New York State Department of Environmental Conservation
Division of Mineral Resources
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FILE COPY

Alexander B. Grannis
Commissioner

January 11, 2010

Mr. William R. Moler, Senior Vice President
Finger Lakes LPG Storage, LLC
c/o Inergy Midstream, LLC
Two Brush Creek Boulevard, Suite 200
Kansas City, MO 64112

Kevin M. Bernstein, Esq.
Bond, Schoeneck & King, PLLC
One Lincoln Center
Syracuse, NY 13202

Re: NOTICE OF INCOMPLETE APPLICATION & STATUS OF MATERIALS
ECL Article 23 Underground Storage Permit
Finger Lakes LPG Storage, LLC, Schuyler County

Dear Messrs. Moler and Bernstein:

This is sent to provide you with a Notice of Incomplete Application ("NOIA") for Finger Lakes LPG Storage, LLC's ("Finger Lakes") subject application received by the Department on October 13, 2009. In addition, the current status of each primary element necessary to complete the application is noted on the enclosure. This NOIA does not address any other Department applications, permits and/or approvals that may be required in conjunction with the subject permit. Additional comments and/or questions, if any, on other required Department approvals and/or permits will be addressed separately by the Region 8 Avon Division of Environmental Permits office.

The following response is organized in the same fashion as the handout detailing application and permitting requirements that was provided to Finger Lakes at the February 19, 2009 pre-application meeting. The enclosed comments and questions must be addressed to continue processing Finger Lakes' application for an Underground Storage Permit for its proposed liquefied petroleum gas ("LPG") facility.

As you are aware, Environmental Conservation Law § 23-1301.1 requires that the New York State Geologist approve of any underground storage application prior to Department issuance of a storage permit. This NOIA includes comments and questions provided to this office by the New York State Geologist. Please contact me if you have any comments or questions concerning this NOIA.

Sincerely,

Peter S. Briggs

Peter S. Briggs
Chief, Permits Section

PB/tj
Enclosures

c: J. Maglienti, Esq.
L. Collart
B. Glynn
R. McDonough
W. Kelly

NYSDEC Division of Mineral Resources
NOTICE OF INCOMPLETE APPLICATION & STATUS OF MATERIALS
ECL Article 23 Underground Storage Permit
Finger Lakes LPG Storage, LLC, Schuyler County

1. **Organizational Report** - *Finger Lakes' September 30, 2009 Organizational Report satisfies the Department's requirements at this time. An updated Organizational Report must be filed with the Department if a change occurs in any of the information provided on the report including a change in corporate structure.*

2. **Financial Security** - *Financial security is required prior to issuance of any well drilling permit or approval of any well transfer request, and will be reviewed at the time such applications and/or requests are received by the Department.*

3. **Transfer of Well Plugging Responsibilities** - Approval of such transfer requires properly completed request for transfer forms, followed by compliance inspection of the wells by Regional staff and verification of financial security. *All unplugged wells in Finger Lakes' Galleries 1 and 2 currently registered with other well owners [i.e., US Salt LLC and Seneca Lake Storage, Inc.("SLSI")] must be transferred prior to Finger Lakes performing any proposed well work that requires a permit in Finger Lakes' name.*

4. **Full Environmental Assessment Form** - In contrast to the individual Environmental Assessment Form required with each drilling permit application, the Full Environmental Assessment Form ("EAF") is required to address the whole storage project, including any compressor site, any proposed lateral pipelines to power plants or transmission lines, and any proposed discharges. The Full EAF will be used to identify:

   a. any need for additional Department permits including those that address brine handling and discharge/disposal.

   Finger Lakes provided a Full EAF with its storage application received on October 13, 2009. The following corrections must be made, and a revised form submitted. However, because this NOIA is limited to Division of Mineral Resources' issues, Finger Lakes should coordinate its revisions and submission of the revised EAF with any comments received from the Region 8 Avon Division of Environmental Permits office, and submit only one revised form to the Department.

   Page 1 – The "Name of Lead Agency" must reflect the Commissioner's Lead Agency Decision when reached.
   Page 2 – The address of the applicant must be corrected to reflect Finger Lakes' Organizational Report provided with the storage application.
   Page 5 – The total amount of salt that will be removed from the site due to operational solution mining over the projected life of the project must be provided including a notation of the life of the project in years.
   Page 8 – Additional approvals in the form of well transfers, well drilling permits and well plugging permits associated with the project will be required by the NYSDEC.
   Page 10 – The form appears to be signed by Michael Armstrong, Director Engineering. Mr. Armstrong is not listed in Box 7 of Finger Lakes' Organizational Report provided with the storage application, and therefore is not authorized to sign submittals to the Department.

Please have a person listed in Box 7 or Kevin Bernstein (project-specific authorization granted by Finger Lakes on October 20, 2009) sign the revised EAF.

5. **Map(s)** - Please prepare a map(s) at a minimum scale of 1" = 400' and include the following items. Submit as many separate maps as necessary to legibly depict the requested information.

Generally speaking, the facility map (4/14/09, last updated 7/9/09) provided with the Finger Lakes storage application is deficient in many of the same ways as were maps provided by Inergy Midstream, LLC ("Inergy") for its other LPG storage application at Savona. The deficiencies for the Savona application were previously communicated by the Department to Inergy although they apparently were not considered when preparing the Finger Lakes application map. Most remarkably, the proposed ultimate cavern outlines and remaining pillar thicknesses at the end of the life of the project are absent from Finger Lakes' map. Specific map deficiencies are noted below and must be corrected, and a revised map or maps submitted.

a. Location, total depth, well type, well status and API well identification number of all wells listed in the Well Status and Condition Report described in item 9 below.

Finger Lakes must supplement its map to include the requested information for all wells listed in the Well Status and Condition Report as described and required in below Item 9.

b. Location of all existing and proposed wells within and immediately adjacent to the storage area.

Finger Lakes must supplement its map to include all wells listed in the Well Status and Condition Report as described and required in Item 9, including showing existing and plugged wells and gallery outlines in the south field located south of proposed LPG Gallery 2. The map must also show the locations of all proposed wells in Galleries 1 and 2.

c. Plan view of the proposed reservoir boundary (i.e., existing and proposed ultimate cavern outlines which take into account directional surveys for wells). Clearly label each cavern to denote its current status, current use and proposed use under the requested permit. Include distance, in feet, between proposed ultimate cavern outlines and/or other existing caverns.

Finger Lakes must supplement its map to include all requested information as described above. Wells in communication must be shown as such on the plan view. Presently, Finger Lakes' map provided with its storage application shows individual caverns in Gallery 1. Interconnections must be shown and a single gallery outline provided for both existing and proposed ultimate conditions for Galleries 1 and 2. The map must include a notation of the method by which the existing outlines were determined (e.g., sonar survey, production records). Each gallery's length and span at proposed ultimate capacity must be shown on the map. The distance, in feet, between proposed ultimate cavern outlines and other caverns/galleries in the field must be shown (i.e., remaining pillar thicknesses). These determinations must take into account any additional solution mining that may occur as a result of brine production at the US Salt LLC operation. For proposed storage Galleries 1 and 2, all current and past sonar surveys (outermost outline) must be included on the plan view. The Department has previously run sonar survey information

(excluding the 2009 surveys) in its files as follows: Well Nos. 34, 43 & 44 – 1997, 1999, 2001, 2002, 2004 and Well No. 30 – 1997. Finger Lakes may submit as many maps as needed to clearly display the requested information, however; all sonar survey outlines should be shown and appropriately labeled on a single map.

For the portion of the cavern outline currently shown on the map due west of Well No. 34, it is the Department's understanding that this linear feature would be re-evaluated prior to submission of this storage application because the sonar for Well No. 34 does not show such a feature. Rather, the linear feature shown is from Well No. 44's sonar. This issue with the map for the facility was discussed during our field visit in May 2009. Please explain why the linear feature was retained or correct this portion of the cavern outline.

In addition, for wells with directional surveys, wellhead and production casing shoe locations must be clarified on Finger Lakes' map or maps. In addition to any symbol used to denote casing shoe locations, wellhead symbols (e.g., 33, 43, 34, 44, new wells) must also be included in a legend.

The relative closeness of the gallery (Well Nos. 18, 55, 57, aka International Gallery 10) immediately to the north of proposed storage Gallery 1 is of potential concern to the Department. For each of the three wells identified in the gallery, provide a well diagram showing the depth of top of salt, existing casing, mechanical plugs and cement. Please provide any additional information Finger Lakes may have to show that no interconnection between the noted galleries currently exists or will be formed during operation of the proposed project or if such a connection is made, that International Gallery 10 would adequately contain LPG stored in Gallery 1. Inadvertent communication between Finger Lakes Gallery 1 and International Gallery 10 could provide a possible route of escape for stored product at some future date after Gallery 1 is activated. In addition, do directional surveys exist for the identified wells (Well Nos. 18, 55, 57)? Finger Lakes facility map shows a current pillar thickness between the galleries of approximately 70 feet. Is any pressure testing of International Gallery 10 contemplated? The Department may require re-entry and hydrostatic pressure testing of International Gallery 10 (along with full complement of directional survey, sonar survey, nitrogen/brine interface MIT on re-entered well) upon receipt and evaluation of Finger Lakes' response to this NOIA.

d. All faults or other structural or stratigraphic features depicted on the cross-sections described in item 6a below.

See Department responses to below Items 6a and 6b.

e. The proposed location of compressors and other surface equipment, structures, tanks, impoundments (e.g., brine ponds), discharge points, flare stacks and pipelines associated with the proposed storage operations.

Satisfactorily addressed by Exhibit 1 and Exhibit 2 (Maps 1 & 2) of Finger Lakes' storage application.

f. Notation of the applicant's surface and mineral rights within the vicinity of the proposed storage area.

Such notation must be included with the applicant's storage rights affidavit required in below Item 10.

g. Topographic and cultural features such as roads, railroads, oil or gas pipelines, utility rights-of-way, surface waters, springs, public and private water supplies, buildings or dwellings, agricultural districts, significant landmarks and any other public area which may be used as a place of occupancy, resort, assembly, lodging, manufacture, storage or traffic.

Satisfactorily addressed by Exhibit 1 and Exhibit 2 (Maps 1 & 2) of Finger Lakes' storage application.

6. **Reservoir Suitability Report** - This report must document suitability of the reservoir for storage. The report must include a cavern development plan & geomechanical (including finite element analysis) study including and analyzing, but not necessarily limited to, items listed below. Note that the geomechanical study must use supportable baseline cavern information and a justifiable projection for future cavern growth—existing cavern size(s) and shape(s) must be based on reliable information such as historical cavern development records and recent sonar surveys.

On pages 9 & 10 of the storage application, Finger Lakes indicates that it does not intend to perform any cavern/gallery specific Finite Element Analysis ("FEA") [or Finite Difference Analysis ("FDA")] for proposed LPG storage Galleries 1 and 2, and instead proposes to rely on SLSI's 2002 natural gas storage analysis for Gallery 2. This proposal is not acceptable to the Department, and is fundamentally flawed because the 2002 analysis was performed on a no-growth natural gas storage cavern/gallery. We concur that a natural gas cavern analysis is typically more rigorous than a LPG analysis because of the operating range associated with such operations but Finger Lakes has stated that it anticipates its galleries will grow at a rate of approximately 1-2% annually due to operational solution mining. The Department estimates the caverns will double in capacity in approximately 35 years using an annual operational solution mining growth rate of 2%. We agree with Finger Lakes that future sonar surveying may reveal some cavern capacity being masked by bulking of insolubles forming the rubble pile. However, from a structural perspective, the storage galleries will not be static and will grow over time. Finger Lakes must take this growth into account in its analysis and evaluation of the caverns, and demonstrate stability and containment of LPG over the projected life of the project. Gallery interaction between proposed storage Galleries 1 and 2 must be analyzed over the entire projected life of the facility. A prediction of the time required for each gallery to grow from its existing capacity to proposed ultimate capacity based on individual cavern characteristics and proposed operation of individual wells (i.e., injection, withdrawal) must be included in the required geomechanical analysis. Modeled dimensions must be provided in the required geomechanical analysis. Minimum and maximum operating pressures, including MIT pressures, must be stated and considered in the required geomechanical analysis. A prediction of total subsidence at the end of the operating life of the project must be included.

In addition, because of the close proximity of New York State Electric and Gas' ("NYSEG") existing natural gas storage operation, the required geomechanical analysis and report must include a gallery interaction study, under all existing and proposed operating and testing conditions, which analyzes currently permitted operations at NYSEG's existing storage cavern

and operation of Finger Lakes' proposed LPG storage galleries over the proposed life of the Finger Lakes' facility. A copy of NYSEG's 1995 Underground Storage Permit with allowable operating pressures was previously provided to the applicant. A copy of the gallery interaction study must be provided to Mr. Mark Cole of NYSEG at the same time the interaction study is provided to the Department, and proof of delivery of such to NYSEG must be provided to the Department.

a. Geologic cross-sections of the area shown on the map listed in item 5 showing lithologies, storage wells (including casing strings and setting depths) and overlying and underlying formations, and vertical profiles of the existing and ultimate caverns including all prior sonar surveys. These cross-sections must also depict any faults or other structural or stratigraphic features that affect either continuity and extent of the formations shown or effectiveness of containment of gas in the storage reservoir.

Cross-sections of Galleries 1 and 2 are included in Finger Lakes' application as Exhibits 5 and 6 respectively. Some additional cross-sections for Gallery 2 are included in Exhibit 10. However, these cross-sections do no satisfy the Departments informational requirements as previously requested. Finger Lakes may add information to the previously submitted cross-sections or provide focused cross-sections of the proposed storage caverns with the required additional information. All interconnections through rubble piles must be identified on the cross-sections to show communication, where appropriate, within each gallery and storage capacity. A single gallery outline must be provided for both existing and proposed ultimate conditions for Galleries 1 and 2. For Gallery 1, distinct salt and "rock" units and cavern development within such must be identified similar to what was already provided for Gallery 2 (Exhibit 6). However, for both Gallery 1 and 2 cross-sections, the standardized salt unit naming convention ("D, E, F," sequence starts at bottom, see Figure 3-1 of Exhibit 10 and "Stratigraphy of the Upper Silurian Salina Group, New York, Pennsylvania, Ohio, Ontario," Map and Chart Series Number 12, New York State Museum and Science Service, Rickard, 1969.) must be used instead of naming units numerically from top to bottom. The cross-section must include a notation of the method by which the existing outline was determined (e.g., sonar survey, production records). For the purpose of this application (and permit, if and when issued), all water-filled capacity, including any in rubble pile, is considered potential product storage capacity regardless of how deep Finger Lakes intends to set its brine strings. All current and past sonar surveys (outermost outline) must be included on the cross-sections to facilitate identification of rubble-filled portions of each gallery and cavern growth characteristics. Finger Lakes may submit as many cross-sections as needed to clearly display the requested information, however; all sonar survey outlines should be shown and appropriately labeled on a single cross-section. The Department has previously run sonar survey information (excluding the 2009 surveys) in its files as follows: Well Nos. 34, 43 & 44 – 1997, 1999, 2001, 2002, 2004 and Well No. 30 – 1997. The Department does not have the "8/16/78 Sonar Survey" noted and shown on Exhibit 5—please provide a copy of the referenced 1978 sonar survey. The Department does not have the "July 1978" sonar survey for Well No. 30 noted on page 6 of Exhibit 10 – please provide a copy of the survey. All requested cross-sections must correspond to the map or maps requested in above Item 5.

b. Discussion of the information illustrated on the cross-sections described above. Any zones or planes of weakness referenced in other published reports (e.g., Jacoby) potentially affecting the suitability of the reservoir for storage must be documented and explained in the Reservoir Suitability Report.

Discussion of the project's regional and local geology and structural features is included on pages 1, 2, 3, 6, 7, 8 and pages 11 through 15 of Exhibit 10. On page 3, Finger Lakes states "The overlying sediments are characterized by broad, gentle east-west synclines and anticlines with axes generally paralleling the sharp folds of the underlying evaporates." Finger Lakes' discussion on page 8 of its application includes statements from Jacoby and Dellwig that "The structure contour map on top of the salt gives no indication of the faults breaking up into the overlying sediments" and that the "zones or planes of weakness" referenced in the same paper are confined to the salt section. For proposed storage Gallery 1,while general statements are made regarding the continuity of the Camillus Shale, it is unclear from the discussion in the application if Finger Lakes has performed its own independent analysis and evaluated each well's geophysical logs (along a north-south line running through Gallery 1 from Well No. 18 or 57 to Well No. 31 and an applicant-selected representative east-west line through Gallery 1) to determine if repeat or missing sections occur as an indication of faulting in the caprock overlying the Syracuse salts. Please provide analysis if previously prepared. If such an analysis has not been performed, please do so and provide results. If the analysis shows that faults are present, they must be shown on the cross-sections. The objective of this requirement is to demonstrate the lack of potential pathways for the escape of stored product.

c. Discussion of any core test results including caprock and salt properties.

Addressed by Item 7.3 and Exhibits 8 & 9 of Finger Lakes' storage application. Please explain how the referenced cores correlate to Finger Lakes' proposed Galleries 1 and 2. The caprock and salt properties discussed in Exhibits 8 & 9 should be used in the project-specific geomechanical analysis requested in Item 6.

d. Description of the material to be stored and analysis of the physical and operational parameters required for safe containment of the stored material and any displacement fluid for the life of the project.

Satisfactorily addressed with respect to stored material. Finger Lakes states that propane and butane will be stored, and included MSDS for both as Exhibits 12 and 13 respectively. Finger Lakes also included a MSDS for Ethyl Mercaptan which will serve as an odorant when product is loaded into trucks. It is understood that the Ethyl Mercaptan is stored at the truck loading dock and is introduced into product only when trucks or containers are filled for public distribution. Operational parameters are discussed below in 6e.

e. Existing and proposed total storage capacity (i.e., water-filled capacity) which includes rubble pile capacity, if any, and minimum and maximum operating storage pressures. The underground storage permit for the facility will specify total capacity; any future increase

in permitted total capacity, however caused, will require an underground storage modification permit in accordance with ECL §23-1301(5)(b).

Page 2 of the storage application states that Gallery 1's existing capacity is "close to 5 million barrels" and Gallery 2 "will store 1,000,000 barrels." In addition, no proposed ultimate total storage capacities were provided by Finger Lakes except that Finger Lakes states on page 11 of its application that "The only increase in cavern dimensions will be about 1-2% annually by the displacement of hydrocarbon products with slightly undersaturated brine..."

For each gallery, please restate or state, in more precise terms a) existing total storage capacity (i.e., water-filled capacity) which includes rubble pile capacity, if any, b) proposed ultimate total storage capacity (i.e., water-filled capacity) which includes rubble pile capacity, if any, c) gallery length and span at proposed ultimate capacity, and d) operating storage pressures as follows for each proposed storage well: maximum storage pressure at the wellhead (psig), and minimum and maximum storage pressure gradients measured at the casing shoe (psi/ft) with corresponding casing shoe depth. For each gallery's stated existing and proposed ultimate capacity, explain how determined. Submission of a "Capacity Matrix" as was provided with the Savona LPG application would be one means of providing some of the above requested information.

f. Past and current sonar reports and surveys, and schedule for future sonar surveys. Sonar schedules must take into account the cavern development plan. Any other materials including other types of surveys and/or determinations of current cavern size and shape including records of prior cavern development. Directional surveys for wells for determining spatial relationship of caverns.

Recently run sonars and directional surveys have been provided by Finger Lakes (or its parent Inergy Midstream, LLC). The Department also has some past sonar surveys for some of the subject wells in its files. Finger Lakes must provide a listing of all available sonars so that the Department can verify it already has a copy.

Finger Lakes states that Gallery 1 sonar surveying is complete at this time and that future sonars will be conducted at least every ten years. With regard to Gallery 2, Finger Lakes states that "When the wells for gallery 2 are redrilled or new wells drilled, new sonars will be performed (and periodically thereafter every 10 years). Directional surveys will also be performed when the new wells are drilled." It is the Department's understanding that no wells in Gallery 2 will be redrilled (see "Finger Lakes Gallery 2," page 12 of application). Please clarify.

g. Discussion of historical earthquake activity, if any, within a one-half mile radius of the project area.

Satisfactorily addressed by Item 13 and Exhibit 11 of Finger Lakes' storage application.

h. Proposed safety and emergency shut-down systems for the storage facility.
Upon review of items a through h, the Department may require additional geologic and/or engineering analysis to further support the applicant's proposed operations.

If and when the storage permit is issued, prior to any injection of storage gas, Finger Lakes must provide two copies of its Emergency Response Manual to the Director of the Bureau of Oil & Gas Regulation in the Department's Albany office.

7. **Subsidence monitoring plan.** The subsidence monitoring plan must take into account the cavern development plan.

Finger Lakes' proposal to continue US Salt's subsidence monitoring schedule of every 5 years for the proposed LPG storage facility is not acceptable because US Salt's five-year program is designed for solution salt mining and not storage of hydrocarbons. Early detection is inherently more critical at hydrocarbon storage facilities. Consistent with existing subsidence monitoring programs at the Savona and Harford Mills LPG storage facilities, if and when the storage permit is issued, subsidence monitoring will be required at least every 2 years at all injection, withdrawal and plugged wells in each gallery. In addition to the storage and plugged wells in Galleries 1 and 2, please identify additional monuments or wells, if any, that will be included in Finger Lakes bi-annual subsidence surveying program when implemented.

8. **Mechanical integrity testing ("MIT") plan.** Proposed MIT pressures must be accounted for in the geomechanical analysis.

On page 13 of its application Finger Lakes states that it will conduct a nitrogen/brine interface MIT at all storage wells prior to first injection of product and thereafter at least every five years. Please state proposed MIT test pressure for each well (Galleries 1 and 2) in psi/ft. Test pressures must be taken into account in the required geomechanical study. In addition, if and when the storage permit is issued and prior to injection of product, Finger Lakes will be required to submit for Department review and approval a summary of test data and a narrative report detailing the results of all MITs.

9. **Well Status and Condition Report** - The purpose of this report is to show that prior to commencement of storage operations, the condition of all wells located within and immediately adjacent to the storage area is such that storage gas containment is not compromised. Please include the following items.

a. A well summary covering all plugged and unplugged wells which documents the well use histories and current status or downhole condition of each well.

See response to below Item 9b.

b. A proposed remediation plan for wells described in item a above which are not adequately completed or plugged to ensure storage gas containment.
With respect to Items a and b above, Finger Lakes provided information on the wells in proposed storage Galleries 1 and 2 as Tab D of its storage application, and at other locations within the

application. Well construction and well history information is also included on page 4 of the storage application. Please provide a well diagram showing existing casing and cement for each plugged and unplugged well in Galleries 1 and 2. The diagrams for existing and proposed plugged wells must show the location of existing or proposed mechanical and/or cement plugs in the wellbore. Information on the historical use of Gallery 2 for LPG storage is provided on page 4 of the storage application and in Exhibit 10. Details and results of the Vertilog well casing evaluation logs recently run on the wells during re-entry are provided on page 5 of the storage application. Well Nos. 33 and 44 were recently relined to ensure integrity of the storage system. Provide an explanation as to why well No. 43 does not require relining.

For proposed storage Gallery 2, Finger Lakes' intended use of Well No. 30 is unclear. Page 2 of Tab D states "will be converted to LPG storage" while page 12 of the application states "Finger Lakes plans to replug and abandon well 30..." Please clarify.

Finger Lakes did not provide any information on wells "immediately adjacent to the storage area" as requested in Item 9. For the purpose of this requirement, immediately adjacent is defined as all wells in a cavern or gallery within 500 feet of the ultimate cavern outlines for proposed storage Galleries 1 and 2. For all identified immediately adjacent wells, provide well name, number, API No., current status, year plugged, if applicable, and well owner's name. For clarification sake, a tabulation of all wells (Galleries 1 and 2, and immediately adjacent) documenting each well's current status, proposed status and remedial or plugging work already performed or required is requested.

c. A proposed monitoring/observation well protocol, if any, which lists proposed monitoring/observation wells, identifies their locations and describes the purpose, methodology and frequency of the planned monitoring and observation.

Finger Lakes did not identify any permanent monitoring or observation wells for its proposed LPG storage facility. Please confirm that Finger Lakes will not have any dedicated monitoring or observation wells.

Prior to commencing any work on an existing or new well, including re-entry, drilling, conversion and plugging, the applicant must contact the Regional Minerals Manager to determine application, notification and/or permitting requirements for individual wells in accordance with 6NYCRR Parts 550 - 559.

10. **Storage Rights Affidavit** - Please provide an affidavit stating that the applicant has acquired at least 75 % of the storage rights within the proposed storage formation in the reservoir and buffer zone, and reference and include a lease tract map. In addition to the affidavit itself, include a tabulation which corresponds to the lease tract map of the names and complete mailing addresses of all surface owners within and adjacent to the proposed storage area (reservoir and buffer zone).

Finger Lakes did not provide the requested lease tract map and tabulation. Finger Lakes must provide a new affidavit, lease tract map (including ultimate cavern outlines) and tabulation

11. **Permit Application Fee** - *The application fee for a new underground storage facility is $10,000. The fee was received by the Department on October 13, 2009. Please find enclosed receipt No. 558202.*

Other Comments/Questions

Page 1, 1st paragraph – The statement "US Salt has been in the business of salt production for over 100 years by solution salt mining underground salt deposits on property adjacent to Seneca Lake" is incorrect as written. The sentence should be revised to state "US Salt and its predecessors at the facility..." US Salt's predecessors at the facility include Cargill, Akzo-Nobel, Akzo and International Salt.

Page 2, 5th paragraph – Finger Lakes states "Brine circulated from the caverns will be stored in one or more above-ground ponds." Please clarify the location of the multiple ponds that may be used to store brine.

Page 4, 2nd full paragraph – Finger Lakes states "The wells were abandoned in 1986 when the storage contract terminated with TEPPCO since they required a larger volume of storage than what US Salt was willing to provide" is incorrect as written. US Salt did not own the subject facility in 1986. The sentence should be revised to state "...than what one of US Salt's predecessors at the facility was willing to provide."

Page 4, 4th full paragraph – Finger Lakes states "When wells 33, 34, 43 and 44 at the US Salt facility at Watkins Glen were drilled out and reopened, there was positive pressure held on the cavern since abandonment indicating the 4-well gallery retained mechanical integrity." What were the positive pressures encountered?

Page 5, 2nd full paragraph – Finger Lakes states "NYSEG performed a hydrotest on Gallery2 and Inergy has reviewed the MIT and the entire Gallery had pressure integrity." Please provide a copy of the referenced hydrotest of Gallery 2 performed by NYSEG. A recent long-term brine hydrotest for Gallery 1 was performed in May 2009, and the results are provided as Exhibit 7 of the storage application. It is understood that Finger Lakes will have performed or will perform a nitrogen/brine interface MIT on every storage well (injection and withdrawal) prior to the injection of any storage gas.

Page 5, 3rd full paragraph – Finger Lakes states "These tools are important to the operation of the reservoir since repetitive and comparative logs will alert Finger lakes to any changes that might affect the well and cavern operation." What is Finger Lakes schedule for running comparative gamma ray and neutron logs?

Page 5, last full paragraph – Finger Lakes states "Finger Lakes and Inergy are cognizant of the overall pressures required for safe operations of hydrocarbon storage caverns based on years of experience and will never permit leakage that would jeopardize the public or USDW." At what frequency will Finger Lakes monitor the wellhead pressures of its storage wells to ensure safe operation of its facility? It is understood that Finger Lakes Emergency Response Manual will be provided at a later date per above Item 6h.

Page 6, 1st full paragraph – Finger Lakes states "The actual extent of the cavern...is based on the hydrostatic testing that took place." Please elaborate and explain this statement.

Page 6, 2nd full paragraph – Finger Lakes states "Hydrostatic pressure testing at a gradient of 0.8 psi/foot was performed by injection of nearly saturated brine into well 43 to determine the integrity of the casings and cavern to fluid movement within or out of the gallery." Pressure test data is included as Exhibit 7. Please provide and show calculation for determining that pressure test was equivalent to a 0.8 psi/foot test. From Exhibit 7 pressure test data, it appears Well Nos. 33 & 43 were drilled out to the cavern and open to the pressure test and Well Nos. 34 & 44 remained plugged–was this the status of the wells during the Gallery 1 test?

Page 6, 3rd full paragraph – Finger Lakes states "New sonars of caverns for the proposed Finger Lakes Gallery 1

showed the salt pillar thickness relationship..." Information on the existing salt pillar thicknesses is important. However, Finger Lakes neglected to include information on salt pillar thicknesses at the end of the life of the project (i.e., ultimate cavern dimensions for Galleries 1 and 2). As previously noted, this information must be included and analyzed as part of Finger Lakes application.

Page 11, last full paragraph – There appears to be a typo or missing word in the sentence containing "...and used for hydrocarbon storage."

Page 14, 1st paragraph – Finger Lakes states "State-of-the art hydrotesting has been performed on the gallery shown as Finger Lakes Gallery 1 (33, 43, 34 and 44). The same will be provided for Finger Lakes Gallery 2 (30, 31 and 45) when all well workovers and new drilling are completed." It is the Department's understanding that no wells in Gallery 2 will have workovers (see "Finger Lakes Gallery 2," page 12 of application). Please clarify. In addition, if and when the storage permit is issued and prior to injection of product, Finger Lakes will be required to submit for Department review and approval test data and a narrative report detailing the results of the proposed Gallery 2 hydrotesting.

Exhibit 15, Mechanical Integrity Test Procedures – Finger Lakes states "The U.S. Environmental Protection Agency (USEPA) requires that storage wells undergo a mechanical integrity test (MIT) prior to fluid injection in order to assure protection of the underground source of drinking water (USDW)." For clarification sake, the USEPA does not regulate LPG storage wells where no active solution mining is occurring such as Finger Lakes' proposal. Wells used for the injection of LPG are specifically excluded under the USEPA's Underground Injection Control (UIC) Program. See CFR Part 144 which states " (2) Specific exclusions. The following are not covered by these regulations: ... (iv) Injection wells used for injection of hydrocarbons which are of pipeline quality and are gases at standard temperature and pressure for the purpose of storage." (http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e836eb638bc78ea602d31da7d5dca6dc&rgn=div8&view=text&node=40:22.0.1.1.6.1.35.1&idno=40) While the USEPA can require a "gas" MIT for Class 3 solution mining wells, its standard test uses brine which is not satisfactory to the Department for underground gas storage MIT purposes. Nevertheless, the Department appreciates Finger Lakes' intent that all storage wells will be tested prior to storage service, and the fact that Finger Lakes states elsewhere in its application that all storage wells in Galleries 1 and 2 will be tested using the nitrogen/brine interface test prior to product storage.