

New York State Department of Environmental Conservation
Division of Mineral Resources
Bureau of Oil & Gas Regulation, 3rd Floor
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Alexander B. Grannis
Commissioner

FILE COPY

February 24, 2009

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

**Re: Application for ECL Article 23 Underground Storage Permit
Finger Lakes Storage Project, Schuyler County**

Dear Mr. Moler:

Thank you for meeting with us on February 19, 2009 to discuss your proposed Finger Lakes liquefied petroleum gas ("LPG") storage project in Schuyler County.

It is our understanding that an Inergy Midstream, LLC (Inergy) affiliated company will submit storage and well applications to the Department in the near future for permits related to the subject project for the storage of LPG in existing solution mined caverns currently operated for brine production by US Salt LLC. Under Article 23 of New York's Environmental Conservation Law ("ECL"), the Department, acting through the Division of Mineral Resources ("DMN"), has regulatory jurisdiction over hydrocarbon wells and underground gas storage reservoirs in New York. As you are aware, additional permits from other divisions within the Department may be required for your project and those permits will be coordinated by the Region 8 Avon Division of Environmental Permits.

The purpose of this correspondence is to ensure that you are fully informed with respect to New York State's underground storage permit requirements for potential development of the subject project. This cites the following documents:

- Attachment 1, "How to Apply for an Underground Storage Permit." Further explanation of the application materials listed on this sheet is included in this letter.
- Environmental Conservation Law (ECL) Article 23 - New York State Oil, Gas and Solution Mining Law As Amended, 1989. Title 13 pertains to underground gas storage.
- Parts 550-559 of Title 6 of the New York Code of Rules and Regulations (NYCRR).

Underground Gas Storage Permit Requirement

ECL §23-1301 mandates that no underground reservoir (including salt caverns) be used for gas storage or its capacity modified without a permit from the Department that has been approved by the State Geologist, and lists the information that must be included in an application. Applications for modification permits and applications for new underground storage permits for the storage of LPG are similar in scope and consist of the same general components. See below for further discussion of the fee required for each. Attachment 1 serves to amplify these application requirements, particularly §§23-1301(1)(a), 23-1301(1)(b) and 23-1301(1)(d).

State Underground Storage Permit Application Materials

Numbered items below correspond to Attachment 1. All forms can be obtained through our web site, at <http://www.dec.ny.gov/energy/1612.html> and <http://www.dec.ny.gov/pubs/4761.html>. Questions regarding the organizational report, financial security, and well transfer forms may be directed to Ms. Jenna Dott of this office.

1. **Organizational Report** - All well owners, operators, drillers and pluggers must file a notarized form with DMN prior to commencing any regulated activity, including preparatory work on the well site. The well owner may authorize other persons to sign all subsequent submittals to the Department by listing them on the Organizational Report form. An updated Organizational Report must be filed with the Department when a change in address or corporate structure occurs.
2. **Financial Security** - Adequate financial security is required prior to issuance of any well drilling permit or approval of any well transfer request.
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.
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.
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.
 - 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.
 - b. Location of all existing and proposed wells within and immediately adjacent to the storage area.
 - 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.

- d. All faults or other structural or stratigraphic features depicted on the cross-sections described in item 6a below.
 - 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.
 - f. Notation of the applicant's surface and mineral rights within the vicinity of the proposed storage area.
 - 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.
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.
- 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.
 - 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.
 - c. Discussion of any core test results including caprock and salt properties.
 - 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.
 - 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).
 - 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.

- g. Discussion of historical earthquake activity, if any, within a one-half mile radius of the project area.
 - 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.
7. Subsidence monitoring plan. The subsidence monitoring plan must take into account the cavern development plan.
 8. Mechanical integrity testing ("MIT") plan. Proposed MIT pressures must be accounted for in the geomechanical analysis.
 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.
 - b. A proposed remediation plan for wells described in item a above which are not adequately completed or plugged to ensure storage gas containment.
 - 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.

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 listed on Attachment 2 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).
11. Permit Application Fee - The permit fee for a modification to an existing storage facility is \$5000 and \$10,000 for a new underground storage facility (including any proposal to store natural gas in caverns previously used or currently permitted or used to store LPG).

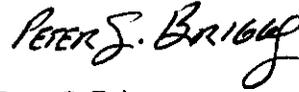
Timing and Distribution of Application Materials

Attachment 2 provides an overview of the timing and distribution of application materials for an Underground Storage Permit. As previously mentioned, approval of the State Geologist is required before the Department can issue an underground storage permit. The Department's Regional Division of Environmental Permits is responsible for review of issues outside the scope of Article 23, as well as for determining whether additional Department permits are necessary. The storage rights affidavit is necessary at the beginning of the process to document that the applicant holds a sufficient acreage position to justify

processing of its application. The check for the permit application fee is required with the applicant's initial submittal and should be made payable to "NYS Department of Environmental Conservation."

We look forward to your applications and please contact me with any questions.

Sincerely,



Peter S. Briggs
Mineral Resources Specialist 3

Enclosures

PB/tj

c: K. Bernstein, Esq. (Bond, Schoeneck & King)
J. Hairie, Esq.
W. Kelly (NYSGS)
R. McDonough
L. Collart

ATTACHMENT 1

How to Apply for an Underground Storage Permit

No underground reservoir shall be devoted to the storage of gas, liquefied petroleum gas, oil, petroleum products or petroleum byproducts unless the prospective operator of such storage reservoir shall have received from the Department, after approval in writing from the State Geologist, an underground storage permit which shall be in full force.

In the application for an underground storage permit, the following information must be submitted:

1. An Organizational Report.
2. Financial security form for all unplugged wells owned by or transferred to the applicant within storage project area.
3. Transfer of well plugging responsibilities form. This must be submitted if the operator is taking over wells for storage from other operators.
4. A completed full Environmental Assessment Form (EAF).
5. A map showing the location and boundaries of the existing and proposed underground storage reservoir. All storage wells and plugged and abandoned wells are to be indicated.
6. A report detailing the reservoir's suitability for storage. This report should contain all testing and analysis specific to design and operation of the storage reservoir in order to demonstrate that the stored product, whether natural gas or liquefied petroleum gas (LPG), can be handled and confined without impact to public health and safety and the environment. The Department recommends convening a pre-application conference with the applicant to focus the content of the report.
7. Subsidence monitoring plan.
8. Mechanical integrity testing plan.
9. A Well Status and Condition Report which includes each well in the proposed storage area.
10. An affidavit signed by the operator that the operator has acquired at least 75 percent of the storage rights in the reservoir and buffer zone. The applicant will further agree as a condition to the issuance of the permit that it will acquire the remaining 25 percent storage rights in the reservoir and buffer zone.
11. A permit application fee. For new facilities, the fee is \$10,000. For modifications to storage capacity, the fee is \$5,000.

Any increase in the storage capacity of the reservoir will require an underground storage modification permit. An increase in storage capacity by physical enlargement of an individual cavern requires a modification permit as does creation of additional storage capacity through an increase in the permitted maximum storage pressure. Conversion from storage of LPG to storage of natural gas within the same reservoir requires submission of a new underground storage permit application.

ATTACHMENT 2

NYSDEC Underground Storage Permitting Requirements
Timing and Distribution of Permit Application Materials

Item to be Submitted to the Department	Timing	Total Copies	Distribution*
Full EAF	With initial submittal	3	1 - DMN Albany 1 - DMN Avon 1 - DEP Avon
Storage Rights Affidavit	Concurrent with full EAF	1	DMN Albany
Permit Application Fee	Concurrent with full EAF	1	DMN Albany
Map(s) (see item 5 in Attachment 2)	With full EAF or as soon thereafter as possible	4	1 - DMN Albany 1 - DMN Avon 1 - DEP Avon 1 - NYSGS
Reservoir Suitability Report (see item 6 in Attachment 2)	With full EAF or as soon thereafter as possible	4	1 - DMN Albany 1 - DMN Avon 1 - DEP Avon 1 - NYSGS
Well Status and Condition Report (see item 7 in Attachment 2)	With full EAF or as soon thereafter as possible	4	1 - DMN Albany 1 - DMN Avon 1 - DEP Avon 1 - NYSGS

*Addresses

DMN-Albany

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NYSGS

Dr. William Kelly
State Geologist and Chief
NYS Geological Survey
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