

January 20, 2012

**VIA OVERNIGHT DELIVERY**

David L. Bimber  
Deputy Regional Permit Administrator  
New York State Department of Environmental Conservation  
Region 8  
6274 Avon-Lima Road  
Avon, New York 14414

Re: *Finger Lakes LPG Storage, LLC*  
*Proposed Liquid Petroleum Gas Storage Facility, Town of Reading, Schuyler*  
*County*

Dear Mr. Bimber:

Finger Lakes LPG Storage, LLC ("Finger Lakes") has reviewed the comments received in response to its proposed Liquid Petroleum Gas ("LPG") storage facility in the Town of Reading, Schuyler County (the "Project"). In the course of its review, Finger Lakes has made changes to the Project that we believe further minimizes and/or mitigates any potential environmental impact of the Project. A summary of those changes as well as a summary of additional information Finger Lakes is submitting for the SEQRA record is provided herein.

**A. Changes to Brine Pond Siting**

Many public comments focused on the brine pond in terms of its location and size. As a result of its review of these comments, Finger Lakes has decided to reduce the size of the brine pond located on the east side of NYS Route 14 and move it further south (on property it owns). This pond is called the East Pond by Finger Lakes. To account for some of the reduced storage capacity of the newly located and reduced brine pond on the east side of NYS Route 14, Finger Lakes will construct a brine pond on its property at the surface facility (the former Casella property) located west of NYS Route 14 and off of NYS Route 14A. This pond is called the West Pond by Finger Lakes. The West Pond will require a slight relocation of the product (propane and butane) lines on the former Casella property that were already shown on the site operations plan drawing contained in the DSEIS (DSEIS Figure 2b). Specifics of the two ponds follows.

The East Pond will have a surface area of 1.8 acres, an approximate total disturbance limit of 6.18 acres, and will have dimensions of 182' by 400'. This compares with the brine pond originally proposed in the DSEIS (Original Pond) which was 13 acres in size

and would disturb (at its grading limit) approximately 27 acres including drainage channels that were intended to be relocated. The East Pond will avoid these drainage channels. The East Pond will provide brine storage capacity of approximately 171,000 barrels of brine, compared to the Original Pond which was designed to be large enough to contain 2.19 million barrels of brine or approximately 91.98 million gallons of brine.

The West Pond will be located on the former Casella property. This pond will have a surface area of approximately 6.8 acres, a total disturbed limit of approximately 15.2 acres, have the capacity for approximately 1 million barrels of brine, and will have dimensions of 320' by 915'. There will be one additional 40 hp brine pump that will be located on the former Casella property for use with the West Pond.

Contoured drawings showing the reduced and relocated brine pond on the east side of NYS Route 14 (the East Pond) and the new brine pond on the former Casella property (the West Pond) are attached as **Attachments 1 and 2**. In addition, a revised Site Operations Plan is attached as **Attachment 3**.

The double lined design described in the Engineer's Report in the DSEIS (Appendix F) will remain for both brine ponds, including 3 feet of free board. Finger Lakes will address the reduction of brine pond storage capacity as part of its operational injection and withdrawal plan. Certain commenters requested the brine pond liner specifications. These are included herewith as **Attachment 4**.

Finger Lakes' engineers, CT Male Associates, have prepared a memorandum responding to a number of engineering concerns raised in the public comment letters with regard to the Original Pond. CT Male's memorandum is attached as **Attachment 5**. These responses demonstrate that the Original Pond would not have resulted in a significant adverse impact under SEQRA. Nevertheless, as described above, Finger Lakes has revised its brine pond plan resulting in a significant reduction in perceived impacts, thus minimizing any potential impacts to the maximum extent practicable.

Finger Lakes believes that these changes have resulted in a considerable reduction in impacts, something the iterative SEQRA process allows and encourages.

## **B. Revised Site Operations Plan and Relocation of Plant Area**

The revised Site Operations Plan (**Attachment 3**) shows the relocated East Pond, the new West Pond, and water lines on Finger Lakes and US Salt property that will be part of Finger Lakes' fire safety system. The revised Site Operations Plan also shows the relocation of the Plant Area (primarily the location of the injection pumps in a partially enclosed structure) from a wooded area off of NYS Route 14 to an open gravel pad (used for the storage of spare parts) that is further east of the original Plant Area. The primary reason for this move has been to further avoid wetland impacts and to move the

injection pumps further away from nearby receptors. Federally regulated wetlands were identified in the original treed Plant Area.

**C. Revised Wetlands Report**

To determine that the relocated and resized brine pond on the east side of NYS Route 14 and the new brine pond on the former Casella property and the relocated Plant Area did not increase (but rather reduced) impacts to wetlands and regulated waters, AK Environmental (who prepared the wetland delineations contained in Appendices M and N in the DSEIS) has prepared a comprehensive overall wetland delineation of all areas of the project. This report is attached as **Attachment 6**.

**D. Revised Sound Study**

To account for the relocation of the Plant Area, an additional brine pump on the former Casella property for use with the West Brine Pond, and a water pump for use for fire safety purposes, the sound study has been revised by Finger Lakes. The revised Sound Study is attached as **Attachment 7**. The revised study concludes that the changes mentioned above will not increase noise impacts on nearby receptors, but instead those sound levels will be further reduced. Sound mitigation for the water pumps (i.e., they will be enclosed) is also incorporated in the sound study. The primary sound component heard by nearby receptors will continue to be traffic that already exists on NYS Routes 14 and 14A.

**E. Supplemental Traffic Information**

For reasons unrelated to Finger Lakes' project, the ramp from NYS Route 14 northbound to NYS Route 14A, near the project site, is currently weight restricted and at some point in the near future will be replaced or rehabilitated (this depends on state and federal funding). The Department and Finger Lakes have both been in touch with the New York State Department of Transportation ("NYSDOT"). Finger Lakes' traffic expert has also prepared a supplemental traffic assessment about the turning movements of unloaded LPG trucks during the time the ramp is weight restricted or being replaced or rehabilitated. During this time, unloaded trucks (loaded trucks would not be using this ramp since product is not being delivered to the Finger Lakes surface facility by truck) will use the existing NYS Route 14/NYS Route 14A cross over (located just after the ramp) by turning left or right (depending on which direction on NYS Route 14 the unloaded truck is traveling). A copy of the Supplemental Traffic Assessment submitted by Finger Lakes to the NYSDOT is attached as **Attachment 8**. The original Traffic Assessment contained in the DSEIS as Appendix J was also submitted to the NYSDOT. On January 11, 2012, the NYSDOT wrote the Department stating that the "traffic impacts associated with the proposed action do not represent a substantial increase to the existing traffic volumes, nor do they present a need for mitigation to the highway."

NYSDOT's letter is attached as **Attachment 9**. Additionally, in response to public comments, Finger Lakes has prepared a truck and rail product allocation attachment that estimates the volume of product coming in to storage and leaving storage by either pipeline, rail or truck and determines how this volume relates to truck and rail traffic volume. See Attachment 10.

#### **F. Quantitative Risk Assessment**

A Quantitative Risk Assessment ("QRA") study is being performed by Quest Consultants, Inc. ("QUEST") to provide a detailed report providing a quantitative assessment of the potential risks imposed on the public by the proposed facilities. Quest is a well recognized expert in the field and has performed numerous QRAs.

In order to quantitatively assess the risk, the QRA requires an evaluation of the following five steps:

- (1) Hazards and Release Identification
- (2) Failure Frequency Definition
- (3) Consequence Analysis
- (4) Risk Quantification
- (5) Risk Assessment

The report will include representative model results for each hazard type evaluated, references for the failure rate data bases used in the analysis, and the methodology used to complete each phase of the study. The report, once completed, will be provided to the Department under separate cover.

#### **G. Potential Migratory Bird Mortality**

Finger Lakes requested that O'Brien & Gere ("OB&G") evaluate the comment related to the potential mortality of migratory birds from the brine pond and OB&G has prepared a response in a memorandum attached as **Attachment 11**. The proximity of the brine pond to Seneca Lake is the primary reason that any potential impact to migratory birds will be mitigated. In addition, Finger Lakes underground LPG storage facility in Savona, New York has not encountered any such issues and the fresh water source that is nearby is a much smaller body of water (Cohocton River).

#### **H. Supplemental Flare Information**

When LPG is injected into the storage cavern, the brine is displaced up the brine tubing from the bottom of the well. When the brine reaches the surface it goes through the well head piping through the safety control valve up to the pond site where the flare tower is located. The main brine line (welded 10" pipe) connects the storage caverns to

the pond. The flare tower is a vertical pipe which extends above the top of the pond dike and connects to the main brine line. The main line from the well is connected to the flare tower pipe below the top of the pipe, but above the top of the pond dike. The line from the bottom of the flare tower goes to the top of the pond dike and over into the pond. The way this is designed, it keeps the brine level in the flare tower pipe so the brine coming from the storage well free falls to the level in the pipe. When the brine free falls, if there was any LPG in the brine it would drop out and rise to the top of the flare tower (since LPG is lighter than brine) where there is a pilot burning which will ignite the gas and flare it off. There is typically no LPG in the brine when it comes out of the cavern. A ¼ inch hole is drilled into the tubing 4 inches up from the bottom of the tubing so if the LPG was nearing the bottom of the tubing a small flare will be seen at the flare tower before the well fills. Although the pilot for the flare is always on, flames from the flare will not always be visible. That is, during normal injection conditions, the only time the flare is used under normal operations is during the injection season of product into the caverns. Finger Lakes will install a shield around the flare so the flame is not visible from lake or road. There is no noise from the flare. When the flare is being utilized, only propane is being burned. There is no potential for brine-sourced chlorides in the flare gas because the salt does not come into contact with the gas. **Attachment 12** contains a drawing showing operation of the flare.

#### I. Supplemental Geological Information

In response to public comments made regarding geology, geologic faults, seismic concerns and the ability of the salt caverns to retain liquid petroleum gas, geologists Leonard Dionisio and John Istvan of Inergy have prepared a comprehensive memorandum addressing some of the more specific public concerns. This memorandum, which addresses leaching of cavern contents into the Seneca Lake, the fate of a spill into Seneca Lake, and faulting and seismicity, is attached as **Attachment 13**.

Please note that the information contained in **Exhibits 1 and 2 to Attachment 13** contain confidential information or confidential and/or proprietary, trade secret or business information and should be treated as privileged and confidential and should not be released pursuant to the provisions of 6 NYCRR § 616.7.

#### J. PILOT Status

There were some comments related to the status of the PILOT. First, it is without doubt that the Finger Lakes project will result in a significant increase in the local property tax base. However, Finger Lakes has not entered into a PILOT agreement for this Project and discussions regarding a PILOT have been discontinued at this time. If Finger Lakes enters into a PILOT agreement in the future, the agreement would still provide for significant real property tax payments to the local municipalities.

**K. NFPA Compliance**

In response to public comments, the designer of the surface facility, Superior Energy Systems Ltd. ("Superior"), has addressed compliance with the 2011 edition of National Fire Protection Association ("NFPA") 58 *Liquefied Petroleum Gas Code*. Superior has also addressed API 2510 and 2510A, including the applicability of these standards in light of New York's adoption of NFPA 58 and 70 (the National Electric Code). See Attachments 14-16.

**L. Emergency/Fire Department Readiness**

Dominick Smith, the Chief of the Watkins Glen Fire Department, has provided Finger Lakes his response to public comments related to the capabilities of local emergency responders. His letter is attached as **Attachment 17.**

**M. Additional References**

In its review and response to public comments, Finger Lakes either relied on a number of additional references not identified in the DSEIS or responded to certain reference contained in the public comments. These references are included as **Attachments 18-22.**

1. Davison, Ian, Faulting and fluid flow through salt, *Journal of the Geological Society*, London, Vol. 166, 2009, pp 205-216. See Attachment 18.
2. Jacobi, Robert D., Basement faults and seismicity in the Appalachian Basin of New York State, *Tectonophysics* 353, 2002, pp 75-113. See Attachment 19.
3. Jacobi, Robert, Definition of Trenton/Black River Prospects in the Finger lakes Region, New York State, Revised Final Report, NYSERDA Agreement Nol. 4877-ERTER-ER-99, June 10, 2003. See Attachment 20.
4. Lu, Ming, Rock engineering problems related to underground hydrocarbon storage, *Journal of Rock Mechanics and Geotechnical Engineering*, 2010, pp 289-297. See Attachment 21.
5. Lugert, Courtney M., Fractures and Their Relation to Other Geological Data Sets along the Southeastern Shore of Seneca Lake, New York State: Implications for Fault Systems in the Appalachian Plateau, March 22, 2005. See Attachment 22.

The public comment period closed on November 14, 2011, more than two (2) months ago. Given the critical nature of the energy infrastructure that this Project provides, the

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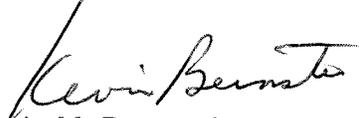
reduced impacts from the changes to the brine pond(s), and the information provided herein, we request that the Department expedite the completion of its review and quickly issue a Final Environmental Impact Statement so that an underground storage permit can be issued.

Four (4) additional sets of this submission are being provided to you for distribution to Department Staff. In addition, this submission is also contained in the enclosed CD. Five (5) CDs are being provided for your use.

If you have any questions regarding this matter, please call. Thank you.

Sincerely,

BOND, SCHOENECK & KING, PLLC



Kevin M. Bernstein

Enclosures

List of Attachments to Letter to David Bimber dated January 20, 2012

- Attachment 1 Contoured drawing of East Brine Pond, dated January 17, 2012
- Attachment 2 Contoured drawing of West Brine Pond, dated January 12, 2012
- Attachment 3 Revised Site Operations Plan
- Attachment 4 Brine pond liner manufacturer's specifications
- Attachment 5 C.T. Male Associates memorandum regarding Response to Public Comments regarding Brine Pond, dated January 12, 2012
- Attachment 6 AK Environmental revised wetland delineation
- Attachment 7 Revised Sound Study
- Attachment 8 GTS Consulting Supplemental Traffic Assessment
- Attachment 9 NYSDOT letter to NYSDEC regarding traffic impacts, dated January 11, 2012
- Attachment 10 Truck and Rail Product Allocation
- Attachment 11 O'Brien & Gere Memorandum regarding Potential Impact of Proposed Brine Storage Area on Breeding and Migratory Bird Populations
- Attachment 12 Supplemental Flare Information
- Attachment 13 Leonard Dionisio and John Istvan memorandum regarding Response to Public Comments regarding geology and underground storage caverns, dated January 11, 2012
- Attachment 14 Superior Energy Systems Ltd. letter to NYSDEC dated October 31, 2011
- Attachment 15 NFPA 58 *Liquefied Petroleum Gas Code*, 2011 Edition
- Attachment 16 Superior Energy Systems Ltd. letter to Inergy/Finger Lakes Storage dated December 8, 2011
- Attachment 17 Letter from Dominick Smith, Watkins Glen Fire Chief

- Attachment 18 Davison, Ian, Faulting and fluid flow through salt, Journal of the Geological Society, London, Vol. 166, 2009, pp 205-216
- Attachment 19 Jacobi, Robert D., Basement faults and seismicity in the Appalachian Basin of New York State, Tectonophysics 353, 2002, pp 75-113
- Attachment 20 Jacobi, Robert, Definition of Trenton/Black River Prospects in the Finger lakes Region, New York State, Revised Final Report, NYSERDA Agreement Nol. 4877-ERTER-ER-99, June 10, 2003
- Attachment 21 Lu, Ming, Rock engineering problems related to underground hydrocarbon storage, Journal of Rock Mechanics and Geotechnical Engineering, 2010, pp 289-297
- Attachment 22 Lugert, Courtney M., Fractures and Their Relation to Other Geological Data Sets along the Southeastern Shore of Seneca Lake, New York State: Implications for Fault Systems in the Appalachian Plateau, March 22, 2005