



CORNERSTONE

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June 16, 2011

Mr. David L. Bimber
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Division of Environmental Permits
6274 East Avon-Lima Road
Avon, New York 14414-9519

Re: Response to DEIS Review and Comments
DEC 8-4538-00094/00001 MLR 80837
Meadow View Surface Mine, Seneca Meadows, Inc., Waterloo (T) Seneca County

Dear Mr. Bimber:

On behalf of Seneca Meadows, Inc., Cornerstone has enhanced its mitigation efforts and developed responses to the comments in your letter dated January 31, 2011 for the Meadow View Surface Mine. NYSDEC's comments are listed below with responses in italics immediately following.

1. Noise Analysis. Our analysis focuses on the increase in sound from the mining operation over ambient and the 6dBA maximum exceedance noted in the Department's Policy.

Response: *The noise models have been recently updated to reflect current revisions to the site design, including relocation of the main haul road into the site, added berming, and revised phasing of the berm construction. These design factors have effectively reduced all daytime noise increases during normal operations to below 6 dBA at boundaries with residential-use properties for each examined development scenario. The results are summarized in a revised Community Noise Assessment that is provided in Appendix J and summarized in the text of the DEIS.*

- a. Table 3, Modeled Community Noise Levels, depicts an increase of 12.6 dBA at location 10 during construction of berms, haul roads, and drain construction. This increase, though limited in time, has the potential for adverse impacts and deserves consideration of additional mitigation measures, such as limiting hours of

construction to normal business hours, i.e., 9 am to 5 pm. Once, the initial construction phase has been completed, a decibel level between 6-9 dBA will occur at location 10 through phases 1, 2, 3., as stated in section 2.3.2. and depicted in Table 2-5. An increase of over 6 decibels of the ambient noise level is considered intrusive; further mitigation measures should be addressed and implemented to reduce noise impacts at this location.

Response: *Certain noise increases are expected at the nearest residential property line locations during the initial construction phase while construction equipment operates close to the boundaries, prior to completion of the perimeter berm. The noise increases would be limited to daytime hours and would be temporary for the duration required to complete the localized berms, nearby access road segments, and infrastructure. The impacts will be limited considering that construction along the boundaries will proceed as quickly as practical. Furthermore, the noise levels associated with construction are well under the limits set forth in the Town of Waterloo Ordinance. The noise increases as a result of operations after initial construction have been addressed with relocation of the road, additional berms, and different phasing of the berm construction, as described above and in the revised Community Noise Assessment report in Appendix J.*

- b. The computer model used by Angevine allows a credit of 20 dBA for the proposed 6 ft berms. Other literature sources, for example, The Aggregate Handbook, suggests 10-15 dBA attenuation with a 12 ft berm and a wide belt of trees. Please discuss this difference. A list of noise attenuation structures to be used at the proposed mine and the decrease of decibel levels for each should be listed (i.e. 6 foot berm will decrease decibel level by...).

Response: *The noise assessment completed by Angevine Acoustical Consultants incorporates baseline berm heights of six feet. The sound attenuation provided by the baseline six foot berm is typically 3 dBA for the closest receptor location considering the assumed source heights. There is no 20 dBA credit included. The sound attenuation that would be provided by areas of trees along the haul roads conservatively have been excluded from the assessments. The sound attenuation factors that were included in the assessments have been assessed separately, with results summarized in the Community Noise Assessment report and below.*

Sound Attenuation from Incorporated Mitigations for Phase I Initial Development (dBA)						
<i>Receiving Location</i>	<i>Attenuation from S berm for orig. haul road</i>	<i>Attenuation from S+E berm for relocated haul road</i>	<i>Attenuation from relocated main haul road alone</i>	<i>Attenuation from relocated haul road with S berm</i>	<i>Attenuation from relocated haul road with , S, SE and E berm</i>	<i>Attenuation from east of Burgess haul road berm alone</i>
10	1.5	3.3	1.9	5.3	5.6	0
11	0.6	0.7	2.1	2.7	2.7	0
15	0.1	0.9	0.8	1.6	1.6	1.0
18	0	0	0	0	0	0
19	0	0	0	0	0	0

- c. The proposed 6 ft berms may not be adequate to completely shield mining operations at the Lemmon property, both visually and as it pertains to noise limits. Please explain the preference for the six foot berm and address if a berm of greater height would be beneficial to further shield the residence from noise and visual impacts.

Response: *With the reconfigured access road depicted in the revised drawings and updated noise modeling in Appendix J, the six-foot high berm provides adequate noise mitigation from the proposed mining operations. Based on comments received from Ms. Dixie Lemmon during the scoping process, it was our understanding that she wanted the berm heights minimized. In a letter dated August 4th, 2009 addressed to DEC representatives, and subsequently provided to Seneca Meadows, Ms. Lemmon stated "the burming [sic] proposed will be just about enclosing my land. My view will be obstructed on all sides leaving me only to see down my driveway." The current design minimizes the berm height to address Ms Lemmon's original comments, while maintaining adequate mitigation from noise impacts.*

- d. To assist in our evaluation of noise impacts, equipment assemblages and locations evaluated by the modeling should be described.

Response: *Key plans showing the layouts of model inputs for each scenario are provided in the model results section of the Community Noise Assessment report. Additional narrative has been added to the report as well to describe these items.*

- e. The Noise Pollution Control section 5.2, states that back up alarms can be adjusted and output levels can be selected with self-adjusting output levels or sensing devices. Please describe how and when Seneca Meadows will implement these technologies to reduce equipment noise levels.

Response: *Appropriate "state of the art" backup alarms as approved by MSHA will be installed on construction and operating equipment owned or leased by SMI to limit sound emissions. This equipment will be installed on equipment prior to the start of construction.*

- f. In the noise study, page 17, noise mitigation, the model inputs assume a typical maximum of twenty haul trips per hour within the proposed mine limits. Since a maximum of 42 truck trips per hour is proposed throughout the DEIS and Mined Land Use Plan, the analysis should be expanded to include that number of trips.

Response: *The Community Noise Assessment (Appendix J) has been revised based on worst case maximum values of haul road traffic of 42 trips per hour (84 vehicle passes per hour).*

2. Appendix N, Hydrogeologic Modeling.

- a. Page 1-7: The text indicates that, "Well 1 is completed within the overburden...", however, Table 1-2 shows that Well 1 is a bedrock well. The Table lists Well 2 as the overburden well. Please clarify.

Response: *The text should read, "Well 2 is completed within the overburden...". The text of Appendix N has been revised to reflect that Well 2 is the well completed within the overburden.*

- b. Page 2-2: There appears to be a discrepancy in the elevations for the lowest level of the excavation and the pond outlet. They are both referenced as elevation 478.6 ft. The mine cross sections show an approximate excavation elevation of 455 ft. Please clarify.

Response: *The lowest excavation for the north pond is intended to be El 455. The text of Appendix N has been revised to reflect the correct excavation elevation for the north pond.*

- c. Page 2-2: Please provide further clarification of the bedrock potentiometric surface. Section 2.4 references a potentiometric surface at 15 feet above the till layer, or 15 ft above the bottom of the excavation. This excavation seems to conflict with other references in the December 17, 2010 response letter Page 10, Response #3, and the dEIS Section 2.2.1.2. Here the potentiometric surface is referenced as typically 2 feet lower than the LGL. Was the 15 ft used as a conservative estimate in the fill time calculations in Section 2.4?

Response: *The December 17, 2010 response letter indicates that 'the bedrock potentiometric surface is typically on the order of 2 feet lower **than that in the LGL.** The intent was to portray the potentiometric surface of the bedrock as 2 feet lower than the potentiometric surface of the LGL, and not the top of the LGL surface. That description is consistent with those in Sections 1.4 and 2.4 of Appendix N, which describe the potentiometric surface used in the modeling as follows:*

Data and mappings from the site investigation report indicate the potentiometric surface of the LGL is generally 15-25 feet below the groundwater table and the potentiometric surface of the BR is typically 2 feet lower than that of the LGL. To produce the maximum difference between the unperturbed head in the LGL and the excavation bottom, the head in the LGL was specified at 15 feet below the groundwater table (i.e., at an elevation of 182 ft in the model).

To provide further clarification we have added the following statement to Section 1.4 of Appendix N:

The head in the BR (*bedrock*) was specified at 180 ft in the model. This is 2 feet lower than the LGL potentiometric surface and 15 feet above the top of LGT layer (Table 1-1)

- d. Page 2-4: Please discuss the possibility of directing the south pond dewatering discharge to the completed north pond in order to expedite pond filling. The narrative seems to indicate that both north and south pond discharge will be directed to the sediment ponds, and then discharged to Black Brook.

Response: *Agreed. Text has been added to Section 2.6 of Appendix N indicating that the dewatering discharges from the south pond will be directed to available volume in the North Pond whenever available*

- e. The proposed reclamation for the mine will consist of two ponds, as stated in the plans the ponds will take between 4 years for the North pond and 12 years for the South pond to reach the proposed water levels of each. There is a possibility that the ponds may be filled within 2-3 years factoring in runoff etc. It is therefore assumed that there will be no flow of water from the pond since the discharge is at a higher elevation, therefore the ponds may become stagnant during that time. Please address if this assumption is correct and any plans to mitigate the possibility of stagnation of the ponds.

Response: *It is anticipated that due to the size of the ponds that wind and the associated wave action will provide some degree of aeration and circulation of the pond waters. However, should stagnant water result, an aerator will be added to the pond as necessary. A statement has been added to Section 2.2.2.3.1 of the DEIS and Section 6.7.1 of the MLUP indicating an aerator will be added as necessary.*

- f. Regarding item #4 in your Comment Response Letter; the Department would expect that well information would be contained in the DEIS. It is understood that access to individual wells may be denied, and should be referenced where that has occurred.

Response: *In response to the NYSDEC comments, Cornerstone contacted the owners of Wells #2, #3, and #16 in writing and requested access to the property to obtain water level readings and well depth measurements. Access was granted to the properties on which Wells #2 and #16 are located; however, access was not granted to the property on which well #3 is located. During a discussion on March 4, 2011, the owner of Well #3 requested payment of \$2,000 prior to accessing the property.*

On March 9, 2011, site visits were made to the Guthrie property to verify the depth of Well #16 and to the Martin property to verify the depth of Well #2. At the Guthrie

property, the well that had previously been listed as having a depth of 72 feet was measured at 70.7 feet below ground surface. The actual measured depth confirms the previous data and does not alter the impacts described for the well. The water depth in this well was measured at 38.1 feet below grade.

At the Martin residence, a total of three wells were observed. One well, located immediately to the north of the house, appeared to be hand-dug and had a measured depth of 39.6 feet, which is consistent with the previously presented data (38-foot deep well). The water depth was measured in this well at 2.8 feet below grade. Another hand-dug well, which was reportedly not used and is located only 25 feet from Powderly Road, was observed on the Martin property and had a measured depth of 27.4 feet. The water depth in this well was measured at 1.3 feet below grade. A third well was observed on the Martin property, located behind the garage at the north end of the property. This well had a measured depth of 73.0 feet below grade and was reportedly used to supplement the hand-dug well behind the house. These wells have been identified as Wells 2, 2A, and 2B, respectively, in Table 2-2 of the DEIS and Table 1-2 of Appendix N.

Although the above two additional wells were encountered during the March 9, 2011 site visit, the significance of the impact of the proposed mine excavation on the wells surrounding the properties does not change significantly. The wells that were previously identified extend into the aquifers that were previously assumed. The additional shallow well (Well 2A) on the Martin property was plotted on the estimated groundwater drawdown contours for the LGL presented on Figure 2-7 of the DEIS (Figure 5-1 of the MLUP). It can be seen that the estimated drawdown in the Well 2A is negligible at 0.33 feet. The additional deep well (Well 2B) on the Martin property was plotted on the estimated groundwater drawdown contours for the bedrock presented on Figure 2-8 of the DEIS (Figure 5-2 of the MLUP). It can be seen that the estimated drawdown in Well 2B is negligible, at 0.32 feet.

It should also be noted that the exact location of the Lemmon well, which cannot be verified was relocated slightly on the drawdown contour maps. Although the coordinates for the well provided in the USGS database show the well on Seneca Meadows property, we have relocated the well in the drawdown modeling to the Lemmon Property, which more conservatively is closer to the mine. As seen in Figure 2-8 of the DEIS (Figure 5-2 of the MLUP), the estimated drawdown remains negligible at 0.40 feet.

Text, Tables, Figures, and Appendices have been updated in the DEIS and the MLUP to reflect the updated well information described above.

3. Please provide the results of the NYSDOT traffic study and speed limit evaluation for inclusion in the dEIS.

Response: *The proposed Burgess Road crossing was found acceptable by the County Engineer and the County Highway Superintendent in a letter dated February 9, 2009 (Appendix G to the DEIS). The letter did not indicate any conditions on that approval related to any NYSDOT traffic study. The crossing design and County approvals were based on the current speed limit on Burgess Road. Furthermore, since it is a county road, the NYSDOT is not an approving agency. Because the study is not relevant to the approval of the crossing, the documents are not included in the DEIS.*

4. SWPPP 6-4, 6.4.2 Inventory of Exposed Material states: "should deminimus quantities of lubricants or cleaning products be required, they will be located in a covered shed..." The December 17, 2010 Response #3 states that fertilizer, lubricants etc. will not be stored on site. Please further explain if these materials will be stored on site and if there is intent to store materials within the Life of the Mine. Please show the proposed location of the storage structure both within the text and on the mining map.

Response: *The intent of the previous submittal was to indicate that these materials would not be stored on site, although the statement inadvertently was retained from a previous version of documents. The referenced sentence has been removed from Section 6.4.2 of the MLUP.*

5. As shown in cross section C107 North South Mine Areas 2- the high ground water elevation is approximately 491 ft, the south pond's northern rim is depicted at an elevation of 485+/- ft. Indicate how water will be contained within the pond limits and show that the spill way can control the proposed water level.

Response: *As the pond is excavated, groundwater within the overburden soils will seep into the excavation and remain with the excavation (which will be significantly lower than the rim elevation noted on the plans). The seepage rates are anticipated to be minimal when the pond levels are low and there is no potential for discharge. The high groundwater elevations shown within the mine footprint are indicative of current conditions and will be lowered during construction.*

6. 5.4 Screening and Visual Impacts Control (5-6) Landscape Planting- states that Ash will be planted if landscape planting is approved by adjacent landowners. The Response to DEIS Review and Comments section 12 response states that Ash will be replaced by Northern Red Oak and that the DEIS and MLUP text reflects this

replacement, the Visual Resources Study also lists Ash as part of the Landscape Plantings (pg 8).

Response: *Section 5.4 of the MLUP, Section 2.5.3 of the DEIS, and the Visual Resources Study have been updated to indicate Northern Red Oak will be planted in landscaping areas rather than Ash.*

7. 5.4 Screening and Visual Impacts Control (5-6) Lighting and Visual Resources Study (pg 8) - states that Project lighting would generally be in, or directed into, the excavation site and be directed away from adjacent residences when practical. Lighting should always be directed into the excavation site and never be directed toward an adjacent resident. Please address.

Response: *Section 5.4 of the MLUP, Section 2.5.3 of the DEIS, and the Visual Resources Study have been updated to indicate that project lighting will be directed into the mine and directed away from adjacent residences.*

8. The gas well #04158 must be evaluated to determine if its current state is sufficient or if it is in need of repair, this evaluation must include the use of a gas detection instrument to determine if any leaks are occurring. The well must be evaluated annually with a gas detection instrument and visual inspection with the finding submitted to the Department. The well must also be securely fenced with a chain link or equivalent fencing at least 6 ft high.

Response: *Prior to construction of the mine, an initial assessment of the well head will be performed to determine if any gas leaks are occurring. Annual inspections, which will be performed thereafter, have been outlined in Section 6.10.5 of the MLUP. A 20-foot square fenced area around the well head (with access gate) has been added to the replacement Construction Documents. The fence will be chain link and a minimum of 6-foot tall.*

All changes and additions to the DEIS must also be addressed within the Mined Land Use Plan.

Response: *Appropriate changes have carried through to both documents as applicable and are reflected in the replacement documents.*

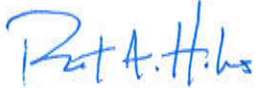
We trust that the responses enclosed herein and the revised DEIS and MLUP documentation adequately address the concerns of NYSDEC required to receive a notice of complete

Mr. David L. Bimber
June 16, 2011
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application and acceptance of the DEIS. Please call me at 845-695-0270 or Mr. Tom Hasek at 315-539-5624 with any questions.

Sincerely,

Cornerstone Engineering and Land Surveying, PLLC



Robert A. Holmes, P.E.
Senior Project Manager

Enclosure:

cc: Don Gentilcore/Seneca Meadows, Inc.
Thomas Hasek, Jr./Seneca Meadows, Inc.
Scott Turner/Nixon Peabody
James Mooney/Town of Waterloo Supervisor
Michael J. Mirras/Town of Waterloo Attorney
Town of Waterloo Planning Board Chairperson
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