

# New York State Department of Environmental Conservation

## Division of Environmental Permits, Region 8

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Alexander B. Grannis  
Commissioner

13 June 2008

John Hellert  
Continental Placer, Inc.  
26 Computer Drive West  
Albany, New York 12205

**Received**  
JUN 18 2008

Dear Mr. Hellert:

Re: **dEIS Review and Comments**  
DEC 8-3436-00033/00001 MLR 80823  
Frontier Stone LLC, Proposed Shelby Quarry  
Shelby (T) Orleans County

Department staff have completed a preliminary review of the draft environmental impact statement (dEIS) and mined land use plan (MLUP) that we received on 29 April 2008. We have determined that the dEIS is insufficient and we offer the following comments on both documents:

1. The influence of quarry activities on the Iroquois National Wildlife Refuge (INWR) and the NYS Wildlife Management Areas (WMA), located immediately south and contiguous to the proposed quarry, is the most significant potential impact associated with this proposal. In general terms, the dEIS does not adequately analyze those impacts. Statements in the dEIS such as "the proposed site totally avoids the Iroquois Wildlife Refuge and will have no impacts to the vegetation and wildlife there" (4.4.4.1, pg 106) are not adequately supported.
2. The conclusion that ongoing mining and blasting activities will have no impact to wildlife in the INWR is unsupported. The assessment of blasting focuses primarily on structural impacts to nearby buildings. A discussion regarding the impacts of noise and vibration on wildlife and wildlife recreation is needed. Please include information on the frequency of blasting and an analysis of the impact of blasting and mining activities on the Refuge. Table 13 should include ambient sound levels at nearby overlooks on the INWR and a discussion of potential impacts should be included for those locations.

Ground nesting birds which may be affected by vibrations, in addition to noise, should also be discussed. There is a large grassland area on the INWR which is in close proximity to the southwest boundary of the proposed quarry site. In the past, this grassland area has been extensively used during the nesting season by a variety of grassland bird species including the state threatened Henslow's sparrow.

There are also possible issues related to disturbance of migratory birds using INWR, the State WMAs, and the surrounding area; for example waterfowl often feed on waste grains in farm fields during migration. Loud noises and vibrations could potentially decrease the value of the stopover habitat by disturbing resting and feeding activities.

In addition, the discussion should include an assessment of blasting and other quarry related noise on wildlife recreation in the area including hunting, bird watching etc. Any

increase in noise on the area will detract from the peaceful atmosphere which many visitors enjoy when visiting INWR and the State WMAs.

A tabular and narrative summary of potential worst case scenario noise impacts on nearby receptors; S-1, S-2, S-3, and including the INWR and the Iroquois Job Corps Center is needed. The summary should describe impacts occurring during land clearing activities, operations behind the proposed berms, and noise generated from a developed mining operation (1 lift and berms).

3. Ground water and surface water that accumulates in the quarry will be pumped into existing drainage ditches running to the south. The dEIS states that "how this pump-out will affect habitats down-drainage from the quarry will depend upon the volume of pump-out water. It is anticipated that it potentially will add water to the system and may result in more wetland areas". Part 4.1.4.2 also states that "Seasonally there may be increased drainage due to the quarry pump out but this should be no different from current heavy precipitation events".

Despite the fact that flow will be in existing drainage patterns, the timing and amount of the flow may have negative impacts on existing habitat. Water from the drainage ditch will flow into School House Marsh on INWR (State Regulated Wetland MD-3), and if water is sent in heavy pulses it may cause fluctuations in the water levels in the wetland that could impact wildlife species (herps, nesting birds, etc.) and adversely affect the management plans for the wetland. Additionally, any alteration of water levels in a NYS Regulated Wetland would require an Article 24 Freshwater Wetlands permit. The dEIS should provide more information on anticipated flow levels and timing of flows entering into the wetlands south of the proposed site. Another concern is with the quality of water being pumped into the wetlands from the quarry. It is likely that water quality decreases with increasing mining depth, and an analysis of quality issues should be provided. Finally, as mining expands, and discharge continues, the nuisance effects of H<sub>2</sub>S should be considered.

Your consultant has concluded that there is no Corps jurisdiction on this site by virtue of the Carabell and Rappanos decisions. Has the Corps provided a concurrent opinion or issued a jurisdictional determination regarding this proposal?

4. Significant wetland and habitat areas exist surrounding the property and additional hydrological analysis is required. Groundwater impacts are projected to extend thousands of feet from the proposed quarry, yet a "no impact" conclusion is reached, but is not supported. Groundwater discharge conditions exist in certain areas surrounding the proposed quarry. An evaluation of discharge conditions in wetlands, streams, springs, etc. must be evaluated, and the impacts from dewatering assessed. Worst case conditions need to be examined in light of documented draw down at distance during the pump test.
5. A narrative and graphic description of the quarry's draw down at full buildout must be provided. Extrapolated drawdown contours on Figure 11 show a groundwater depression at approximately 9000 ft. from the pumping source. Drawdown contours need to be provided for the mine at full buildout, and in a dewatered state (drawdown of 120 + feet).

Figure 11 projects a measurable impact at approximately 9,000 ft. from the pumping well, while Figure 12 only shows an impact area of 4,000 ft. Figure 12 should be expanded to show all wells within the projected draw down area of the mine at the final depth and full buildout.

6. All drill logs, notes, data, and information used as a basis to form conclusions on the geology and hydrogeology of the site, and surrounding areas, must be submitted. If groundwater monitoring has continued since 7 July 2007, the data should be included.
7. The residential well mitigation plan is unacceptable. The one-half mile radius needs to be expanded based on data provided in the dEIS. Monitoring well data during the pump test, as well as Figure 11, indicate that there is a potential for impact beyond the one-half mile radius. Furthermore, data has confirmed drawdown of 3 to 7 feet at distances approaching 2000 ft. with minimal drawdown in the pumping well.
8. The route that the trucks will take to access Route 63 goes right through a portion of the INWR. No mention is made of the impacts of truck traffic to the recreational use of these roads by visitors to the INWR (including birders, hunters, students from the Job Corps, etc.). Dust, noise, and safety issues related to this heavy truck traffic will have definite impacts to the public use of this portion of the wildlife refuge (there are two overlooks/parking areas located on this truck route). There should also be a discussion of impacts to wildlife use of the habitat immediately adjacent to the roads and to wildlife crossing the road from one portion of the refuge to another.

Does the traffic survey and levels of traffic generated by the facility include estimates of traffic levels associated with ancillary processing facilities (concrete batch plants, etc.)?

The Department has requested that the Town of Shelby Highway Department, the Orleans County Highway Department, and the NYS Department of Transportation review the Traffic Study (Appendix 8). Additional comments on this topic may be forthcoming from those agencies.

9. Page 70 Corrections: The dEIS states that the Tonawanda area includes the headquarters and visitors center, but there are no headquarters or visitors center on state land; these are part of INWR. The list of recreational opportunities on the refuge mentions hiking and wildlife viewing, but does not mention other activities such as hunting, fishing, trapping, canoeing, etc.
10. Discussion is needed regarding the use of the area by wildlife. For example, will it make the general landscape in the area less attractive to the short-eared owl that winter in close proximity to the site? Also the cumulative affect of development and other land use changes in the area should be discussed. Due to the ethanol plant located nearby in Medina there is an increased demand for land that is suitable for farming. This increased demand will likely result in corn being planted in areas that are currently pasture, hay, and fallow fields which provide some habitat for grassland nesting birds, many of which are in

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decline. The quarry will eventually remove 175 acres of farmland which will put additional pressure on farm land and grassland habitat in the area.

11. In my 24 January 2007 transmittal of the final scoping outline, I requested that the dEIS include a table that summarizes public and agency comments and where they were addressed in the document. I was unable to find that table in the dEIS.
12. The Division of Minerals has also provided detailed technical comments on the MLUP and the dEIS. I have included them as Attachment 1 to this letter.
13. The Iroquois National Wildlife Refuge and the U.S. Geological Survey may also be commenting on this proposal. I will forward their comments when available.

Please contact me at 585-226-5401 or email at [dlbimber@gw.dec.state.ny.us](mailto:dlbimber@gw.dec.state.ny.us) if you have any question relating to the status of this application or the information discussed in this letter. You can also contact Joe Bucci, Division of Minerals, at 585-226-5471. Thank you for your time and assistance in this matter.

Sincerely,



David L. Bimber  
Deputy Regional Permit Administrator  
Division of Environmental Permits

cc: Joe Bucci, Division of Minerals  
Steve Army, Division of Minerals  
Scott Jones, Bureau of Habitat  
Heidi Kennedy, Bureau of Wildlife  
Diane Kozlowski, USACE, Buffalo District Office  
Tom Roster, Iroquois National Wildlife Refuge  
Charles Loiacano, Frontier Stone LLC  
David Schubel, Town Attorney, Town of Shelby

## dEIS Vol 1

1. 1.2.3 - As in other sections of the dEIS, topsoil separation from overburden should be described. Where will the 6" of topsoil stripped from the mining areas be stockpiled. Separate stockpiles of topsoil and overburden should be identified.
2. 1.2.3 - The permittee shall notify the Department's Mined Land Reclamation Specialist, in writing, at least 24 hours in advance of operating outside the currently identified hours of operation. This notice shall include the reasons for the request, relevant contract information, specific activity, and the dates and hours during which the hours of operation restriction would be temporarily suspended. Operations that are limited to these restrictions do not include, maintenance activity or other operations associated with industrial activity at the site (ex. HMA production or RMC production). If an emergency situation occurs outside the Department's normal working hours, the permittee shall notify the Department the next business day.

Please indicate the days and hours when blasting will take place.

3. 1.2.3 - Provide additional information and an impact assessment on the quarry discharge to the agricultural drainage ditches. Where does this water go? Is there a potential for off site impacts from the quantity of water to be discharged? In addition, water quality decreases with increasing mining depth, and an analysis of quality issues should be provided. Finally, as mining expands, and discharge continues, the nuisance effects of H<sub>2</sub>S should be considered.
4. 1.2.4.2 - Topsoil segregation is mentioned, however, where will it be stored.
5. 1.2.4.4 - A concurrent reclamation schedule should be developed. At a minimum, once an area has been mined out, the quarry face can be backfilled and seeded, while maintaining the quarry floor for operations.
6. 1.3.2.5. / Page 5, B1(g) of the EAF - A maximum truck limit of 8-10 trips per hour is referenced. However, it also states that it is dependant on market demand, suggesting that levels could be higher. The maximum number of truck trips per hour that will not be exceeded must be stated definitively. This should also be considered in the traffic study.
7. 1.5.2.2 - Consideration needs to be given to residents connected to municipal water, but still utilize their wells for other purposes.

The residential well mitigation plan is unacceptable. The one-half mile radius needs to be expanded based on data provided in the dEIS. Monitoring well data during the pump test, as well as Figure 11, indicate that there is a potential for impact beyond the one-half mile radius. Furthermore, data has confirmed drawdown of 3 to 7 feet at distances approaching 2000' with minimal drawdown in the pumping well.

Extrapolated drawdown contours in Figure 11 are showing a groundwater depression at approximately 9000' from the pumping source. Drawdown contours need to be provided for the mine at full buildout and in a dewatered state (drawdown of 120 + feet).

Finally, the your responsibility to mitigate any impact which has resulted from the mining operation can not be limited to only those residents who participated in the well survey.

8. 3.1.1.3 - All drill logs, notes, data, and information used as a basis to form conclusions on the geology and hydrogeology of the site, and surrounding areas, must be submitted.
9. 3.1.2.2 - The quality of the groundwater discharge needs to be considered, and potential impacts evaluated. H<sub>2</sub>S odor should be considered from a nuisance perspective.
10. 3.1.4 - The characterization and impact assessment of off site resources is inadequate. The dEIS only details resources within the project boundary, and has not adequately characterized the surrounding environs with respect to vegetation and wildlife, endangered and threatened species, and wetlands and streams.
11. Identify the proposed site location on Map 2-8.
12. 4.1.2.1 - Surface water drainage courses will be altered. As mining progresses, the man made ditch section located in Phase 2 will be removed. Where will the drainage flow when the ditch is cut off. Will a structure be built to allow drainage into the quarry. If so, design details need to be provided, and erosion and sedimentation need to be addressed. If not, what will happen to ditch drainage, and how will the backup of water be controlled.
13. 4.1.2.2 - Hydraulic connection appears to exist between the upper bedrock layers and the deeper zones. This is shown by the 2.9' of drawdown in the shallow barn well at approximately 1700' from the pumping well. Potentially significant impacts exist taking into account that the pumping well was only drawn down 11.7' over 72 hours. Also, the drawdown plots in the groundwater study indicate that the shallow barn well responded quickly to the pumping well. Furthermore, statements on minimal vertical connection within the Lockport are not supported by the pump test results.
14. 4.1.2.2. - Figure 11 projects a measurable impact at approximately 9,000' from the pumping well, while Figure 12 only shows an impact area of 4,000'. Figure 12 should be expanded to show all wells within the projected draw down area of the mine at the final depth and full buildout.

Whether or not local wells are drawing water from the water bearing zone at depth is irrelevant. The pump test has confirmed impact at distance in the shallow aquifer.

A narrative and graphic description of the quarry's draw down at full buildout must be provided.

As stated, varied hydrologic conditions exist within the Lockport. Despite the data supplied in the dEIS, other quarries within this formation do not typically exhibit draw down less than 50' from the quarry face. In fact, draw down at distance and residential well impacts have been documented. Worst case conditions need to be examined in light of documented draw down at distance during the pump test.

15. 4.1.2.2.3 - Additional analysis is required. Significant wetland and habitat areas exist surrounding the property. Groundwater impacts are projected to extend thousands of feet from the proposed quarry, yet a "no impact" conclusion is reached, but is not supported. Groundwater

discharge conditions exist in certain areas surrounding the proposed quarry. An evaluation of discharge conditions in wetlands, streams, springs, etc. must be evaluated, and the impacts from dewatering assessed.

16. 4.1.3. - Please confirm that processing equipment will be run by line power.
17. 4.1.4.1 - The conclusion that ongoing mining and blasting activities will have no impact to wildlife in the Iroquois Wildlife Refuge is unsupported.
18. 4.2.3. - The applicant must commit to the recommendations/improvements outlined in the traffic report.
19. 4.2.5.1 - Why is there a break in the berm along Fletcher Chapel Road. Provide the timing of berm construction. Will all berms remain in place until mining is complete.
20. 5.1.2. - Again, what will be done when the ditch crossing the site is removed? Will water be allowed to enter the quarry? If yes, how will the water be accepted, and what structures will be put in place. If no, how will water backup in the ditch be prevented.

Where will the water pumped from the quarry go? Need to address ditch, wetland, wildlife, habitat, and adjacent property owner impacts.

21. 5.1.2.3. - The well mitigation plan is unacceptable. A half mile radius around the quarry may not be adequate based on the projected broad cone of depression. The mitigation plan can not only be limited to those impacted who have participated in the well survey. An individuals right to decline participation does not alleviate the permittee's responsibility to mitigate an impact if one exists.

Applicant must commit to installing monitoring wells and take baseline samples prior to the commencement of mining activities.

22. Page 2 of DEIS (Vol 3) provides information regarding a barn well. By looking at the elevations, it appears this well is in a pit. Drilled wells in a pit below grade tend to flood if not properly maintained. Please indicate if this pit is ever flooded, therefore introducing surface water into the groundwater. This could have an effect on well monitoring data accuracy. Provide design detail and current condition of this well in order to determine if it is a effective monitoring point.

### **Mined Land Use Plan Volume 2**

23. All dEIS changes based on comments shall be incorporated into the MLUP where applicable.

### **Maps**

24. Why is there a break in the berm along Fletcher Chapel Road on Map 1?

There are acreage and detail discrepancies between Maps 1 and 2. Map 1 shows an excavation area of 28.4 acres for phases 1 and 4, yet Map 2 shows 38 acres of lake area. Similarly, Map 1

shows an excavation area of 143.8 acres for phases 2 and 3, yet Map 2 shows 161.2 acres of lake area. The cross section on Map 2 verifies this.

Map 2 show that excavation will take place under the berms identified on Map 1, outside the excavation area.

The cross section on Map 2 does not show overburden replacement on the western side of A-A' at the top of rock. All other slopes show replacement.

Surface contours do not extend into the phase 1 area. The last contour is 626', while DH S-05 shows a surface elevation of 619'. With the contour interval at 2', this area should show 3 to 4 additional contours.

The Mine Plan Map shows a cross section identifying 2 lifts. The narrative in section 1.2.3. states that there will be 3 lifts. This discrepancy should be corrected, and either the narrative of map must be revised.

### **General**

25. Need to provide a map identifying the boundaries of the Iroquois Wildlife Refuge, the Oak Orchard and Tonawanda Wildlife Management Areas in relation to the proposed quarry.
26. Identify and describe multiple sump locations that will be needed during phase progression.
27. If groundwater monitoring has continued since July 7, 2007, the data should be provided.
28. All boring information should be provided.
29. Reference was made to the possibility of using a well to supply water to the primary crusher. Information, details, and impact assessment should be provided.
30. Provide ROW crossing construction details, and/or restrictions. A letter from Niagara Mohawk should be submitted granting approval of the crossing.