# DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (DSEIS) FINAL SCOPING OUTLINE

# Finger Lakes LPG Storage LLC, Watkins Glen LPG Storage Facility DEC 8-4432-00085/00001

**1.0 COVER SHEET.** Type of document (draft, final), title of project, location, name and address of Lead Agency, name and telephone number of Lead Agency contact person, name and address of document preparer and deadline for acceptance of public and agency comments.

# 2.0 TABLE OF CONTENTS

3.0 INTRODUCTION AND BACKGROUND. The New York State Department of Environmental Conservation (DEC or Department) finalized a SEQR review of underground gas storage projects in 1992 in the form of a Generic Environmental Impact Statement (1992 GEIS) on the Oil, Gas and Solution Mining Regulatory Program. As an outcome of that process, the DEC determined that new underground gas storage projects, including related surface facilities, must be evaluated to determine whether they may have a significant adverse impact on the environment and may require a supplemental EIS depending on the scope of the project. According to the GEIS, a supplemental EIS may be required if the proposed action is not addressed in this document and if the subsequent action involves one or more significant adverse environmental impacts. The DEC, as Lead Agency for the Finger Lakes liquefied petroleum gas (LPG) storage project, has determined that the scope of the proposed action described below and its potential for significant adverse environmental impacts is such that a draft Supplemental Environmental Impact Statement (DSEIS) should be prepared. DEC has determined that the project may result in adverse impacts, beyond those addressed in the 1992 GEIS, sufficient to require preparation of a site-specific, project-specific DSEIS. These issues will be presented and discussed, as described below.

In its November 17, 2010 Positive Declaration, the Department determined that the Finger Lakes LPG facility may have a potentially significant adverse impact on the environment based on the following list of issues and concerns, and that these potential adverse impacts and concerns are not sufficiently evaluated and addressed in the 1992 GEIS:

Impacts on land

- Integrity and stability of the proposed brine pond and its associated impoundment structure:
- An impoundment structure with a maximum height of 50 feet above its down slope toe is proposed to impound a 2.19 million barrel (91.98 million gallons) capacity brine pond on a site with variable slopes in the 8 to 12 percent range. The slope tends to steepen downhill in the area under the proposed impoundment structure. When full, the pond surface will be approximately 400 feet above Seneca Lake elevation, at a horizontal distance from the lake of approximately 2400 feet.
- Potential for catastrophic structural failure of the surface impoundment.
- Potential for subsidence associated with underground storage operations.

Impacts on water

- The potential for surface water contamination in the event of an impoundment structure failure due to its proximity to Seneca Lake.
- The potential for ground water contamination in the event of impoundment structure leakage, subsidence, or loss of cavern integrity.

Impacts on transportation

- Additional road and rail traffic.
- Potential truck traffic impacts to SR 14 & 14A.
- Additional train traffic over Watkins Glen Gorge bridge.

Noise impacts

• Operation of a new rail and truck loading facility in a sparsely developed rural area where none currently exist.

Visual impacts

- New rail and truck loading facility.
- Brine pond.
- Compressor building.

Impacts on public safety

• LPG handling and containment.

**3.0.1 Project Description.** This section will describe the various elements of the project and their relationship or dependence on each other for the success of the project.

**3.0.2 Executive Summary.** This summary will present an overview of the project, provide a brief description of the overall proposed action, and list the following:

- significant beneficial and adverse impacts,
- alternatives considered,
- mitigation measures proposed,
- issues of controversy, if any,
- matters to be decided, including a list of each permit or approval required, and
- a summary of those prominent issues raised during scoping and determined not to be relevant or not environmentally significant to include in the DSEIS: e.g., hydraulic fracturing, storage of hydraulic fracturing fluids/flowback fluids in the brine pond, and natural gas drilling & production, and
- project-related actions that are addressed in the Generic Environmental Impact Statement (1992 GEIS) on the Oil, Gas and Solution Mining Regulatory Program.

**3.0.3 Purpose and Need for the Proposed Action.** The DSEIS will discuss the purpose, need and public benefit of the proposed project.

## **3.1 ENVIRONMENTAL REVIEW PROCESS**

**3.1.1 Permits Required.** Table 1.0 provides an overview of the permits and approvals presently anticipated to be necessary for the proposed project, the agencies responsible for the approvals and the applicable law or regulations associated with each approval. This table may be revised as additional information is developed in the course of the Scoping process.

**3.1.2 State Environmental Quality Review.** The SEQR Act and its implementing regulations require agencies to assess potential environmental impacts of proposed projects during the permitting process.

The DSEIS for this project is intended to function as a disclosure document to reveal information about the expected environmental effects of the proposed action and provide a basis for informed decisions. The DSEIS identifies and addresses the potential environmental impacts of a project and reasonable alternatives to the project and its component parts, if any, and identifies ways to avoid or mitigate any potential adverse impacts to the maximum extent practicable. Also addressed are irreversible and irretrievable commitments of resources, growth inducing aspects, and the use and conservation of energy.

The DSEIS must be written to a level of detail to properly assess the impacts identified and that allows involved agencies to make a reasoned decision on the action. Many of the issues will also be reviewed in accordance with NYS statutory requirements relating, for example, to the Mineral Resources permitting program. In general, the DSEIS will follow the content requirements of SEQR, 6 NYCRR Part 617.9(b) Environmental Impact Statement Content.

With regard to Finger Lakes' application for an ECL Article 23 Underground Storage Permit, many impacts related to underground storage facilities have already been addressed in the 1992 GEIS. Therefore, instead of a DEIS here, a DSEIS will be prepared to address potential adverse impacts and concerns that are not sufficiently evaluated in the 1992 GEIS. Because the permitting of drilling, conversion and plugging of wells, associated potential impacts and mitigation measures have already been evaluated in the 1992 GEIS, related discussion and analysis is unnecessary in the DSEIS.

**3.1.3 EIS Scoping Process.** The primary goals of Scoping are to focus the DSEIS on potentially significant adverse impacts and to eliminate consideration of those impacts that are irrelevant or non-significant. The scoping process establishes the content of a DSEIS, and the lead agency provides the public the opportunity to participate in that process. The final scoping document will be completed after consideration of all substantive comments from the public and involved agencies.

**3.1.4 Additional, Future Opportunities for Public Comment.** In addition to seeking public input on the scope, of the DSEIS, when completed and accepted by DEC, the DSEIS will be made available for public review and comment and the public will be notified of the same in the Environmental Notice Bulletin. at http://www.dec.ny.gov/enb/enb.html. A final SEIS will then be prepared to address all substantive comments received. To help enable public review, DEC expects to post this scope and the expected DSEIS and supporting documents, as soon as they are prepared and accepted as adequate for public review, in an electronic format on its website at the following address:

http://www.dec.ny.gov/permits/6061.html. All other applicable filing and notice requirements of 6 NYCRR Part 617.12 will be met.

#### 4.0 ENVIRONMENTAL SETTING, SIGNIFICANT ENVIRONMENTAL IMPACTS, AND MITIGATION MEASURES TO MINIMIZE ENVIRONMENTAL IMPACTS.

The environmental setting of the proposed project will be described. Impacts of the proposed project will be evaluated; for each environmental discipline required to be addressed by the Positive Declaration (as mentioned above), the DSEIS will discuss present conditions, the environmental impacts anticipated to result from project development, alternatives, and mitigation measures to be incorporated into the project to avoid or minimize its impact. If beneficial impacts are identified, they will be described in a similar manner. In general, the DSEIS will follow the content requirements of SEQR, 6 NYCRR § 617.9(b) as modified to make the DSEIS relevant to the specific project proposal. This DSEIS will focus on identifying significant environmental issues, their analysis and the evaluation of alternatives related to avoiding, minimizing or mitigating impacts from the proposal. Specific topics to be addressed are discussed below.

#### 4.1 IMPACTS ON LAND

**4.1.1 Ecological Resources.** The DSEIS will assess the potential impact of the operations of the new LPG storage facility on habitats for terrestrial and aquatic ecosystems within and in proximity to the site.

4.1.1.1 Existing Environmental Setting. The existing flora and resident and migratory fauna currently found at the proposed new LPG storage facility will be described. The New York Natural Heritage Program and the US Fish and Wildlife Service will be consulted to identify the presence of any threatened or endangered species or their habitats. Existing conditions shall be assessed through an onsite evaluation. The presence of any endangered or threatened species or significant habitats within or in proximity to the proposed facility will be identified through literature reviews, site surveys, and consultation with DEC staff. If any of the above are found, the size of the population, its range, and a description of its typical habitat shall be provided.

4.1.1.2 <u>Potential Impacts.</u> The potential impact on resident and migratory wildlife species will be evaluated and discussed. On-site field work will be described to evaluate the potential for any anticipated losses of terrestrial and aquatic habitat.

4.1.1.3 <u>Potential Mitigation Measures and Alternatives.</u> If any ecological, terrestrial or aquatic resources are identified where there is an impact which cannot be avoided, mitigation measures and alternatives shall be identified.

## 4.1.2 Proposed Brine Pond

4.1.2.1 Existing Environmental Setting. This section will describe the existing setting of the proposed brine pond location with regard to soils, hydrogeology, geotechnical stability and use of the site. The geotechnical stability analyses must also address the cyclic operation, including a site specific analysis for sudden draw down of the brine pond or any other anticipated conditions at this site from a geotechnical stability standpoint. The following information shall also be included: details of the brine conveyance and delivery system, details of the how the brine pond will be operated; contingency plans for liner system damage and repair, and any sediment cleaning anticipated, and projected life of the pond liner system.

4.1.2.2 <u>Potential Impacts.</u> This section will discuss issues associated with the design of the brine pond, including structural integrity and stability, potential failure, suitability (and available volume) of on-site soils for construction. If soils need to be imported or exported, the impacts associated with this activity will be discussed. Historic seismic activity and potential impacts to brine pond stability should also be discussed. This section should also evaluate slope stability conditions immediately up-slope of the proposed brine pond and potential effects on NYS Route 14/14A.

4.1.2.3 <u>Proposed Mitigation Measures and Alternatives.</u> This section will discuss construction of the double-lined brine pond, including soil testing and quality assurance/quality control measures to be taken during construction, efforts to ensure onsite soils are appropriately utilized, and post-construction and operational maintenance. Alternative impoundment designs that may have operational advantages in the possible event of liner system defects being detected, such as, the impoundment being designed as two separate containment systems will be provided; including the discussion of installation of a grid leak detection and location system, and underdrain system design in light of the existing hydrogeology and topography and year around conditions shall be included.

## 4.1.3 Underground Storage Caverns

4.1.3.1 <u>Existing Environmental Setting</u>. Borrowing from publicly available information submitted in connection with the underground storage permit application and site specific information, this section will discuss regional and local geology, historical use of the caverns proposed for underground storage, historic seismic or earthquake activity, and other uses and proximity of nearby caverns and their potential for interaction with the proposed LPG storage caverns.

4.1.3.2 <u>Potential Impacts</u>. Using publicly available information and site specific information, this section will discuss the suitability of the proposed caverns for underground storage of hydrocarbons. This section will include a discussion of geology, proposed storage pressures, subsidence, and mechanical integrity. Historic seismic activity and potential impacts to storage operations shall also be discussed.

4.1.3.3 <u>Proposed Mitigation Measures</u>. Using publicly available information, this section will include a discussion of the long-term brine tests and nitrogen/brine interface tests that have been or will be used to demonstrate the caverns (and casing seats) are tight and suitable for storage use. This section will also include a discussion of the methodology that will be used to demonstrate structural stability of the storage caverns and containment of LPG over the life of the project (i.e., Finite Element Analysis). Further, this section will discuss the testing and monitoring that will occur on an ongoing basis upon commencement of operations of the LPG facility. In addition, this section will address cavern development for storage and operational and maintenance procedures.

## **4.2 IMPACTS ON WATER RESOURCES**

## 4.2.1 Groundwater

4.2.1.1 <u>Existing Environmental Setting</u>. Existing groundwater resources within and in proximity of the new LPG underground storage and surface facility will be identified and

described. With regard to the proposed brine pond location, the following information should be provided: (1) define the critical stratigraphic section for the site; (2) provide an understanding of groundwater (and surface water) at the site; (3) the seasonal high and low groundwater potentiometric elevations to establish hydrological conditions at the site; (4) contour maps showing high and low groundwater potentiometric surface elevations and direction of groundwater flow, (5) the local groundwater quality, including results of background water quality sampling, and (6) the aquifer/water bearing zone(s) of the geologic unit(s) underlying the proposed brine pond will be characterized including the basic soil/rock property of permeability. This information, along with information obtained from borings, published geologic literature, site specific information, and on-site testing, will provide the basis for the hydrogeologic assessment and design of the brine pond.

4.2.1.2 <u>Potential Impacts.</u> Potential impacts that the brine storage ponds may have on groundwater will be identified and discussed, including the potential for impacts to the quality and quantity of groundwater. A spill pollution prevention plan will be prepared to reduce the potential for impact to groundwater.

4.2.1.3 <u>Proposed Mitigation Measures and Alternatives.</u> A discussion will be provided regarding the design, construction and operational procedures which will be utilized to minimize potential impacts to groundwater. This section will discuss what, if any, impact the pond will have on groundwater quality and alternatives for ensuring ground water quality including multiple layered liner systems, leak detection and monitoring strategies. Groundwater suppression must also be evaluated as a technique to ensure the stability of the ponds.

## 4.2.2 Surface Water

4.2.2.1 <u>Existing Environmental Setting.</u> Existing surface water resources, both State and federal, within and in proximity to the proposed storage facility will be identified and described. Streams, wetlands, floodplains (if any) and other surface water features will be identified and examined based on DEC and federal classification/delineation and field observations. Site drainage patterns will be described and mapped as applicable.

With regard to the proposed brine pond, information should be provided that describes the construction (depth, etc.) and what, if any, impact the pond will have on surface water quality. The stability of berms and other containment structures must be evaluated in terms of the geotechnical stability of on site soils coupled with side slope development.

4.2.2.2 <u>Potential Impacts.</u> Impacts related to the alteration of the surface water drainage patterns, erosion and sedimentation that may affect surface waters, including federal wetlands will be estimated. The potential for impacts to the quality and quantity of surface water will be evaluated.

4.2.2.3 <u>Proposed Mitigation Measures and Alternatives.</u> A storm water plan/erosion control plan will be prepared. The DSEIS will discuss the applicability of DEC's SPDES general permit both during construction and operation. In this regard, methods to control storm water runoff will be discussed. The locations of any detention basins will be provided. In addition, any leak detection or monitoring system for the brine pond will be discussed.

Mitigation measures and alternatives for any other identified impacts to surface waters, State or federal wetlands will be described and discussed.

### 4.3 NOISE IMPACTS

4.3.1 <u>Existing Environmental Setting.</u> Potential receptors will be identified and the existing noise levels and sources identified in the vicinity of the proposed storage area including support facilities such as the rail and truck loading areas. Existing or ambient noise levels will be described based on noise measurements from the site and nearby residential receptor locations. Noise sources and locations associated with the proposed storage facility and processing operations will be identified and quantified. A noise analysis will be required that is consistent with the requirements of the Department's noise guidance document DEP-00-1, Assessing and Mitigating Noise Guidance, and will include an identification of sources of noise generation, potential for adverse impacts to nearby receptors, and mitigation for those impacts.

4.3.2 <u>Potential Impacts.</u> Potential impacts associated with the operation, including truck/rail terminal operations and compressor station operations will be identified and discussed. The sources, levels, character, and duration of operational noise that may occur will be identified based on anticipated storage facility operational procedures. The impacts of project-generated noise shall be compared to existing noise levels at the project site.

4.3.3 <u>Proposed Mitigation Measures and Alternatives.</u> The DSEIS will identify and describe procedures that will be implemented to avoid or mitigate the identified potential impacts associated with noise from the project. Proposals for mitigation of long-term impacts and short term construction impacts will be identified and addressed in the DSEIS. Noise impacts associated with site operations will be assessed. The DSEIS will address measures to avoid or mitigate noise that will be incorporated into the operation to reduce impacts on the facility property at the boundaries near receptor locations and, if appropriate, upon receptor properties. Alternatives including but not limited to landscaping, hours of operation, and other Noise Policy best management practices, etc. shall also be considered.

## 4.4 TRAFFIC AND TRANSPORTATION IMPACTS

4.4.1 <u>Existing Environmental Setting.</u> Existing traffic and rail conditions in the vicinity of the proposed storage facility will be inventoried. The inventory will consider primary truck routes, key intersections along the routes, traffic volumes, and flow patterns all in relation to the rail and truck loading area. Incremental increases in traffic volumes associated with facility operation will be quantified. The inventory of the existing roadway system will include the composition and volume of current traffic flow, the posted speed limits, and the existing traffic volumes at area intersections in proximity to the facility during daily and peak periods. Any proposed modifications to the existing local transportation infrastructure will be described. The traffic data will be collected from existing reports and data.

With regard to rail, a description of the existing rail line, the activity on the rail line, and existing programs in place regarding maintenance and safety will be discussed. The DSEIS shall contain a discussion of the appropriate and authorized use and adequacy of the rail crossing of the Watkins Glen Gorge Bridge under the proposed rail load operating scenarios.

4.4.2 <u>Potential Impacts.</u> The potential impact of traffic and rail volumes and types relative to the proposed facility will be identified and evaluated including, but not limited to safety and impacts to nearby structures. Access to storage facility areas from local roads and changes to local traffic infrastructure will be identified and evaluated.

4.4.3 <u>Proposed Mitigation Measures and Alternatives.</u> The DSEIS will identify potential measures to avoid or mitigate impacts that may include road and rail construction and maintenance, signage, alternative access points to the facility, and other improvements as may be appropriate to maintain the existing level of highway service and public safety. Alternatives, e.g. access, hours of operation, onsite truck staging areas, and traffic infrastructure improvements (turn lanes, etc) should also be considered.

## 4.5 IMPACTS ON AESTHETIC RESOURCES

4.5.1 <u>Environmental Setting</u>. The DSEIS will discuss the existing visual setting for the location of the underground storage caverns, brine pond, and surface facility.

4.5.2 Potential Impact. Potential impacts from the construction of the above-ground facilities (i.e., the brine pond and surface facilities) from the perspective of sensitive resources (i.e., Seneca Lake (mid lake and distant shoreline) and State Route 414) will be evaluated consistent with the Department's Visual Policy, document DEP-00-2, Assessing and Mitigation Visual Impacts, and will include at minimum a line of sight profile from these sensitive resources. In addition, an evaluation of views from State Routes 14 and 14A will be included with respect to the brine pond and surface facilities in a manner consistent with the Department's Visual Policy. This analysis will also evaluate whether, the brine pond is visible from Seneca Lake or State Route 414, or if such visibility is an adverse impact.

4.5.3 <u>Proposed Mitigation Measures and Alternatives</u>. The DSEIS will identify potential measures to avoid or mitigate impacts, or alternatives, including landscaping, lighting, or other techniques discussed in the Department's Visual Policy; with regard to views of the brine pond and surface facility from State Routes 14 and 14A, State Route 414, Seneca Lake, and other potentially sensitive resources as necessary.

## **4.6 IMPACTS ON PUBLIC SAFETY**

4.6.1 <u>Environmental Setting</u>. The DSEIS will discuss the area surrounding the location of the proposed facility, population, other facilities nearby and the road network. Additionally the DSEIS shall discuss the available and adequacy of emergency service to handle ordinary and catastrophic accidents that may occur at the facility or in transportation of product.

4.6.2 <u>Potential Impacts</u>. The DSEIS will evaluate the potential public safety impacts including transportation accidents and catastrophic failure of any part of the facility from the operation of the surface and underground components of the LPG storage facility along with the brine pond and its potential failure. This section will also discuss brine pond liner failure and/or replacement and potential abandonment (see ECL 23-1305) or closure and decommissioning of the facility either before or after the end of its useful life.

4.6.3 <u>Proposed Mitigation Measures</u>. Initially, this section will identify the regulatory oversight for LPG storage facilities and other standards that may apply to its construction and operation. The DSEIS shall describe and append, as necessary, operating procedures,

emergency response and contingency plans, security, and spill control procedures, all of which are designed to minimize any potential public safety impact.

## 5.0 ALTERNATIVES TO THE PROPOSED ACTION

- Alternative Sites. The evaluation of alternative sites owned by, or under option, to the applicant and located in the general project area will include a comparison of the setting and potential impacts on the natural resource system (i.e., land and water), traffic, noise and the proximity of other existing and proposed facilities on the same property or adjacent thereto. This will include a discussion explaining the choice of underground caverns included in the underground storage permit application.
- Alternative Size. Alternatives that reflect the evaluation of changes in the scale or magnitude of the project (including the choice of having only one (1) brine pond instead of two (2) or more) will include a comparison of impacts on the natural resource system, traffic, and demand for utilities and community services.
- Alternative Access. The DSEIS will discuss using a neighboring property, with an existing permitted driveway, to access the surface facility.

## 6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The DSEIS will identify those natural and human resources listed in Section 4 that will be consumed, converted or made unavailable for future use.

## 7.0 GROWTH INDUCING ASPECTS

The DSEIS will identify, describe and discuss the potential growth inducing aspects that may occur as a result of the proposed project, including discussions on population, support facilities, and development potential as well as impacts on surrounding properties.

## 8.0 TABLES

#### 9.0 REFERENCES

DEC Visual Policy:http://www.dec.ny.gov/permits/6224.htmlDEC Noise Policy:http://www.dec.ny.gov/permits/6224.html

#### **10.0 APPENDICES**

## 11.0 ISSUES NOT TO BE ADDRESSED IN THE DSEIS

Prominent issues were raised during scoping that were determined not to be relevant or not environmentally significant or that have been adequately addressed in a prior environmental review and they will not be addressed in the DSEIS for this project. Such issues and potential impacts include those related to hydraulic fracturing, storage of hydraulic fracturing fluids/flowback fluids in brine pond, and natural gas drilling and production and project-related issues that have been addressed in the Generic Environmental Impact Statement (1992 GEIS) on the Oil, Gas and Solution Mining Regulatory Program.

# Table 1.0

State Agencies		
Agency	Permit/Interest	Applicable Law/Regulation
NYS DEC	Underground Storage permit Stormwater SPDES permit Well Drilling, Conversion and Plugging permits	ECL 23-1301 ECL 17-0801 ECL 23-0501
NYS DOT	Curb cut: highway permit(s) (if required)	Highway Law §52 Vehicle and Traffic Law §1220-a
NYS Office of Parks, Recreation and Historic Preservation	Cultural resources, historic preservation review	Parks, Recreation and Historic Preservation Law Article 14
Federal Agencies		
US Army Corps of Engineers	Federal Wetland Permit (if required)	
US Environmental Protection Agency	Underground Injection Control (UIC), Class II X	42 U.S.C. Part 300 et seq. Safe Water Drinking Act
Local Government		
Town of Reading	Special Use Permit/Site Plan Approval	Town of Reading Land Use Law