or explain the proposed measures to mitigate visual impacts. Some additional general language was inserted in the revised VIA but revegtation screening and other mitigation measures are still not adequately documented and

(vi) fails to address the visual impacts from blasting and wind-blown dust. The revised VIA includes some general language about dust occurance but this is not substantied.

Summary of Changes to the VIA

The changes to the VIA consist of the addition of six sets of digital simulations from the six viewpoints listed below; an explanation of the methods used in production of the digital simulations; and additional discussion of mitigation measures for dust control and blasting. Specifically, the additional digital simulations include the following:

DS #1: Peak of Peaked Mountain trail looking back towards the RM pile and quarry;
DS #2: At the middle of Thirteenth Lake looking back towards the RM pile and quarry;
DS #3: Peak of Balm of Gilead Mountain trail looking back toward the RM pile and quarry;
DS #4: At the intersection of Thirteenth Lake Road and Harvey Road looking toward the project area;
DS #5: At the peak of Moxham Mountain trail looking back toward the RM pile and Quarry; and
DS #6: Hooper Mine trail looking back towards the RM pile and quarry.

According to H2H, the topographic data for these digital simulations were derived from aerial drone photogrammetric techniques plus LiDAR data for surrounding tree canopy location and height.

Analysis of Supplemental Submissions

The following summarizes my analysis of four of the six additional digital simulations that are problematic and or inaccurate:

DS 3#: *Peak of Balm of Gilead Mountain Trail* looking back toward the RM pile and quarry. The no vegetation visual simulation shows that the proposed RM pile and eastern highwall quarry will be visible from this location. The revised VIA claims, however, that "vegetation around the RM pile and quarry will screen a portion of the project" and "localized vegetation would further screen the project site from this viewpoint" (H2H 2023, p. 19). This is purely speculative and cannot be substantiated without a detailed simulation of vegetative cover that will exist over time at the mine site and to what extent the vegetation will screen the RM pile and quarry when viewed from the Balm of Gilead Mountain observation point.

DS #4: At the *intersection of Thirteenth Lake Road and Harvey Road* looking toward the project area. The no vegetation visual simulation shows that the proposed RM pile and eastern highwall quarry will be visible from this observation point. The revised VIA claims that "Vegetation that will remain after project completion will completely screen 95% of the RM pile" and that vegetation in the area of the intersection runs adjacent to the roadway and is deeply incised in the local tree canopy thus "likely completely screening" (H2H 2023, p. 19) the project site. This

again is purely speculative and cannot be substantiated without detailed simulation of vegetative cover that will exist over time at the mine site and to what extent the vegetation will screen the RM pile from the viewer observation point.

DS #5: At the *peak of Moxham Mountain Trail* looking back toward the RM pile and quarry. The revised VIA states that under the no vegetation condition only the RM pile is visible and under future vegetated conditions the RM pile will be partially screened. The RM is currently visible from this viewpoint and the revised VIA provides no support for its conclusion that a future, greatly increased RM pile footprint will be screened by future vegetated conditions.

DS #6: *Hooper Mine trail* looking back towards the RM pile and quarry. The no vegetation visual simulation shows that the RM pile and quarry will be visible from this observation point. The revised VIA claims that "vegetation that will return after project completion will probably screen the quarry and RM pile" and that local vegetation will screen the proposed project from the observer depending on the viewpoints and location. (H2H, p. 19). This again is purely speculative without detailed simulation of vegetative cover that will exist over time at the mine site and to what extent the vegetation will screen the quarry and RM pile from the viewer observation point.

These added simulations show that the proposed mine expansion will be clearly visible from several publicly accessible viewpoints that are important Forest Preserve destinations for recreationists, including the peaks of Balm of Gilead and Moxham mountains. The conclusory claims that the RM pile and quarry face will be totally or nearly totally screened by vegetation from these important viewpoints are not supported by Barton's monitoring report on its revegetation testing program, submitted as Exhibit N to the application. In fact, the report documents poor success rates for revegetation, undermining the assumption that the visual impacts of the expanded mining operation will be mitigated by vegetative screening.

In addition, the VIA is flawed because it fails to evaluate the visual impacts of the applicant's proposal to remove approximately 43,000 trees from a 67-acre portion of the mine property.

Adequacy of Mitigation Measures- The revised VIA adds two sections to Mitigation Measures:

1. Under *enhanced dust control measures* the report states that dust occurs only under high wind conditions and does not go beyond the mine property boundary. However, no data is provided regarding wind velocity or wind direction under which windblown dust conditions are expected to occur. In any event, there is a visual impact issue with respect to the presence of dust from conveyer and vehicle operations with or without wind. The proposed mitigation measure of annual placement of biodegradable material on non-reclaimed RM pile faces to bound and capture finer particles and reduce fugitive dust includes no data or examples supporting the effectiveness of this proposed measure.

2. *Blasting*: The revised VIA states that "blasting operations at Barton consist of

> small, contained blasts and have not produce [sic] significant visual impacts, nor will they in the future. (H2H 2023, p. 20) but there is no support provided for these conclusions.

The VIA still fails to provide sufficient detail on the phased concurrent reclamation measures, including how the 100-foot lifts are to be constructed and how the proposed vegetation will be planted and maintained for screening effectiveness. This is a particularly significant omission given the poor survivability of plantings documented in Exhibit N. The VIA should also include information on rock residual material weathering to reduce visual color contrast.

Although the VIA states that more natural contours for the RM pile design will be used to mitigate visual impacts, the simulations continue to show only a bench-like final ridgeline shape. The actual ridgeline designs are not shown, and it is therefore unclear how or to what extent they would reduce visual impacts. In addition, as noted in the APA (2021) permit application review, the final RM pile elevation does not account for expansion of the side slope areas to the east and west, which may result in more reduction of ridgeline screening vegetation. To address these issues, alternative RM pile designs should be described, simulated from key viewpoints, and evaluated.

Key References

Adirondack Mountain Club. Undated. Central Region, Guide to Adirondack trails. The Adirondack Mountain Club Inc.

Adirondack Park Agency. November 16. 2021. Notice of Incomplete Permit Application APA Project Number2021-0245. Adirondack Park Agency, NY 7pp.especially project description and visual impacts.

Adirondack Park Agency. Undated. Visual Analysis Methodology. Adirondack Park Agency, Ray Brook, NY

H2H Geoscience Engineering, PLLC. 2023. Visual Impact Assessment Barton Mine, Town of Johnsburg Warren County New York, NYS DEC Mine Permit #5-5230-0002/0002 Mine File #50483 by H2H Geoscience Engineering PLLC Troy, NY

NYS DEC. 2000. Assessing and Mitigating Visual Impacts, DEP-00-2 NYS DEC, Albany NY.