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November 16, 2016

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First St., N.E.
Washington, D.C. 20426

Re: National Grid LNG LLC
Fields Point Liquefaction Project
Docket No. CP16-121-000
Supplemental Information related to Resource Report 7 and the
Soil Management Plan

Dear Secretary Bose:

On April 1, 2016, National Grid LNG LLC (“NGLNG”) submitted an abbreviated application for a certificate of public convenience and necessity for its Fields Point Liquefaction Project in Providence, Rhode Island (the “Project”). In Resource Report 7, submitted in Volume II of the application, NGLNG stated that a Short Term Response Action Plan (“STRAP”) would be used for soil disturbances during the Project. STRAPs are prepared under the Rhode Island Department of Environmental Management’s (“RIDEM”) Remediation Regulations. NGLNG has now determined that it would be more appropriate to proceed under its 2012 site-specific Soil Management Plan (“2012 SMP”), which is provided as Attachment A, to manage soil disturbance from the Project and any associated groundwater encountered.

The proposed Project site is on part of a National Grid owned property that had contained a former Manufactured Gas Plant and that was capped under previous remedial activities approved by RIDEM. In light of the character of the property, the 2012 SMP was developed and submitted to RIDEM to guide excavation, storage, and reuse or disposal of soils and the handling and management of groundwater at the National Grid owned property. By way of background, SMPs are for, among other things, construction activities that involve the movement and handling of potentially contaminated soil and any associated groundwater. In other words, the SMP is the “instruction manual” for the excavation, storage, and reuse or disposal of contaminated soils from a site and the handling and management of groundwater encountered during soil excavation.

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By following the 2012 SMP, NGLNG will minimize impacts on groundwater quality and protect worker health during Project construction. To limit the potential mobilization of contaminants in exposed subsurface soils during planned earthwork activities and excavations, strict odor and dust control methods will be implemented. In addition, NGLNG will employ a qualified Environmental Inspector who will be responsible for ensuring implementation of the 2012 SMP and other important environmental safeguards at the site. Since the 2012 SMP was developed, at least six projects have been successfully completed at Fields Point following this SMP, including the upgrade of more than 900 feet of a 16-inch diameter water main by NGLNG and the upgrade of the gas regulator station by The Narragansett Electric Company.

NGLNG has informed RIDEM that it will proceed under the 2012 site-specific SMP and RIDEM has acknowledged that the site prep work related to the placement of the liquefaction facility and equipment would not proceed under a STRAP. The correspondence between NGLNG and RIDEM is provided as Attachment B. STRAPs are for short term response or “remedial” actions under the RIDEM Remediation Regulations such as with an emergency stemming from the release of hazardous materials. The proposed soil and groundwater management protocols under the SMP are consistent with what would be followed under a STRAP. RIDEM will still receive information on the activities under the 2012 SMP because the plan recommends that RIDEM be notified prior to commencing these types of activities. As a result, NGLNG will notify RIDEM of its planned work and any Commission comments on the SMP.

Please do not hesitate to contact me if there are any questions.

Sincerely,

/s/ Andrea Wolfman

Andrea Wolfman

Counsel for National Grid LNG LLC

Enclosures

cc: Service list
Kenneth Warn, OEP
Christina Hoffman, Environmental Resources Management
Anthony LaRusso, National Grid
Wendy B. Levine, National Grid
Robin Main, Hinckley Allen LLP

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Attachment A

Soil Management Plan



**SOIL MANAGEMENT PLAN
642 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND**

PREPARED FOR:
RIDEM
Providence, Rhode Island

ON BEHALF OF:
National Grid USA
Waltham, Massachusetts

PREPARED BY:
GZA GeoEnvironmental, Inc.
Providence, Rhode Island

September 2012
File No. 33554.00

GZA
GeoEnvironmental, Inc.

*Engineers and
Scientists*

September 12, 2012
File No. 03.0033554.00-C



Mr. Joseph Martella
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908-5767

Re: Soil Management Plan
642 Allens Avenue
Providence, Rhode Island

530 Broadway
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401-421-4140
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<http://www.gza.com>

Dear Mr. Martella:

Attached is the most recent version of the *Soil Management Plan* (SMP) for the 642 Allens Avenue Property (Site) in Providence, Rhode Island. The plan was prepared by GZA GeoEnvironmental, Inc., (GZA), on behalf of National Grid, to establish procedures to be followed during the installation of subsurface lines and other construction related activities at the Site that disturbs the subsurface.

Should you have any questions or comments, do not hesitate to call the undersigned at 401-421-4140, or Amy McKinnon, from National Grid, at 781-907-3644.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'MSK', written over a light blue circular stamp.

Margaret S. Kilpatrick, P.E.
Senior Project Manager

A handwritten signature in blue ink, appearing to read 'James J. Clark', written over a light blue circular stamp.

James J. Clark, P.E.
Principal

MSK/JJC:tja

Attachments: Soil Management Plan

cc: Amy McKinnon, National Grid

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1.00 INTRODUCTION



On behalf of the Narragansett Electric Company d/b/a/ National Grid (National Grid), GZA GeoEnvironmental, Inc., (GZA) has prepared this *Soil Management Plan* (SMP). The SMP serves to provide guidance relating to the excavation, storage, and reuse or disposal of soils from the National Grid-owned property located at 642 Allens Avenue in Providence, Rhode Island (the “Site”). This plan also provides guidance related to the handling and management of groundwater. This SMP is subject to the Limitations provided in Appendix A.

The Site is identified on the Providence Tax Assessor’s Map as Assessors Plat (AP), Lots 5, 273, 316, and 317, and as Plat 101, Lot 1. A Site *Locus Plan* is included as Figure 1.

The Site is the location of a former manufactured gas plant (MGP) and prior environmental testing indicated the presence of MGP-related contaminants at concentrations above certain regulatory criteria. The Site is currently occupied by National Grid for use as an active natural gas distribution facility. A tenant Holcim (Canada) Inc., (Holcim), a cement company, occupies the southeastern portion of the Site.

Note that the coastal resource areas of the Site (the Providence River) are subject to regulation by the Coastal Resources Management Council (CRMC), Rhode Island Department of Environmental Management (RIDEM), the U.S. Army Corps of Engineers (ACOE), and the U.S. Coast Guard (USCG). In addition, stormwater management, treatment and discharge may be subject to Narragansett Bay Commission (NBC) or RIDEM Rhode Island Point Discharge Elimination System (RIPDES) jurisdiction. Accordingly, an evaluation of potential regulatory requirements must be evaluated prior to the initiation of projects by National Grid Environmental personnel.

This SMP is based in part on the May 2009 SMP developed by VHB on behalf of National Grid. It has been prepared to establish procedures that will be followed during future construction/maintenance activities at the Site, which require the need to manage soils excavated and groundwater removed from the subsurface.

- Section 1.0 includes this introduction;
- Section 2.0 describes the Site and provides relevant background information;
- Section 3.0 presents a summary of the Site hydrogeologic features;
- Section 4.0 summarizes soil and groundwater quality data;
- Section 5.0 presents soil and groundwater management guidelines; and
- Section 6.0 presents health and safety guidelines.

2.00 SITE DESCRIPTION/BACKGROUND

The following provides a brief description and history of the Site and a summary of relevant past operations. For more detailed information, please refer to the April 2003 *Site Investigation Report* (SIR) submitted to RIDEM.



The Site consists of an approximately 42-acre parcel of land and is bound to the west by Allens Avenue, to the east by the Providence River, to the northwest by the Motiva Terminal property, to the northeast by a water lot owned by Motiva, to the southwest by Terminal Road, and to the south and southeast by UNIVAR (a chemical distributor), the former Sun Oil/ProvPort facility, the LeHigh Cement Distribution Company and the New England Petroleum Terminal Corporation. All surrounding properties are industrial in nature and either historically or currently store(d) petroleum and/or hazardous materials and have the potential to impact the Site. (Refer to Figure 2 for a *Site Plan*).

The Site is comprised of three principal areas and associated operations (as shown on Figure 2):

- National Grid's 642 Allens Avenue facility;
- National Grid's 670 Allens Avenue Compressed Natural Gas (CNG) Fueling Station;
- The Liquefied Natural Gas (LNG) facility operated by National Grid LNG; and
- Holcim's Cement facility.

The MGP occupied portions of all three locations described above. The main entrance to the Site is on Allens Avenue, on the west side of the Site. There are also gated entrances to the National Grid LNG site and Holcim facilities off Terminal Road.

From 1910 until 1954, an MGP operated at the Site producing coal gas, carbureted water gas, and high-BTU oil gas. Gas manufacturing by-products were routinely managed through recovery, storage, recycling, reprocessing, and resale of the by-products. Such by-products included coke, coal tar, ammonia, toluene, and benzene. B.P. Clapp operated an ammonia works at the Site beginning in 1910, and managed the recycling and sale of ammonia by-products. The United States Government operated a toluene facility at the Site for a short period of time during 1918.

In 1952, a liquefied petroleum gas distribution plant began operation at the Site. By 1954, coal gasification operations at the Site had ceased. As indicated previously, a LNG facility has operated on the eastern and southeastern portions of the Site since 1972 and Holcim (formerly, St. Lawrence Cement Company) has leased the southeastern section of the Site since 1961.



3.00 HYDROGEOLOGIC CONDITIONS

Site stratigraphy generally consists of fill materials, underlain by organic deposits/ materials, underlain by a discontinuous layer of sorted sands (outwash deposits) and underlain by glacial till. In general, the shallow fill consists of sands and gravels with cinders, cinder ash, coal fragments, wood chips and bricks. Bedrock is expected to be more than 100 feet below ground surface (bgs). The organic materials, which occurs at various depths ranging from 16.5 to 19 feet bgs is likely to an original tidal mud deposit. The glacial till is very dense, heterogeneous and poorly sorted.

Groundwater is encountered at depths of approximately 2 to 8 feet below the ground surface across the Site and is inferred to flow to the northeast toward the Providence River and to the north towards the cove area. Groundwater is tidally influenced and the groundwater table is predominantly encountered within the fill materials. Groundwater underlying the Site is classified by RIDEM as “GB” or not suitable for potable use without treatment due to known or presumed degradation.

4.00 SUMMARY OF ENVIRONMENTAL IMPACTS

Based on the type of chemical constituents present at the Site, the potential routes of exposure to excavation and/or utility repair workers include inhalation, dermal contact or accidental ingestion of impacted soil and/or groundwater, and the possible introduction of contaminants through broken skin. Utilization of the appropriate personal protective equipment and the general safety guidelines provided herein will serve to minimize the potential for worker exposure to impacted media while performing work.

The following sections present a summary of soil and groundwater quality at the Site. This information was obtained from previous environmental studies of the Site. For further detail, please refer to the following:

- February 1995 *Summary Report Phase 1A Field Characterization Investigations* prepared by Resource Controls (RCA);
- June 1996 *Summary Report Phase 1B Field Characterization Investigations* prepared by RCA; and,
- September 2003 *Site Investigation Report (SIR)* prepared by VHB.

In planning activities that may include disturbance of impacted materials, a qualified environmental consultant¹ shall review this environmental data and develop appropriate project-specific procedures for addressing impacted soil and groundwater disturbance/management/disposal and worker health and safety consistent with this SMP.

¹ For the purpose of this document, this term is consistent with the definition of “Environmental Consultant” contained in RIDEM’s *Rules and Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Material* dated April 2011.



4.10 CONSTITUENTS OF CONCERN

Based on the results of the previous investigations described in the above reports, certain constituents of concern (COCs) were detected in soil and groundwater associated with former operations at concentrations that represent Method 1 exceedances of the RIDEM *Rules and Regulations for the Investigation and Remediation of Hazardous Waste Materials* (Remediation Regulations, DEM-DSR-01-93, as amended). Please refer to the 2003 *SIR* for a complete data set.

For the Site, the following exceedances have been documented:

- **Industrial/Commercial Direct Exposure Criteria (I/C DEC):** arsenic, lead, total petroleum hydrocarbons (TPH), and several polynuclear aromatic hydrocarbons (PAHs);
- **GB Leachability Objectives:** TPH, benzene, toluene, ethylbenzene, and xylene;
- **GB Groundwater Objectives:** benzene and naphthalene;
- **Soil Upper Concentration Limits:** TPH, lead, and naphthalene; and
- **Groundwater Upper Concentration Limits:** light non-aqueous phase liquid (LNAPL) and trace amounts of dense non-aqueous phase liquid (DNAPL).

4.20 EXTENT OF CONTAMINATION

The extent of impacted soil associated with the former MGP usage varies throughout the Site. In addition to MGP impacts, much of the Site and its surroundings are filled land and may contain hazardous materials-impacted soils not associated with the former MGP. Based on the above, soil management guidelines are necessary to ensure soils are managed with consideration to the project remedial goals and the Remediation Regulations.

Areas that have been remediated and capped with approximately 2 feet of cover material include the former Compressor Building No. 1 area and the northwestern and southern portions of the National Grid LNG Site (see Areas 1, 2, and 3 on Figure 3, *Remediated Areas*). The former Materials Handling Area has had approximately 6 inches of clean loam applied and has a grass cover established to stabilize the soils.

Subsurface soil exceedances exist throughout the Site, but there appears to be concentrated areas of exceedances in the general vicinity of the former Gasholders No. 18 and No. 21, the former Purifier Area, and the National Grid Regulator Area.

NAPL has been observed in the subsurface throughout the Site, with both LNAPL and dense non-aqueous phase liquid (DNAPL) occurring. LNAPL occurs in trace amounts proximate to the former Gasholders Nos. 18 and 21, trace amounts proximate to the former propane cradles in the central portion of the Site and in thicknesses ranging from approximately trace amounts to 3 feet thick in the eastern portion of the Site (within the LNG facility). DNAPL occurs in the northern portion of the Site, proximate to the cove, in trace amounts only.

4.30 REMEDIAL ACTIONS

Several remedial actions have been completed at the Site.



In June 1999, Environmental Science Services (ESS) supervised the excavation of surface and subsurface soils in preparation for the construction of a vaporizer pad, located to the south of the offload area on the National Grid LNG portion of the Site. Subsurface piping was removed and recovery wells and groundwater flow barriers were installed to aid in the recovery of LNAPL. Areas that were excavated were capped with approximately 2 feet of clean fill or were covered by structures (the vaporizer pad). The area west of the LNG tank sub-impoundment was also excavated as part of these remedial activities. See Area 1 on Figure 3, for the location of this area.

Additional remedial actions were initiated in May 2002 at the Site and were conducted in accordance with the ESS *Remedial Action Work Plan* (RAWP) (as amended), which was approved in 1998 and a Temporary Remedial Action Permit issued by RIDEM in 2002. See Areas 2 and 3 on Figure 3 for the location of the remediated areas. These remedial actions consisted of the removal of MGP waste and impacted soils from subsurface structures and their surroundings and construction of engineered caps in portions of the Site. VHB supervised some of these remedial actions. The Remedial Objectives (ROs) for this project were divided into three categories: surface soil objectives (0-2 feet bgs); subsurface soil objectives (>2 feet bgs) within 100 feet from the shore; and subsurface soil greater than 100 feet from the shore. These ROs were based on the RIDEM DEC (surface soil) and UCLs (subsurface soil). The ROs from the 1998 ESS RAWP are provided in Appendix B.

Based on the industrial nature of the surrounding properties, the documented releases of petroleum hydrocarbons on all surrounding properties, the continued large-capacity storage of petroleum products, and the excavation of source materials within the Site, it was proposed, in the *Site Investigation Report*, to address groundwater impacts through monitoring and passive recovery of non-aqueous phase liquid (NAPL).

5.00 SOIL AND GROUNDWATER MANAGEMENT GUIDELINES

This SMP has been prepared to establish procedures that will be followed should future construction/maintenance activities at the Site require the need to manage soils and groundwater during excavation activities. As previously noted, soils have been detected at the Site exceeding the RIDEM-approved Remedial Objectives, as well as RIDEM Industrial/Commercial DEC, GB Leachability Criteria, and UCLs.

Soils generated from an excavation conducted at the Site may be placed back into its original excavation, based on the discretion of the environmental consultant (refer to Section 5.20). However, so as to maintain known exposure scenarios, every attempt shall be made to backfill the excavation so that the corresponding depth and location of the backfilled soil resembles the depth and location at which the soil originally existed. In certain areas where remedial



actions have been completed, this requirement includes the reinstallation of the geosynthetic barrier and the re-placement of the engineered control cap. Excess materials and/or materials deemed unsuitable for use as backfill shall be managed and disposed of in accordance with this SMP. As described previously, the natural groundwater table is encountered at depths ranging from approximately 2 to 8 feet below grade and has been observed to be tidally influenced, with the groundwater table is generally observed within the fill unit. In addition, NAPL has been observed in certain areas of the Site. Projects involving excavation below the water table and/or disturbance of impacted groundwater will require additional controls and Best Management Practices (BMPs) as described below. As part of any construction activities, soils will need to be stockpiled within the Site area. Specifics regarding stockpiling protocol are outlined in the following sub-sections.

5.10 PRELIMINARY ACTIVITIES

- While formal RIDEM approval of planned utility/construction projects is not a requirement, it is recommended that RIDEM be notified prior to commencing these types of activities.
- Before preparing for any planned activities involving the disturbance of materials beneath any of the engineered controls, this SMP shall be reviewed by a qualified environmental consultant. Project-specific plans shall be prepared in consideration of the Site conditions and soil and groundwater impacts described herein, so as to prevent potential human exposures to or migration of hazardous materials.
- Should any project require the need for dewatering and/or disturbance of impacted groundwater in support of excavation/construction, the qualified environmental consultant shall plan to manage, contain, treat (if necessary) and discharge or dispose of impacted groundwater. In addition, all appropriate regulatory approvals related to the removal, handling, treatment and discharge of impacted groundwater shall be in-place prior to the initiation of the project. Such plans shall, at a minimum, include an evaluation of water quality and the potential presence of NAPL, the method by which water will be treated, contained and/or discharged/disposed and the necessary regulatory approvals, permits, *etc.* Impacted, untreated groundwater shall not be discharged directly to the ground surface, collection utilities or neighboring water bodies.
- Prior to the initiation of soil excavation, the selected contractor or any other personnel performing subsurface work at the Site shall contact DIGSAFE[®] and appropriate utility companies to identify and mark the location of below grade utilities.
- Prior to performing the proposed work, the selected contractor and/or responsible party shall obtain all applicable federal, state and local permits. As noted, portions of the Site are located within the jurisdictional limits of the CRMC. A jurisdictional determination of the requirements of the CRMC shall be made prior to the implementation of proposed construction projects. If applicable, CRMC approval shall be obtained prior to conducting the work.



- As described further herein, prior to conducting any earthwork/construction activities that involves disturbance of materials, a qualified environmental consultant shall be consulted to determine the appropriate level of health and safety training required by personnel involved with the work, the personal protection equipment required, and general health and safety guidelines. A project-specific Health and Safety Plan (HASP) shall be prepared by a qualified Certified Industrial Hygienist (CIH) and strictly adhered to during all phases of the work.

5.20 SOIL SCREENING/DISPOSAL REQUIREMENTS

- Environmental consultant(s) will be available during earthwork activities to provide guidance regarding the management of potentially impacted soil and groundwater. The environmental consultant will monitor the work areas during soil excavation to conduct observations and for field screening/soil sampling, and will be available on a fulltime or as needed basis. The environmental consultant will summarize all observations and sampling activities in daily field reports that will serve as the Operating Log.
- If unusual observations are made during excavation anywhere in the work area (*e.g.*, NAPL, buried containers, or unusual odors), work in the subject areas shall stop immediately. Workers should not excessively handle the material of interest and will notify the NGRID's construction project supervisor and request further direction. The construction project supervisor will in turn notify NGRID's Environmental Department. Unusual material will be segregated by the contractor and characterized by the environmental consultant per the following bullet.
- The contractors, with guidance from the environmental consultant, will segregate any suspect soil ("suspect soil" includes observations of NAPL or unusual odors) based on visual observations and total volatile organic compounds (TVOC) headspace screening via a photo ionization detector (PID). Any soils which exceed a TVOC concentration of 50 parts per million per volume (ppmv) or which exhibits visual or olfactory evidence of contamination will be segregated for laboratory analysis for comparison to the RIDEM regulatory criteria and disposal parameters. The segregated soil will be stockpiled by placing on two layers of 6 mil polyethylene sheeting, or stored in roll-off type containers or drums. In either case, the material in storage will be covered with secured polyethylene sheeting at the end of each work day, as specified in Section 5.30. All other soil will be considered suitable for reuse on the Site, but must be stockpiled in accordance with Section 5.30. The environmental consultant will sample segregated soil every 1,000 cubic yards for TPH via Method 8100M, semi-volatile organic compounds (SVOCs) via Method 8270, arsenic and lead via Methods 200s/6010/7000s and volatile organic compounds (VOCs) via Method 8260/5035. A determination regarding the potential for such soils to be reused on the Site will be made by comparing the laboratory analytical data to the RIDEM approved surface and subsurface Remedial Objectives per the 1998 RAWP (see Appendix B).



- Should soils with evidence of NAPL be discovered during excavation, these materials and/or soils shall be segregated for disposal at a licensed facility approved by National Grid.
- Soil disposal documentation for non-hazardous soil will be maintained on file by National Grid.
- For soil disposed of as a hazardous waste, disposal documentation (*i.e.*, Hazardous Waste Manifests) will be provided to National Grid for distribution to RIDEM.
- Any soil remaining after the completion of construction activities requiring disposal (based on analytical results) at a licensed and National Grid approved facility will be kept on polyethylene sheeting and covered until it is shipped off-Site.
- **Soils excavated from the Site shall not be re-used at non-permitted locations off-Site.** All excess Non-RCRA Hazardous soils shall be transported to a licensed thermal desorption or other similar type of facility for treatment/recycling. In the event RCRA Hazardous materials are generated, these materials shall be disposed off-Site at a licensed hazardous waste disposal facility. A qualified environmental consultant shall collect samples of the excavated soils (either during excavation or from stockpiles) for laboratory testing. Soil must be sampled at a frequency adequate to support the data requirements of the selected recycling/disposal facility.
- The National Grid Environmental contact will make arrangements for the disposal of the material and will sign as the generator of these materials on all waste profiles and shipping manifests. Copies of these records shall be provided to National Grid.

5.30 SOIL STOCKPILE MANAGEMENT/EROSION CONTROL

- Segregated materials which meet the on-Site re-use requirements, and can be re-used on the Site considering the scope of the active project, will be temporarily stockpiled on 6 mil polyethylene sheeting. Temporary stockpiles may also be created adjacent to excavation areas to accommodate the contractor's work schedule throughout the Site area.
- Excavated materials shall be temporarily staged on two layers of 6-mil polyethylene sheeting in working stockpiles adjacent to excavations. Depending on the volume of material involved in the project, soils shall be either stockpiled on polyethylene sheeting as described herein, or stored in lined roll-off type containers or drums. No excavated materials shall be placed directly on the ground surface. At the end of each work day, all stockpiles shall be covered with 6-mil polyethylene sheeting to control the generation of wind-blown dusts and potential migration of soils with stormwater runoff. Stockpile areas shall be equipped with appropriate controls to limit the loss of the cover and protect against storm water erosion. These controls shall include the installation of hay bales, silt fencing and any other appropriate measures during the



entire duration of the project. Stockpiles shall be inspected daily by site personnel. Should tears or punctures be observed in either the polyethylene sheeting covering or underlying the piles, repairs shall be made immediately. Daily shutdown procedures shall include the covering and securing of all stockpiled material area with polyethylene sheeting and appropriately sized materials to secure the polyethylene sheeting in place.

- All catch basins/storm drains proximate to work areas will also be protected from excessive sediment discharge by placing staked haybales or similar protective devices around its perimeter. All catch basins/storm drains will be protected and inspected daily during the course of the entire project to ensure haybale placement and integrity.
- Stockpiled soils shall be staged and temporarily stored in a designated area of the Site for no more than 90 days. To the extent practical, the storage location shall be selected to limit the unauthorized access to the materials (*i.e.*, away from public roadways/walkways).
- Soil, construction material and/or debris stockpile areas shall not be located on any coastal feature, within 200-feet of the inland edge of the coastal feature or in coastal waters.

5.40 DUST AND ODOR CONTROL

All reasonable precautions must be taken to prevent the excessive generation of dust and/or nuisance odor during soil excavation, stockpiling, loading, and other soil handling activities. At a minimum, the PM₁₀ dust concentration, as measured with a real-time dust monitor, shall not exceed 150 ug/m³ over a 24-hour period. Dust control measures must be implemented, as required, to prevent airborne particulate matter from leaving the Site at all times. Methods of stabilization consisting of sprinkling, mulching, or similar methods shall be employed as soil conditions warrant (*i.e.*, visual evidence of dust). Odor controls such as sprinkling, covering of piles and/or disturbed areas, and use of foams or other techniques shall also be employed as necessary to control odors.

Work at the Site must comply with all applicable federal, state, and local regulations, including the RIDEM's *Air Pollution Control Regulations*, and specifically Regulation No.5 regarding control of fugitive dust. The contractor will conduct dust/odor control measures during and after normal work hours and on weekends as necessary to control dust/odors. All stockpiles shall be inspected on a daily basis to ensure compliance with RIDEM *Air Pollution Control Regulations*.

5.50 CAPPING REQUIREMENTS

Following construction activities, soils will be managed in a manner which ultimately results in these materials being interred in the following manner.



- All excavated soils which meet the re-use criteria (refer to Appendix B – RIDEM approved Remedial Objectives) will be re-interred (if possible).
- Soil meeting the surface soil Remedial Objectives will be used as surface soil or subsurface backfill. Soil passing the subsurface soil Remedial Objectives will be used only as subsurface soil backfill.
- Soil not meeting the subsurface Remedial Objectives or soils that cannot be reused will be disposed at a National Grid approved licensed facility.
- The replacement of the existing surficial cap should consist of either: (1) two feet of clean soil, (2) one foot of clean soil underlain by permeable geosynthetic; (3) asphalt pavement cover; or (4) permanent structures with concrete slab.

5.60 DECONTAMINATION PROTOCOL

Since heavy equipment/hand tools may remain onsite for several days, decontamination need not occur on a daily basis. At the conclusion of the construction activities, heavy equipment and tools will be decontaminated. Soil will be brushed from the equipment and containerized prior to washing the equipment surfaces. The containerized material should be sampled for disposal determination (as required) and then properly disposed at an off-Site facility. All liquid (water) generated as a result of decontamination procedures will be spread over as large an area as possible and allowed to infiltrate the ground surface.

Crushed gravel will be placed at the construction boundary zone to facilitate the removal of excess soil from vehicle tires for vehicles which need to leave the work zone on a daily basis (such as vehicles used to transport soil).

5.70 OTHER SOILS

Any clean fill material brought on-Site is required to meet the RIDEM's Method 1 Residential Direct Exposure Criteria or be designated by a qualified environmental consultant as Non-Jurisdictional under the Remediation Regulations. All clean fill, including sub-grade material and loam, imported to the Site must be sampled prior to delivery and placement. Laboratory analytical results shall be reviewed by a qualified environmental consultant and National Grid prior to acceptance or delivery to the Site. Clean fill and loam shall be sampled for arsenic at a minimum frequency of one sample per 500 cubic yards. One-quarter of the total number of compliance samples of clean fill and loam shall be sampled for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and the 13 priority pollutant metals. Any fill determined to be non-jurisdictional will also require the submission of a written certification by a qualified

environmental consultant designating that the fill is not jurisdictional. Any clean fill that is stockpiled on the Site prior to use will be segregated from any stockpiles of excavated soils, although must be stockpiled pursuant to Section 5.30.

5.80 DEWATERING



Laboratory analytical results of Site groundwater samples indicate the detection of hazardous substances that exceed RIDEM GB Groundwater Objectives and possibly sewer or surface water discharge criteria. If dewatering is necessary, all impacted fluids shall either be properly treated on-site for subsequent surface water or Narragansett Bay Commission (NBC) discharge, or containerized for off-Site disposal. Any discharges shall be performed consistent with all applicable regulations and permits. With respect to fluids to be disposed off-site (including NAPL), they shall be properly transferred and containerized to prevent discharges or leaks, characterized per the requirements of the receiving facility, and subsequently transported to a fully licensed/permitted treatment/recycling facility. **Impacted, untreated groundwater shall not be discharged directly to the ground surface, collection utilities or neighboring water bodies.** Open excavations shall be protected when feasible to prevent introduction of stormwater runoff and/or precipitation into the excavation (ie. staked haybales to berm the edge of excavations, etc.) If dewatering is part of the Contractor's scope of work, the cost implication of dewatering, permitting and disposal must be included in the bid costs.

5.90 MANAGEMENT OF NON SOILS

Work area excavations may unearth solid debris and/or refuse materials such as concrete, brick, rubble, pipe, lumber and other building materials. This material should be segregated to the extent feasible and stockpiled separately utilizing the procedures outlined above. Disposal of this material is not the subject of this plan and will be handled by the contractor in a manner consistent with demolition and refuse clearing projects and in accordance with RIDEM *Solid Waste Regulations*, and subject to National Grid approval.

6.00 HEALTH AND SAFETY GUIDELINES

The basic health and safety procedures outlined below are intended as a general guideline for basic short-term excavation activity conducted at the Site and that a project- specific HASP may be warranted for complex or long-duration subsurface work. **The contractor is responsible for developing their own HASP and to provide site safety personnel who will be responsible for ensuring that safety measures are strictly followed.** Prior to starting work, the project-specific HASP must be reviewed by National Grid.

6.10 PERSONNEL PROTECTIVE EQUIPMENT (PPE)

In general, the level of protection which will be used by workers will be determined by the task which the person is performing; however, at a minimum, workers performing excavation

work subject to the SMP are required to wear the following Level D personnel protection equipment (PPE):

- Safety leather steel toe boots;
- Rubber or leather gloves;
- Eye and hearing protection;
- Hard hats; and
- Florescent vests.



6.20 SITE OPERATING PROCEDURES / SAFETY GUIDELINES

Regardless of the level of PPE necessary to complete work, the following general health and safety guidelines shall be followed during the performance of any excavation activities conducted.

- Workers conducting site activities under this SMP should do so with consideration to OSHA Standards including OSHA Standard 29 CFR 19.10-120.
- Site security shall be maintained on a continuous basis. No trespassers will be allowed.
- Work in the LNG portion of the site will be performed in accordance with National Grid's LNG safe practice procedures for that area of the Site.
- A pre-work meeting will be conducted at the start of every workday to discuss the health and safety procedures.
- The location of all utilities in the vicinity of the excavation shall be established prior to beginning work.
- Practice contamination avoidance: never sit or kneel in an excavation; never lay equipment on the ground; avoid obvious sources of contamination; and avoid unnecessary contact with objects in an excavation.
- Be alert to any unusual changes in your physical condition; never ignore warning signs. Notify the responsible employee as to any changed conditions.
- All equipment used in an excavation shall be properly cleaned and maintained in good working order. Equipment shall be inspected for signs of defect and/or contamination before use.
- Eating, drinking, chewing gum, and smoking shall be prohibited in active excavation areas.



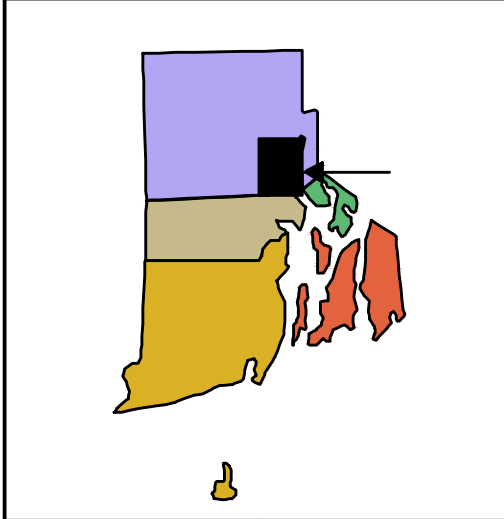
- During working hours, workers who stop to drink or eat should leave the active work area, remove PPE, and wash hands thoroughly with soap and water prior to eating or drinking.
- The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated shall result in the evacuation of personnel from the excavation and the re-evaluation of the hazard and the level of protection; and
- At the completion of work, workers are required to wash their hands with soap and water or use pre-moistened wipes (such as Go-Jo wipes) before leaving the Site. All workers' safety boots are required to be brushed with a stiff bristle brush or similar instrument (not by hand) to remove residual soil. Used disposable PPE (such as Go-Jo[®] wipes, nitrile or latex gloves, boot covers, and Tyvek[®] suits, if necessary) is required to be disposed according to applicable regulations.

6.30 EMERGENCY PHONE NUMBERS

Emergency telephone numbers and the directions to the nearest hospital are included below. This information shall also be included in the project-specific HASPs developed for the activity and shall be periodically reviewed and updated as needed.

Response Agency	Phone Number
Ambulance	911
Police	911
Fire	911
RIDEM/Office of Compliance & Inspection/Emergency response Program	(401) 222-1360 or (401) 222-3070 (non-business hours)
USEPA/Hazardous Materials Spills	(800) 424-8802
Poison Control Center	(800) 562-8236
DigSafe [®] (Utility Clearance)	1-888-DIGSAFE
Hospital	
Rhode Island Hospital 593 Eddy Street Providence, RI 02903	401-444-4000
Route to Hospital	
<ol style="list-style-type: none"> 1. Turn RIGHT out of the Site onto ALLENS AVENUE 2. Turn LEFT at the ninth turn onto PUBLIC STREET 3. Turn RIGHT at the first turn onto EDDY STREET 4. End at 593 EDDY STREET 	

FIGURES

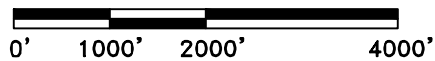


BASE MAP FROM THE FOLLOWING USGS QUADRANGLE MAP:
PROVIDENCE, RHODE ISLAND-MASSACHUSETTS (1987)

DIGITAL TOPOGRAPHIC MAPS PROVIDED BY MAPTECH, INC.

CONTOUR ELEVATIONS REFERENCE NGVD 29,
CONTOURS ARE SHOWN IN METERS AT 3 INTERVALS

APPROXIMATE SCALE IN FEET



NATIONAL GRID GAS FACILITY
642 ALLENS AVENUE

PROVIDENCE, RHODE ISLAND

LOCUS PLAN

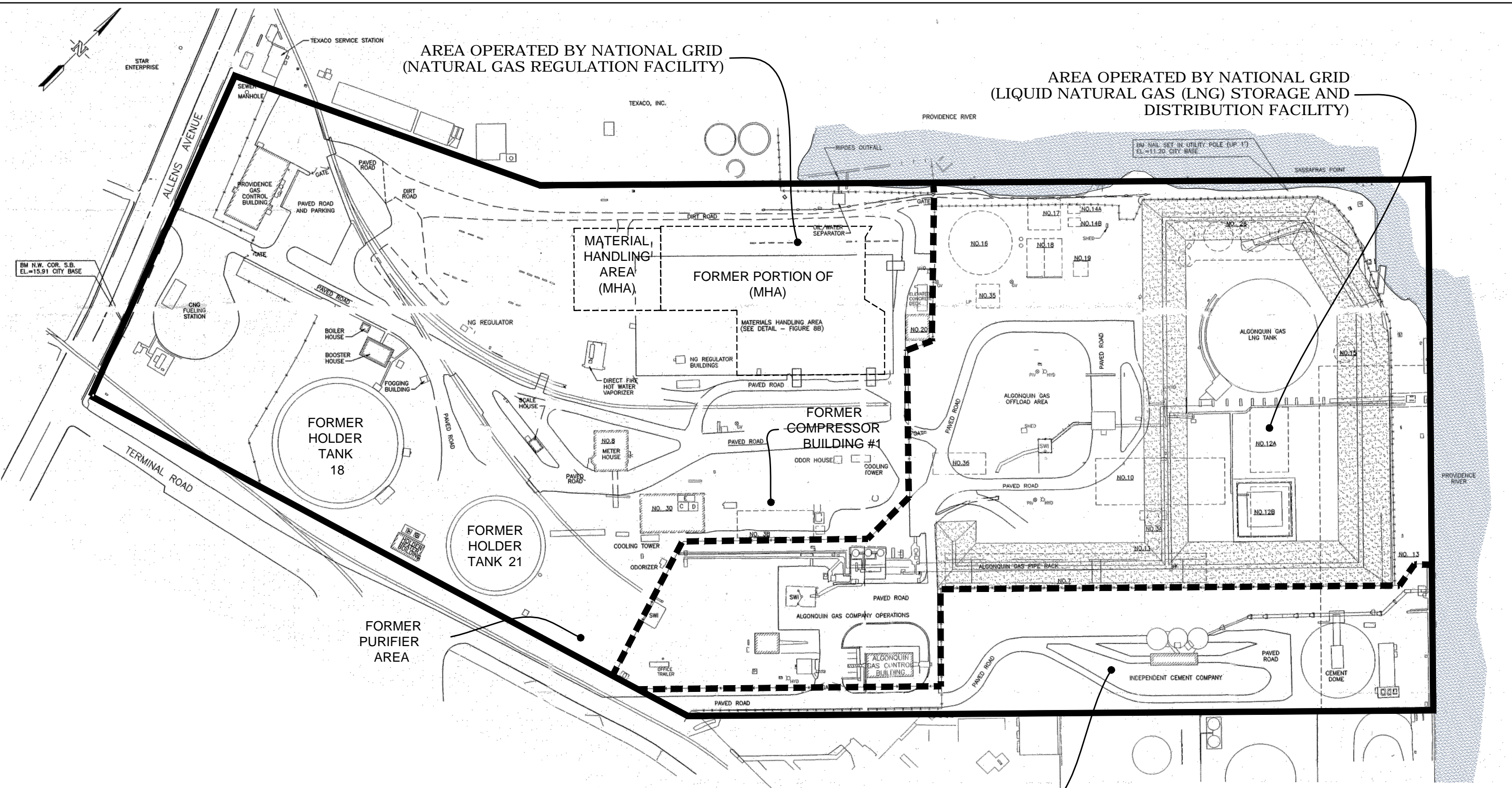
SEPTEMBER 2012

FIGURE NO. 1

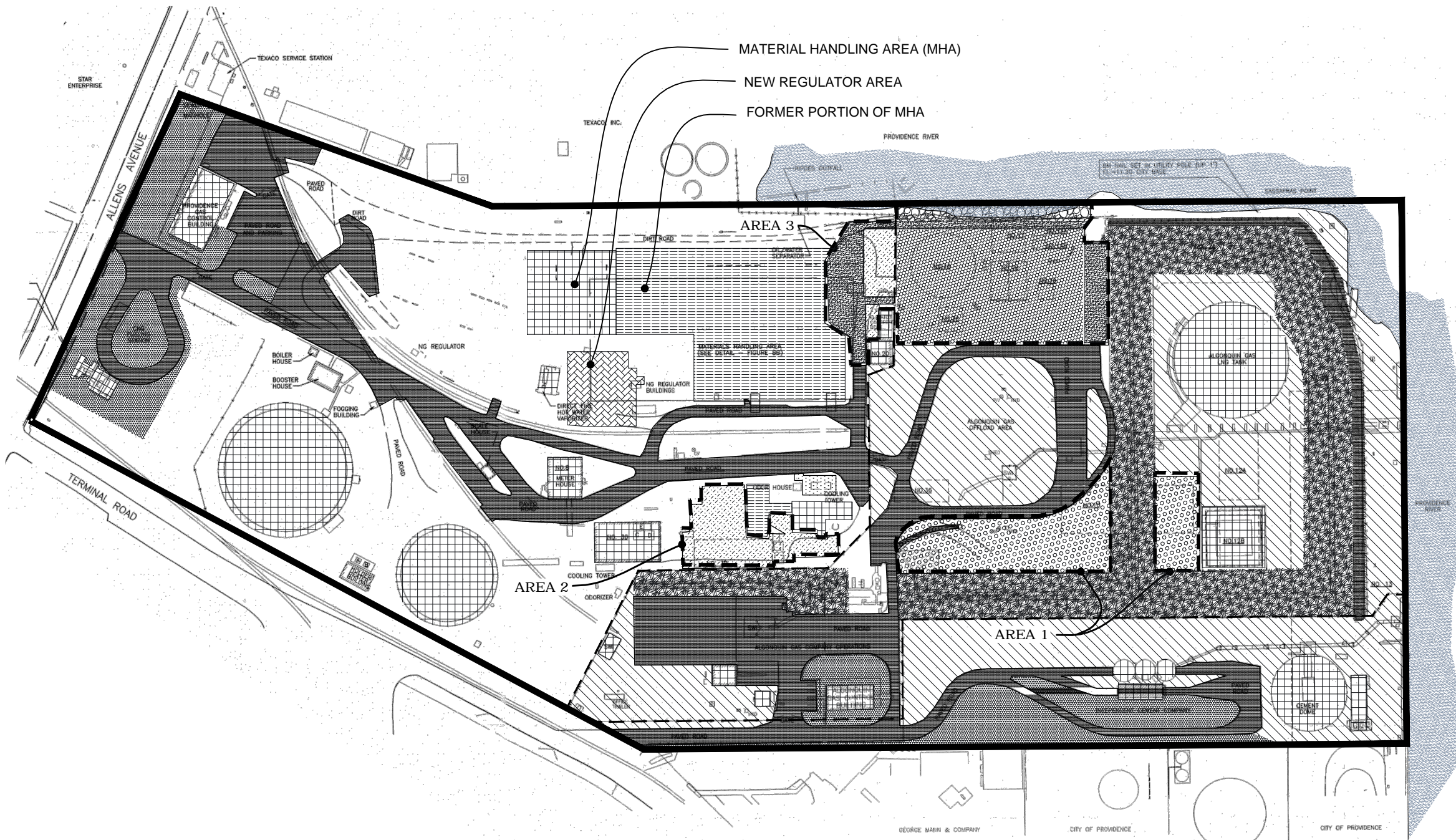
AREA OPERATED BY NATIONAL GRID
(NATURAL GAS REGULATION FACILITY)

AREA OPERATED BY NATIONAL GRID
(LIQUID NATURAL GAS (LNG) STORAGE AND
DISTRIBUTION FACILITY)

AREA OPERATED BY
HOLCIM (CANADA), INC.



NOTE:
 1) BASE MAP DEVELOPED FROM ELECTRONIC SCAN PROVIDED BY NATIONAL GRID, PREPARED BY ESS ENVIRONMENTAL SCIENCE SERVICES, INC., ENTITLED "SITE LAYOUT PLAN," DATED DECEMBER 3, 1998, ORIGINAL SCALE 1"=80', DRAWING No. P1P51-8A.



- AREAS OF REMEDIATION**
- AREAS CAPPED WITH APPROXIMATELY 18-20 INCHES OF CLEAN SAND, APPROXIMATELY 4-6 INCHES OF LOAM AND HYDROSEED
 - AREAS CAPPED WITH WITH APPROXIMATELY 2 FEET OF STONE DUST
 - AREAS CAPPED WITH APPROXIMATELY 18-20 INCHES OF CLEAN SAND AND APPROXIMATELY 4-6 INCHES OF CRUSHED STONE
 - AREAS CAPPED WITH 2 FEET OF CLEAN FILL
 - AREAS REMEDIATED BY ESS, CLEAN SAND AND CRUSHED STONE CAP
 - AREAS CAPPED WITH GEOTEXTILE AND APPROXIMATELY 24 INCHES OF RIP RAP
- AREAS EQUIVALENT TO AN ENGINEERED CAP**
- BUILDING/STRUCTURE
 - PAVED AREAS
 - CONTAINMENT DIKE
- OTHER AREAS**
- APPROXIMATELY 4-6 INCHES OF LOAM AND HYDROSEED APPLIED TO FORMER MHA, NOT AN ENGINEERED CAP. ADDITIONAL INVESTIGATION ARE PLANNED.
 - CRUSHED STONE
 - AREAS MAINTAINED WITH GRASS



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

642 ALLENS AVENUE PROVIDENCE, RHODE ISLAND			
REMEDIATED AREAS			
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists 530 BROADWAY PROVIDENCE, RHODE ISLAND 02909 (401) 421-4140	DESIGNED BY: ABU	REVIEWED BY: ABU	CHECKED BY: JPH
DATE SEPTEMBER 2012	PROJECT NO. 33554.00	DESIGNED BY: CRB	SCALE: AS NOTED
		REVISION NO.	FIGURE 3
			SHEET NO.

© 2010 - GZA GeoEnvironmental, Inc. J:\ENV\33554.ABI\FIGURES\GZA_DWG\33554.00_FT-F3

APPENDIX A
LIMITATIONS

LIMITATIONS

1. This Soil Management Plan has been prepared on behalf of and for the exclusive use of The Narragansett Electric Company d/b/a National Grid (National Grid), solely for use at the 642 Allens Avenue Providence, Rhode Island ("Site") in documenting the work completed as described herein at the Former Tidewater MGP and Power Plant Site ("Site") under the applicable provisions of the State of Rhode Island Department of Environmental Management Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations). This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of GZA GeoEnvironmental, Inc.(GZA) or National Grid.
2. GZA's work was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and GZA observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. GZA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA as described herein.
3. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based upon services performed and observations made by GZA.
4. In the event that National Grid or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.
5. The conclusions and recommendations contained in this report are based in part upon the data obtained from environmental samples obtained from relatively widely spread subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more gradual. For specific information, refer to the boring logs.

7. In the event this work included the collection of water level data, these readings have been made in the test pits, borings and/or observation wells at times and under conditions stated on the exploration logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
8. The conclusions contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA and the conclusions and recommendations presented herein modified accordingly.

J:\ENV\33554.abu\Soil Management Plan\2012\33554 SMP Limitations-Appendix A.docx

APPENDIX B

RIDEM APPROVED REMEDIAL OBJECTIVES

Appendix B
RIDEM-Approved Remedial Objectives
642 Allens Avenue
Providence, Rhode Island

File No. 03.00033554.00
8/28/2012

Constituent (mg/kg)	RIDEM			RIDEM Approved Remedial Objectives		
	I/C DEC	GB Leachability Criteria	UCL	Surface Soils	Subsurface Soils	Subsurface Soils
					<100 feet from shore	>100 feet from shore
Metals						
Arsenic	7	NE	10,000	7	-	-
Cyanide	10,000	NE	10,000	10,000	-	-
Lead	500	NE	10,000	500	-	-
PAHs						
2,4-Dimethylphenol	10,000	NE	10,000	10,000	10,000	10,000
2,6-Dinitrotoluene	NE	NE	10,000	10,000	10,000	10,000
2-Methylnaphthalene	10,000	NE	10,000	10,000	10,000	10,000
Acenaphthene	10,000	NE	10,000	10,000	10,000	10,000
Acenaphthylene	10,000	NE	10,000	10,000	10,000	10,000
Anthracene	10,000	NE	10,000	10,000	10,000	10,000
Benzo (a) anthracene	7.8	NE	10,000	7.8	10,000	10,000
Benzo (a) pyrene	0.8	NE	10,000	0.8	10,000	10,000
Benzo (b) fluoranthene	7.8	NE	10,000	7.8	10,000	10,000
Benzo [g,h,i] Perylene	10,000	NE	10,000	10,000	10,000	10,000
Benzo [k] Fluoranthene	78	NE	10,000	78	10,000	10,000
Chrysene	780	NE	10,000	780	10,000	10,000
Dibenzo (a,h) anthracene	0.8	NE	10,000	0.8	10,000	10,000
Fluoranthene	10,000	NE	10,000	10,000	10,000	10,000
Fluorene	10,000	NE	10,000	10,000	10,000	10,000
Indeno [1,2,3-cd] Pyrene	7.8	NE	10,000	7.8	10,000	10,000
Naphthalene	10,000	NE	10,000	10,000	500	5,000
PCBs	10	10	10,000	10	10,000	10,000
Pentachlorophenol	48	NE	10,000	48	10,000	10,000
Phenanthrene	10,000	NE	10,000	10,000	10,000	10,000
Pyrene	10,000	NE	10,000	10,000	10,000	10,000
TPH						
TPH	2,500	2,500	30,000	2,500	15,000	30,000
VOCs						
Benzene	200	4.3	10,000	200	4.3	43
Ethylbenzene	10,000	62	10,000	10,000	62	620
Toulene	10,000	54	10,000	10,000	54	540
Xylenes	NE	NE	10,000	10,000	540	540

NE - Not Established

- No Remedial Objective established for this constituent

Attachment B

Correspondence with RIDEM




100 Westminster Street
Suite 1500
Providence, RI 02903
(401) 457-5278
Fax (401) 277-9600
rmain@hinckleyallen.com

MEMORANDUM

TO: Susan Forcier, Esq., Rhode Island Department of Environmental Management ("RIDEM")

CC: Kelly Owens and Joseph Martella, Office of Waste Management, RIDEM
Michele Leone and Amy Willoughby, National Grid

FROM: Robin L. Main 

DATE: September 26, 2016

RE: Liquefaction Project, 121 Terminal Road, Providence, Rhode Island

I. Summary

As the Rhode Island Department of Environmental Management ("RIDEM") is aware, National Grid LNG, LLC ("NGLNG") is proposing to build a natural gas liquefaction facility (the "Project") at its existing storage facility at 121 Terminal Road in Providence, Rhode Island (the "Site"). This Project will be a reliable, safe, cost-effective way to ensure that National Grid's customers have the natural gas they need to heat their homes and businesses, particularly when the demand is greatest. NGLNG has sought approval for this project from the Federal Energy Regulatory Commission ("FERC").¹

RIDEM and NGLNG have discussed the effect of federal preemption upon certain statutes and processes under RIDEM's purview. This memorandum provides a brief background of the Project and a summary of NGLNG's position that federal law preempts certain RIDEM regulations or processes related to this Project.²

¹ FERC has jurisdiction over the Project pursuant to 15 U.S.C. § 717f(c)(1)(A), which provides that "[n]o natural-gas company . . . shall engage in the transportation or sale of natural gas, subject to the jurisdiction of the Commission, or undertake the construction or extension of any facilities therefor, or acquire or operate any such facilities or extensions thereof, unless there is in force with respect to such natural-gas company a certificate of public convenience and necessity issued by the Commission authorizing such acts or operations." *See also Algonquin Lng v. Loqa*, 79 F. Supp. 2d 49, 50 (D.R.I. 2000).

² In a March 2016 report included in the NGLNG certificate application to FERC, Resource Report No. 7 Soils, NGLNG told FERC that soil disturbance associated with the Project would be managed under a short term response

Federal statutes and regulations concerning the construction of natural gas facilities preempt state, site-specific environmental regulations such as the environmental remediation statutes administered by RIDEM.³ See *Nat'l Fuel Gas Supply Corp. v. Public Service Commission*, 894 F.2d 571, 579 (2d Cir.1990) (holding state site-specific environmental review preempted by authority granted to FERC); see also *Algonquin Lng v. Loqa*, 79 F. Supp. 2d 49, 51 (D.R.I. 2000) (recognizing the impact of *National Fuel Gas Supply* while analyzing preemption issues related to the same property at issue). Further, where a procedure set in place by RIDEM, such as the creation of a Public Involvement Plan ("PIP"), would delay or burden a FERC-approved project, federal law also preempts that process. See *N. Nat. Gas Co. v. Munns*, 254 F. Supp. 2d 1103, 1111–12 (S.D. Iowa 2003) (reasoning that "the burden and delay caused by the concurrent state review . . . supports a conclusion of preemption."); see also *Nat'l Fuel Gas Supply Corp.*, 894 F.2d at 578-79 ("Allowing all the sites and all the specifics to be regulated by agencies with only local constituencies would delay or prevent construction that has won approval after federal consideration of environmental factors and interstate need, with the increased costs or lack of gas to be borne by utility consumers in other states.").

As outlined more extensively below, NGLNG believes RIDEM cannot seek to impose its remediation statutes or its PIP process on NGLNG with respect to the Project as it lacks the jurisdiction to do so.

II. Project Description

A. Liquefier Facility

NGLNG is undertaking the Project at the request of its two affiliated storage customers, The Narragansett Electric Company ("TNEC") and Boston Gas Company, to add liquefaction capability so that they can deliver gas for storage in vapor form as an alternative to delivering liquefied natural gas ("LNG") to the site by tanker trucks. The Project will include one new 20

action plan ("STRAP") that RIDEM approves. FERC policy encourages but does not mandate voluntary compliance with state and local requirements to the extent possible, and this filing was consistent with that policy. Since that FERC filing, NGLNG has determined that it would be more appropriate for NGLNG to proceed under the 2012 Soil Management Plan ("SMP") (discussed *infra*) to handle soil disturbance and any associated groundwater that is encountered during excavations. NGLNG will provide the SMP to FERC. In the event that FERC finds the SMP insufficient for the Project, FERC will mandate that NGLNG take additional or alternative steps to handle soil management, as well as any contaminated groundwater encountered during excavation. As such, soil and groundwater management during the Project will have FERC oversight and will not be conducted at the sole discretion of NGLNG.

³ The FERC process does not preempt all statutes administered by RIDEM. The Natural Gas Act specifically states that nothing in that Act affects the rights of the States under 1) the Coastal Zone Management Act ("CZMA"); 2) the Clean Air Act ("CAA"); and 3) the Federal Water Pollution Control Act, commonly known as the Clean Water Act ("CWA"). 15 U.S.C. §717b(d). To the extent RIDEM acts pursuant to authority delegated by the federal government under the CZMA, the CAA or the CWA, its actions are not preempted. Here, the Rhode Island Industrial Property Remediation and Reuse Act, R.I. Gen. Laws §§ 23-19.14-1 *et. seq.*, ("IPRRA") is not promulgated under authority delegated by the federal government to the state under any statute, including the CZMA, the CAA or the CWA. Instead, in passing the statute, the Rhode Island General Assembly explicitly referenced Rhode Island specific concerns. R.I. Gen. Laws §§ 23-19.14-1(1) and 23-19.14-1(6). For this reason, IPRRA and its implementing regulations are not within the exceptions to FERC preemption.

million standard cubic feet of gas per day (“MMscfd”) gas pretreatment and liquefaction system to convert domestic natural gas delivered by pipeline into LNG by cooling it to a liquid state for storage. Feed gas will be transported to the Project via an existing 12” pipeline owned by TNEC. Pre-treatment will consist of one train capable of providing treated gas to a liquefaction facility for producing 20 MMscfd vapor equivalent of LNG for storage. The existing storage capacity will remain unchanged. There will be no change to the LNG storage tank and no relocation of the existing cryogenic piping or vaporization equipment is proposed.

The purpose and need for the Project is to add liquefaction capability to the existing NGLNG storage facility, which will enable the facility’s customers to fill their contracted storage capacity with pipeline-sourced natural gas as an alternative to supplying gas for storage that is already in a liquid state. The current storage operation does not include any liquefaction equipment and receives LNG by truck to fill the 600,000 Barrels (“Bbl”) (~2.0 Bcf) storage tank for the peak season needs. The local distribution company customers that have requested this additional service will use this capability to reduce their dependence on imported LNG supplies acquired from LNG import terminals. The purpose is to reduce the customers’ supply risks, and related exposure to sharp cost increases, for obtaining the LNG that they store at the existing facility, which enhances the reliability of the downstream gas service the customers provide.

The Project will involve raising grades to lift the facility out of the flood zone, utility work, pile driving for equipment foundations, construction of the facility itself, paving and fencing. The majority of the proposed work is to be above current site grades. As with a construction project of this nature, there will be a lay down area with a gravel base for equipment, temporary office trailers, and fencing. The SMP will be followed, along with any FERC adjustments to it, for the Project work. At its core, this is a FERC jurisdictional construction project.

B. The SMP

In September 2012, GZA submitted the SMP to RIDEM.⁴ The purpose of the SMP is to set forth detailed procedures that will be followed during construction/maintenance activities at the Site that require the management of soils excavated and groundwater removed from the subsurface. In other words, the SMP is the “instruction manual” for the excavation, storage, and reuse or disposal of soils from the Site and the handling and management of groundwater encountered during soil excavation. The SMP is attached in Exhibit A and made a part hereof. As the SMP acknowledges, formal RIDEM approval of planned utility/construction projects is not required, but it is recommended that RIDEM be notified prior to commencing these types of activities. *See* SMP, p. 6. Since its submittal to RIDEM in 2012, at least six projects have been successfully completed following the SMP at the Site, including the upgrade of 900+ feet of 16-inch diameter water main, emergency gas leak repairs, and the upgrade of the gas regulator station. NGLNG intends to perform the Project under the SMP, will notify FERC of this process and agrees to notify RIDEM of its planned work and of any FERC comments on the SMP.

⁴ The 2012 SMP is based in part on the May 2009 SMP that Vanasse Hangen Brustlin submitted to RIDEM for the Site.

III. Federal Regulation Preempts RIDEM's Remediation Statute and Regulations

A. Remediation Statute and Regulations

Federal statutes, federal regulations and decisions from federal courts establish that RIDEM's remediation statute and the Remediation Regulations are preempted. "Since the [facility] is engaged in interstate transportation and sale of natural gas, it is subject to federal regulation under the Commerce Clause." *Algonquin Lng*, 79 F. Supp. 2d at 51.⁵ "Congress has exercised its Constitutional authority by enacting the [Natural Gas Act] and the [Pipeline Safety Act]." *Id.*

These statutes, together with the regulations promulgated pursuant to them, establish a comprehensive scheme of federal regulation that the United States Supreme Court has determined confers upon FERC "exclusive jurisdiction over the transportation and sale of natural gas in interstate commerce." *Id.*

The FERC regulatory scheme "governs virtually every aspect of the transportation and sale of natural gas" including "whether natural gas facilities may be built or modified, where they may be located, the methods by which they are constructed, and the safety standards that must be observed." *Algonquin Lng*, 79 F. Supp. 2d at 51.⁶ In particular, "[p]ursuant to Section 717f(c) [of the Natural Gas Act], a natural-gas company must obtain a 'certificate of public convenience and necessity' from the FERC before constructing or operating facilities used for the interstate transportation and sale of natural gas." *Nat'l Fuel Gas Supply Corp.* 894 F.2d at 573. NGLNG is currently engaged with FERC on this process and expects FERC approval of the Project in early 2017.

Of particular importance here, FERC regulations impose environmental restrictions upon natural gas companies during the site approval process. *Nat'l Fuel Gas Supply Corp.*, 894 F.2d at 573. For example, an applicant "must . . . provide a statement that it has followed the guidelines for planning, locating, constructing and maintaining facilities set out in 18 C.F.R. § 2.69" so that certificates granted by FERC under Section 7(c) of the Natural Gas Act minimize adverse impacts on preserving scenic, historic, wildlife and recreational values. *Id.* NGLNG has done this; the Project will be subject to scrutiny from an environmental standpoint and to public participation and comment as discussed below. Further, the Project is subject to FERC's Upland Erosion Control, Revegetation, and Maintenance Plan. In addition, FERC will require an

⁵ NGLNG is a natural gas company engaged in the transportation and sale of natural gas in interstate commerce. Therefore, it is subject to FERC regulation under the Natural Gas Act. *Nat'l Fuel Gas Supply Corp. v. Pub. Serv. Comm'n of State of N.Y.*, 894 F.2d 571, 573 (2d Cir. 1990). Additionally, NGLNG operates an interstate liquefied storage facility that is subject to the jurisdiction of FERC under the Natural Gas Act and is therefore subject to the Pipeline Safety Act, 49 U.S.C. § 60101 *et. seq.* FERC and the U.S. Department of Transportation have promulgated extensive regulations pursuant to both of these statutes.

⁶ Congress's decision to create this comprehensive regulatory scheme reflects the "strong federal interest in establishing a uniform system of regulation designed to implement a national policy of ensuring an adequate supply of natural gas at reasonable prices." *Algonquin Lng*, 79 F. Supp. 2d at 52.

Environmental Inspector for the Project, and NGLNG has committed to FERC that such Inspector will conduct daily inspections during the construction of the Project.

Given FERC's jurisdiction here, where Rhode Island seeks to regulate the environmental compatibility of the Project in the face of this federal regulation, the state's efforts are preempted. *Id.* at 574 (“Because FERC has authority to consider environmental issues, states may not engage in concurrent site-specific environmental review.”); *see also Islander E. Pipeline Co. v. Blumenthal*, 478 F. Supp. 2d 289, 291 (D. Conn. 2007) (holding Connecticut Department of Environmental Protection enforcement of state “Structures, Dredging and Fill Act” was preempted by FERC process); *N. Nat. Gas Co.*, 254 F. Supp. 2d at 1110-12 (holding that regulations concerning land restoration after construction are preempted and reasoning in part that “[t]he breadth of these statutes and regulations, when combined with extensive safety regulations applicable to pipeline construction, compel the conclusion that Congress has occupied the field of interstate gas pipeline regulation, including land maintenance and restoration standards.”); *see also Algonquin Lng*, 79 F. Supp. 2d at 52 (holding that Congress “clearly has manifested an intent to occupy the field” and has therefore preempted local regulations). Thus, the dictates of IPRA and the Remediation Regulations promulgated thereunder are preempted.

B. The PIP Process and Public Participation in the FERC Review

The PIP process is also preempted here. The PIP process is applicable to site investigation and environmental cleanup activities requiring remedial actions that fall under the jurisdiction of the Remediation Regulations.⁷ Because federal regulation preempts these Remediation Regulations, they also preempt the PIP process.⁸

Moreover, where a state regulation threatens to delay or burden a FERC approved project, it too is preempted. *N. Nat. Gas Co.*, 254 F. Supp. 2d at 1111–12 (“Moreover, the Iowa regulatory scheme imposes impermissible delays and burdens on the construction of a pipeline that already received federal approval, exemplified here by Northern Natural's waiver application and the Boards' rejection of it because, at least in part, the FERC Plan does not provide the

⁷ Under Section 7.07(E) of the Remediation Regulations, public involvement plans are for “any Contaminated Site for which [RIDEM] has received a Notification of Release and for which a minimum of twenty-five (25) . . . interested parties have requested . . . that a formal process be set up for their participation in the cleanup planning.” Here, not only is this process preempted, but even if it were not, the Project work is not in the cleanup process. Instead, this is a construction project that falls directly under the SMP. There will not be remedial actions with site investigations, remedial action work plans, and the like. This is in contrast to other work at the Site that is neither preempted nor exempted from the PIP Process, such as the completion of the Site Investigation Report (SIR) and proposed remediation of the remaining portions of the Site which are not capped consistent with RIDEM requirements. TNEC expects to submit a *Site Investigation Report (SIR) Addendum* to RIDEM in early 2017.

⁸ Further, the PIP process is not intended to apply to projects involving limited subsurface disturbance associated with construction activities or those located in areas previously capped consistent with typical RIDEM requirements. In addition, this process does not apply to work necessary to maintain day to day operations at existing facilities or facility emergencies, including repairs and maintenance of the natural gas regulating facility, compressed natural gas fueling station, liquefied natural gas facility, and cement distribution facility. This process also does not apply to projects involving minor soil disturbances only (utility work, installation of fence posts, etc.).

minimum level of protection required by the Board's rule.”) The PIP process would both delay and burden the Project. Therefore, federal regulations preempt this process.

Public participation is not excluded from the FERC review. Rather, the FERC process mandates public notification and input. *Nat'l Fuel Gas Supply Corp.*, 894 F.2d at 573. In particular, 18 C.F.R. § 157.9 requires notice of an application for a certificate of public convenience and necessity to be published and copies sent to the States affected. Further, 18 C.F.R. § 157.10 permits persons to intervene or file a protest with respect to an application for a certificate of public convenience and necessity. As such, in this case, the FERC review of the Project is subject to public review. Indeed, members of the public here already have moved to intervene in the FERC proceeding and many have obtained intervenor status. Other members of the public, some of whom signed the petition for the PIP, are on the NGLNG/ FERC mailing list for the Project and receive periodic newsletters. In addition, NGLNG has held community meetings on the Project, and created a website (i.e., <http://www.fieldspointngrid.com/>) that provides the public with current and detailed Project information, including information about soil management and other environmental issues at the Site and how they will be handled. Therefore, the application process for the Project has been held open to public scrutiny through the federal regulations that govern its application process. Imposing a duplicative state process would improperly delay and burden the Project and is preempted by federal authority.

IV. Conclusion

For the Project, IPARRA and the Remediation Regulations are preempted by the federal regulatory scheme under FERC. As such, NGLNG does not intend to apply for any RIDEM approvals under IPARRA and the Remediation Regulations associated with soil disturbance work and the handling of any impacted groundwater encountered during excavations for the Project. Because there is no trigger for a PIP for the Project, NGLNG's work on the Project will not be included in the PIP Plan.

NGLNG values and respects the regulatory process, transparency and public comment on its work. NGLNG will not conduct this Project without oversight. Instead, NGLNG will continue to provide publicly available documents to FERC for the FERC approval process so that FERC may review the plans for soil and groundwater handling. In addition, the FERC process mandates notice to the public and invites public comment. Finally, the FERC process mandates an Environmental Inspector for the Project.

NGLNG expects FERC approval of the Project by early 2017. NGLNG respectfully requests that RIDEM inform it by October 7, 2016, if it does not agree in any way with the position set forth herein.



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October 21, 2016

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RE: Liquefaction Project and Public Involvement Plan

Dear Robin,

The Department has reviewed your September 26, 2016 memorandum regarding the Liquefaction Project in Providence, specifically as it relates to the Federal Energy Regulatory Commission ("FERC") process for that project and the recently initiated RIDEM Public Involvement Plan ("PIP") process for the Site.

The Department is in agreement with your memorandum to the extent that the Liquefaction Project activities are governed by the FERC process, which preempts RIDEM's Site Remediation Regulations. Therefore, the Department agrees that those activities that are included in the FERC process may be omitted from the PIP.

That said, however, the Department is not in agreement with your memorandum as it relates to non-FERC projects at the Site. In various meetings between the Department and National Grid over the past nine months, discussion has focused around four major projects. These four projects have been continually discussed as construction projects, separate and apart from the general utility work that is sometimes necessary on the Site. Those four projects are as follows:

- 1) Holder 18/21 capping – Short Term Response Action Plan ("STRAP") submitted 4/27/16, approval issued 5/18/16, work ongoing.
- 2) Access Road into dike wall – STRAP submitted 6/29/16, approval issued 8/25/16, work ongoing.
- 3) Site prep work related to placement of liquefaction facility and equipment.
- 4) Bund wall for LNG tank secondary containment.

During previous meetings, it was the Department's understanding that all four of the above-listed construction projects would be performed pursuant to STRAPs that would be submitted to and approved by the Department, and the first two such projects did in fact proceed along that path, as described above. Your memorandum of September 26, 2016 argues that the third such project, the Liquefaction Project work, is covered by FERC jurisdiction, and therefore RIDEM oversight is preempted, and we concur in that regard as noted above.

While not referenced in your September 26, 2016 memorandum, the fourth project, the so-called bund wall, is not a part of the FERC Liquefaction Project, and not subject to FERC jurisdiction and oversight. Nonetheless, National Grid has recently proposed undertaking the bund wall project not pursuant to a STRAP as previously discussed, but under the terms of the Soil Management Plan that is in place for the site, and also omitting that project from the PIP. The Department disagrees with this proposal.

A Soil Management Plan, such as the one that is on file for this Site, is designed to set a blueprint for minor soil disturbances on post-remediation areas, such as installation or repair of utilities. The bund wall project involves the construction of an eighty foot containment wall and associated foundation excavation surrounding the existing LNG tank at the Site. It is the Department's position that the bund wall project should be submitted as a STRAP for Department review and approval, and should be included in the PIP. While the Department understands your arguments that the Soil Management Plan is designed to address, and the PIP process is not intended to apply to, projects involving limited subsurface disturbance or projects involving minor soil disturbances only, we vehemently disagree that the bund wall falls into these categories.

We look forward to National Grid's submission of its proposed Public Involvement Plan for this Site. Should you have any questions or concerns, please feel free to contact me at 401-222-6607 extension 2305.

Sincerely,



Susan Forcier

- cc: Kelly Owens, RIDEM OWM
Joseph Martella, RIDEM OWM
- ec: Michele Leone, National Grid
Amy Willoughby, National Grid