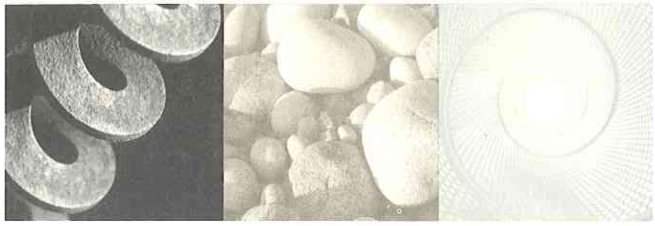

GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological

Community and Environmental Response Plan

Glen Cove Former Manufactured Gas Plant

City of Glen Cove
Nassau County, New York
Order on Consent Index No. D1-001-98-11
Site No. 1-30-089P

Submitted to:
National Grid
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Hicksville, New York 11801

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Abbreviations and Acronyms

CAMP	Community Air Monitoring Plan
CERP	Community and Environmental Response Plan
GEI	GEI Consultants, Inc.
LIPA	Long Island Power Authority
MGP	Manufactured Gas Plant
NCDPW	Nassau County Department of Public Works
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
RA	Remedial Action
RAP	Remedial Action Plan
VOC	Volatile Organic Compound

1. Introduction

National Grid has prepared this Community and Environmental Response Plan (CERP) to summarize the controls, monitoring and/or work practices that will be implemented during the remediation of the Glen Cove former Manufactured Gas Plant (MGP) site (the Site) to address the potential for short-term impacts to the surrounding community or environmental resources. The remediation will include the removal of MGP-related source material observed in the subsurface at the Site. The Site is located on Grove Street in the City of Glen Cove, Nassau County, New York, and is currently occupied by an active electric system substation owned by the Long Island Power Authority (LIPA).

The CERP is a concise summary of the controls, monitoring, and work practices and how they combine to provide the necessary protection of the community and ecological resources. Additional details regarding how this will be implemented are contained in the Phase I Remedial Action Work Plan and the contractor Site Operations Plan. Information on where to find site-related documents and information is located in Section 2. The purpose of the CERP is to provide members of the community with information on the steps and programs that have been put in place in order to protect their health and minimize the disturbance caused by construction activity. This effort will be performed under the approval and oversight of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH).

This CERP has been prepared in accordance with the Order on Consent, Index Number D1-001-98-11 (the Order) signed by KeySpan (which was later acquired by National Grid) and the NYSDEC, the NYSDEC-approved Remedial Action Plan (RAP), and Section 5.1(f) NYSDEC *Final DER-10 Technical Guidance for Site Investigation and Remediation*, dated May 2010.

1.1 CERP Organization

This CERP has been organized in general accordance with the Section 5.1(f) NYSDEC *DER-10* as follows:

- Section 1 – Introduction, describes the purpose and objectives of the CERP
- Section 2 – Public Communication and Outreach
- Section 3 – Public Protection Measures
- Section 4 – Community Air Monitoring Plan (CAMP)
- Section 5 – Noise Reduction Plan
- Section 6 – Vibration Monitoring Program
- Section 7 – Pre and Post Construction Survey Program

- Section 8 – Site Security Plan
- Section 9 – Stormwater and Erosion Control Plan
- Section 10 – Waste Management
- Section 11 – Traffic Management Plan

2. Public Communication and Outreach

2.1 National Grid Contact Information

If members of the community have questions or wish to report a concern, they can contact National Grid on the Glen Cove Hotline Telephone at (516) 545-3589.

2.2 Glen Cove Remediation Website

A dedicated website has been setup for the environmental remediation work being performed at the Glen Cove substation (www.glencovemgpsite.com). The website includes a description of the Site, a description of the Project and its current status, information about health and safety issues associated with Manufactured Gas Plants, contacts and links to the NYSDEC website. A Key Document section includes all of the major reports on the Site, Fact Sheets and the Citizen Participation Plan.

The website will be updated with a written summary of the progress on the project every week while remedial construction is occurring. Each update will contain a description of the work completed the previous week and work that is planned for the next two weeks. It should be noted that the website will not be updated with information related to normal LIPA electric utility operations or utility construction activities which may occur at the Site.

2.3 Document Repositories

National Grid has established local document repositories for site-related documents. The documents are available to the community to review throughout the remedial program at the following locations. A telephone number is provided for each location so that members of the public can call ahead for an appointment.

NYSDEC Central Office,
625 Broadway, 11th Floor
Albany, New York 12233-7014
Attn: Amen Omorogbe, P.E.
(518) 402-9662

Glen Cove Library
4 Glen Cove Avenue
Glen Cove, NY 11542
Antonia Petrash, Director
Call for information: (516) 676-2130

2.4 Regulatory Agency Contact Information

The remediation work at the Site is being performed under the oversight of the NYSDEC. The contact information for the NYSDEC and other regulatory agencies involved in providing oversight for the remedial work being performed at the Glen Cove site are presented below.

New York State Department of Environmental Conservation:

Amen Omorogbe, P.E.
Project Manager
Remedial Bureau C Division of Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York, 12233
(518) 402-9662
(866) 520-2334

New York State Department of Health:

Jacquelyn Nealon
Bureau of Environmental Exposure Investigation
New York State Department of Health
547 River Street, Room 300
Troy, New York 12180
(800) 458-1158 ext. 2-7880
or (518) 402-7870

Nassau County Health Department:

Joseph DeFranco
106 Charles Lindbergh Blvd.
Uniondale, NY 11553
(516) 227-9500

3. Public Protection Measures

National Grid and their Contractor will implement a number of plans to protect the public from physical hazards at the Site. Each of these measures is designed to make the area surrounding the remediation safe for the general public.

3.1 Warning Signs

The contractor will place signs at the Site entrance from Grove Street indicating that the Site is being remediated by National Grid under the oversight of the NYSDEC. In addition, signs will be placed on the gate indicating that the Site is an active construction site and only authorized personnel are allowed onto the Site. Site security will also be present during non-working hours to prevent access as discussed in Section 8.

3.2 Parking Limitations

A parking ban will be in place for the area adjacent to the Site entrance at Grove Street for the duration of the remediation. The ban will be in place to allow trucks to turn into and out of the Site safely without damaging private property. New parking signs will be placed along Grove Street and Stanco Street outlining the parking restrictions. The ban will be limited to working hours only and enforced by the City of Glen Cove Police Department.

3.3 Site Fencing

The existing site fence will be relocated to encompass the entire remedial area and staging areas for the contractor. As discussed in Section 8, temporary fencing will also be constructed around the excavation. The perimeter fencing already in place is intended to prevent public access to the construction site. This fencing will be monitored during non-working hours by site security as described in Section 8.

4. Community Air Monitoring Plan (CAMP)

A site-specific CAMP has been prepared for the Glen Cove site and shall be in force 24 hours a day/7 days a week during the course of the project. The intent of the CAMP is to provide a measure of protection for the downwind community (i.e., off-Site receptors including residences and businesses and on-Site workers not directly involved with the work activities) from potential vapors and dust carried in the air as a direct result of remedial work activities on the Site. The CAMP provides air monitoring procedures, contamination concentration limits, and procedures to reduce vapor and dust generation if the limits are approached. The CAMP is included as an appendix to the Phase I Remedial Action Work Plan and is available online at www.glencovemgpsite.com/key_docs_reports.html.

During construction activities which may create dust or vapors (excavation, drilling, etc.) fence line perimeter air monitoring will be conducted using a combination of real-time (continuous and almost instantaneous) air monitoring at fixed locations and walk-around supplemental monitoring using hand-held instruments on an as-needed basis. Contaminants commonly found at former MGP sites will be monitored, including volatile organic compounds (VOCs) and dust. VOCs are chemicals that easily enter the air as gases from some solids or liquids. During excavation at the Site, VOCs could potentially enter the air from the chemicals in the contaminated soils.

The CAMP includes a Contingency Plan that defines the different concentration limits, and specific response activities to be implemented during working hours if the limit for a measured compound is exceeded. The response actions, potentially including work stoppage, are intended to prevent or significantly reduce the migration of contaminants carried in the air from the Site.

The real-time perimeter limits consist of alert limits and action limits. An alert limit is a level of contaminant in the air that triggers a response action. An alert limit does not suggest the existence of a health hazard, but serves instead as a screening tool to take action, if necessary, to assist in minimizing contaminants from moving off site through the air. An action limit is a level of contaminant or odor in the air that triggers work stoppage.

4.1 Vapor/Odor Management Plan

If the real-time perimeter limits are exceeded or significant nuisance odors are noted, National Grid, the Construction Manager, the Engineer, and the contractor will consult to determine what type of emission control action is appropriate. Actions that may be taken to reduce contaminant or odor levels include the following:

- Spraying water on exposed soil surfaces and/or roadways to reduce windblown dust.
- Covering working areas of exposed impacted soils, trucks loaded with impacted soils, or stockpiles of impacted soils with tarpaulin covers, vapor reducing foam, or other vapor control agents.
- Temporarily relocating work to an area with potentially lower emission levels.
- Reduce the production rate or change the sequence of work activities.
- Change the work methods or equipment to alternatives that reduce the potential to create dust or release contaminants into the air.
- Using specialized odor suppressing foams to cover the contaminated soils. The foam is a product which reduces the ability of vapors and dust to enter the air.
- Misting water onto soil in order to prevent dust.

In practice, these actions will typically be used proactively to prevent alert levels from being reached at the Site perimeter.

4.2 Dust Control

Construction activities will be performed so as to limit the creation of dust. Dust control measures will be used to minimize the potential for creating dust during soil excavation and handling, and the placement of clean soil. Dust control measures will include water spraying, and/or specialized foams. The contractor will provide materials to help prevent generating dust which may include tarps and/or water, specialized foams, or other National Grid-approved methods. The contractor will keep sufficient materials on site to help reduce the level of dust from the excavation. The material will be stored near the excavation and will be easily mobile in case of need.

Truck routes on site will be inspected continuously during periods of high truck traffic for excessive dirt or dust. Heavily traveled truck routes on the Site will be wet down to minimize dust emissions.

The cleaning of trucks exiting the exclusion zone will help eliminate dusty conditions on the Site. Transport trucks exiting the exclusion zone will pass through an inspection area and be inspected to ensure tires and undercarriages are clean and that tarps are secured. Excessive mud and loose dirt observed on the trucks will be manually removed with brooms and brushes as necessary. The proper cleaning of trucks exiting the Site will aid in minimizing/ eliminating dust leaving the Site. A decontamination pad large enough to accommodate equipment and truck traffic will be constructed at the exit point to clean tires of transport trucks exiting the Site.

5. Noise Reduction Plan

The remedial activities conducted on the Glen Cove former MGP site will conform to the noise codes for the City of Glen Cove during the work, which is covered in Chapter 196 of the city code. The specific articles that are applicable to the work that will be performed are as follows:

- § 196-12. Maximum permissible continuous sound levels
- § 196-13. Maximum permissible impulse sound levels
- § 196-14. Sound created by certain equipment and vehicles impacting residential occupancy

More information on the Glen Cove city codes can be obtained online at http://www.glencove-li.com/.

To be in compliance, construction activities on the Site will be prohibited between the hours of 6:00 PM and 7:00 AM Monday through Friday, Saturdays, Sundays, and on all legal holidays. In the event of an emergency that requires work to be conducted during the aforementioned times, the contractor will seek a variance from the Building Department Administrator of the City of Glen Cove to permit such activities.

It is not anticipated that the activities at the Glen Cove Site will create excess levels of noise to a degree that would cause concern to nearby residents. If noise issues do become a concern the following steps may be taken to reduce the noise level caused by construction:

- Locating pieces of machinery on the Site to maximize the distance from potential receptors.
- Developing a design for a site perimeter sound barrier.
- Specifying the use of low noise emission construction equipment.

The work that will be completed does not currently require the contractor to perform tasks which are commonly associated with high levels of noise. The periodic use of back up alarms on vehicles will in all likelihood be the noise that is commonly heard from the Site, and the contractor will make every effort to minimize the need for vehicles to use them.

6. Vibration Monitoring

It is not anticipated that the remedial activities at the Glen Cove site will generate high levels of vibrations for nearby residents. The work that will be completed does not currently require the contractor to perform tasks that are commonly associated with high levels of vibration such as blasting, or pile driving.

The most common source of vibrations from the Site will be from compaction equipment, which will be used to tighten together layers of clean soil as it is used to replace impacted soil that has been excavated. Compaction equipment tightens soil by creating vibrations over a very small area; however, the compaction equipment that will be used on this site will be small and not nearly powerful enough to cause damage to nearby structures.

The Engineer has completed a thorough review of the means and methods selected by the contractor to perform the required work. The selected means and methods do not include items that could cause elevated levels of vibration to be experienced by the surrounding community; however, if vibrations are substantial, a vibration monitoring and reduction plan will be put in place for the Site.

Vibration monitoring, which is not anticipated for the Glen Cove Site, would be performed by the contractor who has specialized training and equipment to measure vibrations which travel through the ground. Typically, when called for, small vibration monitoring devices are placed at the Site boundary and at nearby residences to measure vibrations. One of the most commonly used instruments to measure vibrations on construction sites is manufactured by the Instantel Company (visit http://www.instantel.com for more information on these devices). For most types of structures there are guidelines available on acceptable vibration levels that should pose no risk of cosmetic or structural damage, which can be used as a maximum limit on vibrations for the work.

7. Pre and Post-Construction Survey Program

Structures such as personal residences and businesses that abut the Site, and potentially some that are nearby, may be contacted by National Grid to arrange for a pre- and post-construction survey of their property.

A pre-construction survey is conducted by a third party consultant of the contractor and/or National Grid. The goal is to document the condition of the property and any structures that are on it prior to the start of work on the Glen Cove site. A survey of this nature is typically conducted on the interior and exterior portion of the structures on a property and can be completed on the order of a few hours, depending on the size and number of the structures to be inspected. Still photos or video recordings may be taken in some places to document pre-existing damage to structures.

A post-construction survey is similar to a pre-construction survey, but is conducted after the completion of work at the Site. It is performed to document the condition of structures after the work to serve as a record for damages caused, if any, by the nearby construction.

An individual report will be sent to each property owner containing the findings of any pre-construction or post-construction surveys conducted on their structures. Copies of the pre- and post-construction survey results are kept by National Grid, and can be used as evidence in the event of claims of damage to structures caused by construction related activities. Likewise the survey results can also be used to defend the contractor against false damage claims.

8. Site Security Plan

The objectives of the Site security plan are to prevent the vandalism/destruction of construction equipment, prevent access, and minimize health and safety concerns for the surrounding residential neighborhood.

8.1 Perimeter Security

A temporary fence will be erected around the perimeter of the excavation with a minimum height of at least 6 ft. At least two gates that will have the ability to be locked at the end of each work day will be provided. If the area is not otherwise lighted (i.e., building floodlights, municipal streetlights, etc.) the contractor will provide temporary lighting at the gate.

8.2 Equipment Security

All vehicles and/or equipment left on the Site will be secured at the end of each working day. These criteria can be met by vehicles and equipment remaining inside the perimeter fence, or at a secured remote area if left on site overnight or during non-work days. No vehicles or equipment will be left overnight in an unsecured location. The contractor will insure that all non-essential equipment is de-energized when left on site and not in use to prevent any malfunctions from occurring while workers are not present.

8.3 Overnight Security

Overnight and weekend security measures will be provided by the contractor. Security personnel will be on site during all non-working hours.

9. Stormwater and Erosion Control Plan

The stormwater and erosion control plan is intended to minimize soil erosion, and control stormwater on the Site. Additional information on the stormwater and erosion controls requirements is included in the Phase I Remedial Action Work Plan which is available online at www.glencovemgpsite.com/key_docs_reports.html.

9.1 Implementation of Erosion Control Measures

Sediment fence will be installed around the perimeter of the support zones and all areas to be excavated. The sediment fence acts to trap soil that may be carried by water running across the Site as a result of heavy rain.

The contractor shall install and maintain the erosion control measures for the duration of the excavation work. Additional erosion control measures may be needed due to events beyond the control of National Grid. The contractor will install any additional measures necessary to prevent erosion as directed by National Grid.

9.2 Stormwater Runoff Control

The contractor will be required to utilize appropriate control measures to direct stormwater to flow around the excavation area and to a discharge point. Appropriate controls may include digging a small ditch to direct the water flow, or building barriers out of clean soil to collect the stormwater so it can be pumped to a suitable discharge point.

10. Waste Management

The waste management plan identifies the procedures for managing, treatment, and disposal of waste materials generated as a result of the Phase I Remedial Action (RA). All wastes removed from the Site will be transported from the Site by properly permitted and/or licensed waste haulers directly to the National Grid-approved disposal facilities. All trucks will be inspected to ensure the proper placards, decals and permits are displayed. Trucks will utilize the approved truck route through Glen Cove and then the most direct hauling route to the disposal facility as indicated in Section 11.

10.1 Soil Management and Treatment

MGP-impacted soils removed from the excavation will be directly loaded into trucks for shipment for the approved treatment facility. Trucks will not be allowed to stage on local roadways. The Contractor will schedule trucks in a manner that will minimize the wait time for loading.

Vehicles containing excavated soils will be covered with a solid plastic tarp. If necessary, spray-on odor suppressing materials such as Rusmar Foam may be used to reduce potential VOC emissions or odors during transit.

The impacted materials will be shipped to a thermal desorption treatment facility. At the facility the impacted soils are placed in a rotary kiln that heats the soil which volatilizes the organic contaminants in the soil. The contaminant laden vapors are then collected and treated at the facility. The treated soil is then re-used for beneficial uses such as cover materials at landfills or as aggregate for asphalt or concrete.

10.2 Construction Dewatering and Treatment

The Contractor will establish a dewatering system to depress the water table during excavation. The water table is located between 8 to 10 feet below the ground surface. The groundwater removed from the excavation will be treated on site. The Contractor will mobilize a dewatering treatment facility to the Site which will remove solids and organic contaminants to meet the Nassau County Department of Public Works (NCDPW) discharge limitations. The treated dewatering liquids will discharged to the existing sanitary sewer system on Grove Street in accordance with the provisions of the county discharge permit.

10.3 Wastewater Management and Treatment

Wastewater associated with decontamination activities on the Site will be pumped into a covered frac tank(s), or sent to the dewatering treatment system on the Site. When disposed

of off site, a licensed liquid waste hauler will remove this liquid from the Site and properly dispose of the material in accordance with all applicable regulations.

Solid material collected in the frac tank(s), as a result of settlement, will be bulked with the impacted soils and sent to an appropriately licensed National Grid-approved disposal facility.

11. Traffic Management Plan

The objectives of the traffic plan at the Site are to describe the objectives for traffic control and address any potential concerns. The complete traffic control plan is included in the Phase I Remedial Action Work Plan and is available online at www.glencovemgpsite.com/key_docs_reports.html. The traffic control plan indicates the traffic routes and traffic management at the Site for:

- Trucking soil and bulky waste off Site
- Importing clean fill to the Site
- Liquid waste hauler picking up dewatered liquids, if necessary
- Contractor access and parking
- Equipment access and storage
- Traffic control at the Site entrance
- Requirements for truck flagmen/safety spotters on site.

Vehicles approaching the Site from the south hauling impacted soil, fill materials, and supplies shall enter Glen Cove from Route 107, and then bear right onto Cedar Swamp Road where it splits with Route 107. Vehicles should then take a left onto Grove Street, and then make a right onto the substation access road. Alternatively, vehicles approaching the Site from the north will exit from Route 107 onto Town Path Road, turn right onto Glenn Street, continue on Cedar Swamp Road, and then turn right onto Grove Street.

Vehicles will retrace the Site entry route when departing the work area.

The contractor will provide traffic control personnel when all trucks are exiting the Site onto Grove Street. Traffic control personnel will also direct traffic as needed upon delivery of equipment, trailers, excavation support materials, etc. To maintain access and lines of sight, the contractor will arrange for and coordinate with the appropriate local authorities to ensure that on-street parking nearest to the entrance/exit gate is limited throughout the duration of the work. Trucks will not be allowed to queue on local streets; however, the contractor may negotiate with a third party to obtain off-site parking where vehicles can wait to be loaded. All the roadways utilized by the contractor during the work will be checked daily for spillage and seepage, and cleaned to the satisfaction of National Grid, as necessary.

The traffic control plan has been negotiated with the City of Glen Cove to ensure that the planned routes into and out of the work zone are appropriate, do not conflict with any other town projects, and meet the requirements of all local regulatory agencies.

11.1 Truck Controls

All material hauled to and away from the Glen Cove site will be performed by companies that are appropriately licensed to perform such work in the state of New York. Additionally, all truck drivers must read and sign a truck driver orientation training program.

Upon arrival to the Site, each truck will be visually inspected to ensure appropriate permits are in place. The truck will be initially lined with polypropylene plastic tarp along their beds to prevent water from seeping out of the soil onto local streets. When applicable, odorous truck loads of soil will be foamed to control odors. The trucks will also utilize a heavy tarp which will be extended over the cargo area and overlap the sides and rear of the cargo area to prevent soil being removed from the truck by wind. Before each vehicle leaves the Site it will pass through a decontamination station as described in subsection 4.1.