Proactive by Design

PUBLIC INVOLVEMENT PLAN (PIP)

Former Manufactured Gas Plant (MGP)
642 Allens Avenue
Providence, Rhode Island

PREPARED FOR:

Rhode Island Department of Environmental Management (RIDEM) Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908
Joseph Martella, Project Manager
401-222-2797 ext. 7109
Joseph.martella@dem.ri.gov

ON BEHALF OF:

The Narragansett Electric Company d/b/a National Grid
280 Melrose Street
Providence, RI 02907
Amy Willoughby, Project Manager
781-907-3644
Amy.willoughby@nationalgrid.com

PREPARED BY:

GZA GeoEnvironmental, Inc.
530 Broadway
Providence, Rhode Island 02909
Margaret Kilpatrick, Project Manager
401-427-2719
Margaret.kilpatrick@gza.com

October 28, 2016
GZA File No.: 03.0033554.00

Proactive by Design

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
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October 28, 2016
File No. 03.00033554.00

Via E-Mail and U.S. Mail

Mr. Joseph Martella
Rhode Island Department of Environmental Management (RIDEM)
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

Re: Public Involvement Plan (PIP)
642 Allens Avenue
Providence, Rhode Island
RIDEM Case No. 98-004 / Site Remediation File No. SR-28-1152

Dear Mr. Martella:

On behalf of The Narragansett Electric Company d/b/a National Grid (National Grid), GZA GeoEnvironmental, Inc. (GZA) has prepared the attached Public Involvement Plan (PIP) for the 642 Allens Ave property for your review and approval. This PIP was prepared in response to your *Public Involvement Plan Process Initiation* letter dated September 6, 2016.

Should you have any questions or comments regarding the information presented in the attached, please do not hesitate to contact the undersigned or Amy Willoughby from National Grid at (781) 907-3644.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Sophia Narkiewicz, P.E.
Assistant Project Manager

Margaret S. Kilpatrick, P.E.
Associate Principal

James J. Clark, P.E.
Senior Principal

MSK/tlb

Attachment: *PIP – 642 Allens Avenue*

cc: Amy Willoughby, National Grid

FIGURES

EXHIBITS

KEY THINGS TO REMEMBER

WHERE TO FIND MORE INFORMATION:

- **Publicly Accessible Site Files**
  Files related to the former 642 Allens Avenue Manufactured Gas Plant (MGP) are maintained at RIDEM's Office of Waste Management filed under Former Providence Gas Company MGP, RIDEM Case No. 98-004 / Site Remediation File No. SR-28-1152 (the "Site" or "former 642 Allens Avenue MGP Site"). Appointments to view the files can be made by contacting RIDEM, Department of Technical and Customer Assistance, 235 Promenade Street, Providence, Rhode Island (telephone: 401-222-4700 extension 7307, http://www.dem.ri.gov/programs/customertech/file-review.php).

- **RIDEM Document Listing Website:**
  http://www.dem.ri.gov/programs/wastemanagement/site-remediation/Providence-Gas-Co.php
  Certain publicly available documents already filed with RIDEM on the investigation and remediation of the Site are maintained at this website, which RIDEM operates. As certain public documents are filed on the investigation and remediation activities, they will be posted on this RIDEM website.

HOW TO JOIN THE MAILING LIST:

National Grid established a mailing list for the former 642 Allens Avenue MGP Site. The list includes abutting property owners, tenants, easement holders, and municipalities, as well as people who have previously provided their mailing address to National Grid. Interested persons can be added to this list via an email request to Amy Willoughby at National Grid (amy.willoughby@nationalgrid.com) with your name and address or by calling Amy Willoughby at 1-781-907-3644. National Grid will use the mailing list to distribute fact sheets and other information about the Site on an as needed basis.

CONTACT INFORMATION:

The following personnel should be contacted with questions or concerns pertaining to the Site:

National Grid
Amy Willoughby, Project Manager
National Grid
280 Melrose Street
Providence, RI 02907
781-907-3644
amy.willoughby@nationalgrid.com

Rhode Island Department of Environmental Management
Joseph Martella, Project Manager
RIDEM, Office of Waste Management
235 Promenade Street
Providence, RI 02908
401-222-2797 ext. 7109
Joseph.martella@DEM.RI.GOV

1.0 INTRODUCTION

GZA GeoEnvironmental, Inc. (GZA), on behalf of The Narragansett Electric Company (TNEC) d/b/a National Grid (National Grid), has prepared this Public Involvement Plan (PIP) for the former 642 Allens Avenue MGP Site (the Site) located in Providence, Rhode Island. The attached Figure 1 presents the Site Locus Plan.

On September 6, 2016, RIDEM informed National Grid that the Department received a formal request for development of a PIP. The September 6, 2016 Public Involvement Plan Process Initiation Letter (including the Petition Requesting Public Involvement Plan) is included as Exhibit I.

Consistent with the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations, http://www.dem.ri.gov/pubs/regs/regs/waste/remreg11.pdf), and specifically Rule 7.07E, this PIP was prepared to address relevant and applicable requirements of Rules 7.07 A, B, C and D of the Remediation Regulations. Per Rule 7.07 (Public Involvement), this PIP addresses the following primary elements: 1) Public Notice, 2) Fact Sheets and Enhanced Communication, 3) Community Meetings, and 4) Information Repositories.

The PIP is organized as follows:

- Section 1.00 contains this introduction;
- Section 2.00 includes a summary of relevant Site background information and current Site regulatory status;
- Section 3.00 summarizes historical public involvement;
- Section 4.00 describes the elements of the PIP; and
- Section 5.00 explains how the PIP may be revised in the future.

This PIP is subject to the Limitations included in Exhibit II.

1.1 PIP APPLICABILITY

Consistent with the Department's September 6, 2016 Public Involvement Plan Process Initiation Letter, this PIP is designed to provide public participation in cleanup planning under the jurisdiction of the Remediation Regulations.

This plan is not intended to apply to projects involving, for example, limited subsurface disturbance associated with construction activities or those located in areas previously capped consistent with RIDEM requirements. In addition, this plan 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 plan also does not apply to projects involving minor soil disturbances only (e.g. utility work, installation of fence posts, etc.).

For these activities, National Grid will follow the soil and groundwater management procedures for the Site set forth in the September 2012 Soil Management Plan (SMP).

On October 21, 2016, RIDEM issued a letter on the Liquefaction Project and Public Involvement Plan. RIDEM stated in that letter that the site prep work related to placement of the liquefaction facility and equipment is covered by the jurisdiction

of the Federal Energy Regulatory Commission (FERC)and therefore RIDEM oversight is preempted. As such, this PIP will not apply to the Liquefaction Project work as set forth in RIDEM's letter.

2.0 BACKGROUND

The Site is located at 642 Allens Avenue in the southeastern portion of the City of Providence, Rhode Island and is identified as Assessor's Plat (A.P.) 56, Lots 5, 273, 316 and 317, and A.P. 101, Lot 1. The Site consists of approximately 42 acres with frontage on Allens Avenue to the west and bounded to the northwest, north, and east by the Providence River. It is adjoined to the northwest by Motiva (an oil and gasoline storage and distribution facility), to the southwest by Terminal Road, and to the south and southeast by UNIVAR (a chemical distributor), the former Sun Oil/ProvPort facility, and New England Bituminous Terminal Corporation. The area bounding the Site is generally industrial in nature, with parcels zoned W-3 or M-2 (both industrial type zoning). The closest residential building is over 1,000 feet to the south of the Site. Currently, active natural gas regulation and distribution, gas construction storage, a Compressed Natural Gas (CNG) fueling station, Liquefied Natural Gas (LNG) storage and distribution, and cement storage and distribution activities are conducted at the 642 Allens Avenue property. Figure 2, Overall Aerial Site Plan, presents the location and configuration of the Site, including neighboring properties.

The below table presents a summary of current Site uses:

A.P.	LOT	CURRENT OWNER	ADDRESS	CURRENT USE(S)
101	1	TNEC	642 Allens Avenue 670 Allens Avenue	Natural Gas Construction Storage Natural Gas Regulation and Distribution CNG Fueling Station
56	5	TNEC	195 Terminal Road	Natural Gas Construction Storage Natural Gas Regulation and Distribution
56	273	TNEC	125 Terminal Road also known as (a/k/a) 139 Terminal Rd	Cement Storage and Distribution
56	316	TNEC	125 Terminal Road a/k/a121 Terminal Rd	LNG Facility
56	317	TNEC	181 Terminal Road a/k/a 121 Terminal Rd	Access Road

The Site is generally level with gentle slopes towards the Providence River and is secured by chain-link fencing and barbed wire. Based on several rounds of investigations performed at the Site, subsurface conditions consist of urban fill underlain by organic silt, glacial outwash and glacial till. The depth to bedrock is more than 100 feet below ground surface (bgs). Groundwater is generally encountered within the fill unit, is classified as GB or not suitable for drinking water use without treatment, and flows towards the tidally influenced Providence River.

A United States Army rifle range operated at the Site in the late 1800s, prior to the use of the Site as a MGP. From 1910 until 1954, a MGP operated at the Site producing coal gas, carbureted water gas, and high-BTU oil gas. MGP by-products were routinely managed through recovery, storage, recycling, reprocessing, and resale. 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. By 1954, coal gasification operations at the Site had ceased. From 1952

until the 1960s, a liquefied petroleum gas distribution plant operated on the Site. Gulf Oil had a facility at the Site to store kerosene from 1957 to 1971. A LNG facility has operated on the eastern and southeastern portions of the Site since 1972. The southeastern portion of the Site has been utilized for cement storage and distribution since 1961. Propane storage and distribution occurred at the Site from the 1960s to the 1980s for peak shaving purposes.

The Site is listed as a "State Site" under RIDEM's Remediation Regulations (RIDEM Case No. 95-022 and Site Remediation File No. SR-28-1152) due to the detection of soil and groundwater impacts related to the former MGP and other historical activities and uses. Several rounds of investigation activities have been conducted at the Site. As summarized in VHB's April 2003 *Site Investigation Report (SIR)*, soil and groundwater at the Site contain petroleum hydrocarbons and/or certain hazardous materials at concentrations that represent Method 1 exceedances as defined in the Remediation Regulations. Specifically, the following exceedances have been identified:

- Arsenic, lead, total petroleum hydrocarbons (TPH), and several polycyclic aromatic hydrocarbons (PAHs) in soil at concentrations above the Industrial/Commercial Exposure Criteria (I/C-DEC);
- TPH, benzene, toluene, and ethylbenzene concentrations in soil above the GB Leachability Criteria;
- Benzene and naphthalene concentrations in groundwater above the GB Groundwater Objectives;
- TPH, lead, and naphthalene in soil at concentrations above the Upper Concentration Limits (UCLs); and
- Light Non-Aqueous Phase Liquids (LNAPL) on the water table.

In 2005, VHB initiated the implementation of an annual groundwater monitoring and passive non-aqueous phase liquids (NAPL) recovery program, which was first described in the 1998 *Remedial Action Work Plan (RAWP)* prepared by Environmental Science Services (ESS). Groundwater monitoring is currently conducted at the Site on an annual basis and groundwater and NAPL gauging is performed on a semi-annual basis. Annual monitoring results have been documented in Groundwater Monitoring Reports, which have been submitted to RIDEM between 2005 and 2013. Groundwater monitoring at the Site has continued since 2013 and will be documented in the *SIR Addendum* that is expected to be submitted to RIDEM in early 2017 (see below).

Several remedial actions have been performed at the Site between 1994 and 2010. These activities have been documented in the following reports to RIDEM:

- October 1995 *Remedial Action Report for Condensate Tank Closure Compressor Building No. 2* prepared by Resource Controls Remedial Services, Inc. (RCA) on behalf of the Providence Gas Company (PGC);
- October 1995 *UST Closure Assessment* prepared by Hoffman Engineering, Inc. (HEI) on behalf of the PGC;
- September 1998 *UST Closure Assessment* prepared by Hoffman Engineering, Inc. (HEI) on behalf of the PGC;
- June 1996 *Remedial Action Report for Short Term Measure Performed at the Providence Gas Company* prepared by RCA on behalf of the PGC;
- October 1999 *Subsurface Investigation and Proposed Remediation* prepared by Environmental Science Services, Inc. (ESS) on behalf of the PGC;

- May 3, 2001 *Summary Letter - Former Compressor Building No. 2 PCB Remediation* prepared by ESS on behalf of the PGC;
- January 2001 Remediation of the New Regulator Area – Summarized in the *April 2003 Site Investigation Report (SIR)* prepared by Vanasse Hangen Brustlin, Inc (VHB) on behalf of New England Gas Company (NEGC);
- November 2002 *Remedial Action Closure Report* prepared by VHB on behalf of the NEGC; and
- December 2002 *Remedial Action Closure Report* prepared by VHB on behalf of the NEGC.

RIDEM-approved controls installed at the Site include both fencing and engineered caps. The engineered caps installed on Site include at least 2-feet of clean imported soil, at least 1-foot of clean imported soil underlain by a geotextile or warning barrier, asphalt paving, concrete pads, and building footprints.

In 2014, National Grid initiated additional investigation activities to further evaluate identified data gaps at the Site. National Grid expects to submit a *Site Investigation Report (SIR) Addendum* to RIDEM presenting the findings of these activities in early 2017.

On-going activities that are being performed under Short Term Response Action Plans (STRAPs) approved by RIDEM include the Holder 18/21 Capping Project (*STRAP* approved May 18, 2016) and the New Dike Road Project (*STRAP* approved August 25, 2016).

3.0 PUBLIC INVOLVEMENT HISTORY

Pursuant to Rule 7.07A of the Remediation Regulations, National Grid has provided public notification prior to the completion of recent Site investigation activities at the Site. This notification included mailing public notices to all abutting property owners, tenants, easement holders, and municipalities[1], which detailed information regarding the nature and timing of the proposed field activities. The most recent public notification for the Site (dated May 13, 2014) is included in Exhibit III.

4.0 PUBLIC INVOLVEMENT PLAN

This section describes the elements of the PIP for the Site based on the applicable and relevant requirements of Rules 7.07 A, B, C and D of the Remediation Regulations. This PIP has been prepared to establish procedures for public and community communications relative to the cleanup planning at the Site.

A contact list for National Grid, GZA and RIDEM personnel associated with the Site is presented in Exhibit IV, in the "Key Things to Remember" portion of this PIP and on the title page.

4.1 PUBLIC NOTICE

National Grid has established a mailing list for the Site. The list includes, as required in Rule 7.07A of the Remediation Regulations, abutting property owners, tenants, easement holders, and the City of Providence. In addition, this mailing

[1] Note that there are not any community well suppliers associated with any well head protection areas that encircle the Site.

list includes the petitioners from the September 6, 2016 *Public Involvement Plan Process Initiation* Letter. National Grid will use the mailing list to announce any public meetings and distribute fact sheets and other information about the Site. In addition, National Grid will use the list to distribute information regarding reports and other documents added to the repository (see Section 4.4).

Rule 7.07A of the Remediation Regulations requires public notice at two points during the Site Investigation process:

1. Prior to conducting Site Investigation field activities at a known contaminated site; and

2. Prior to the formal RIDEM approval of the *SIR* (in the form of the *Remedial Decision Letter*).

As described in Section 3.00, National Grid provided public notice in the form of letters mailed prior to performing Site investigation activities in 2014. With respect to the second notification step, upon receipt of a *Program Letter* from the Department, National Grid will provide written notification to the established mailing list when this step is reached. This written notification will include a brief summary of the investigation's findings, a description of the proposed Site remedy, and information on where the public can access and review the *SIR*. As part of this post-*SIR* notification process, RIDEM will initiate a 14-day public comment period, commencing with the date of delivery of the public notice, during which the public may review RIDEM records pertaining to the Site and submit written comments to RIDEM regarding the technical feasibility of the preferred remedial alternative.

4.2 FACT SHEETS AND ENHANCED COMMUNICATIONS

Rule 7.07B of the Remediation Regulations describes requirements for fact sheets and enhanced communication for sites located in Environmental Justice (EJ) Focus Areas. This Site is not located within a EJ Focus Area, therefore, the requirements of Rule 7.07B do not apply. However, in an effort to provide further information, National Grid has prepared and will distribute a Site-specific fact sheet which includes the known history of the Site, summary of Site characterization results (based on historical uses and existing environmental information), information about public involvement activities, the Site's status in the RIDEM regulatory process and the expected path forward, and contact information. This fact sheet will be distributed to the mailing list. National Grid will update this fact sheet in the event new information is developed and/or significant project milestones are achieved.

4.3 COMMUNITY MEETINGS

Consistent with Rule 7.07C, National Grid will schedule community meetings on an as-requested basis when requested by a minimum of 25 individuals who are located near the Site. At all public meetings, translation assistance will be provided for non-English speaking individuals, if requested at least 72 hours in advance of the meeting.

National Grid will submit a written summary of all public meetings to RIDEM in hard copy and electronic format within 10 business days of the meeting. In accordance with Section 7.07C, the meeting summaries will include:

- identification of the main issues of concern to the community;

- document requests by the public for a continued dialogue (including form and frequency); and

- proposed responses to the identified community issues through action items and schedules.

4.4 INFORMATION REPOSITORIES

National Grid will provide Site-specific information on work under the RIDEM regulatory process to the public by developing and maintaining a mailing list to such distribute information; providing advance notification to the Site mailing list about Site activities under the Remediation Regulations; and providing and updating fact sheets on these activities.

Files related to the former 642 Allens Avenue MGP Site are maintained at RIDEM's Office of Waste Management filed under RIDEM Case No. 98-004 / Site Remediation File No. SR-28-1152. Appointments to view the files can be made by contacting RIDEM, Department of Technical and Customer Assistance, 235 Promenade Street, Providence, Rhode Island (telephone: 401-222-4700 extension 7307). Additional information regarding file reviews at RIDEM can be found at http://www.dem.ri.gov/programs/customertech/file-review.php.

In addition, certain documents related to the investigation and remediation of the Site under the Remediation Regulations are maintained at the website that RIDEM operates. The website is accessible at http://www.dem.ri.gov/programs/wastemanagement/site-remediation/Providence-Gas-Co.php. Regulatory submittals will be sent to RIDEM for subsequent posting to the website, including:

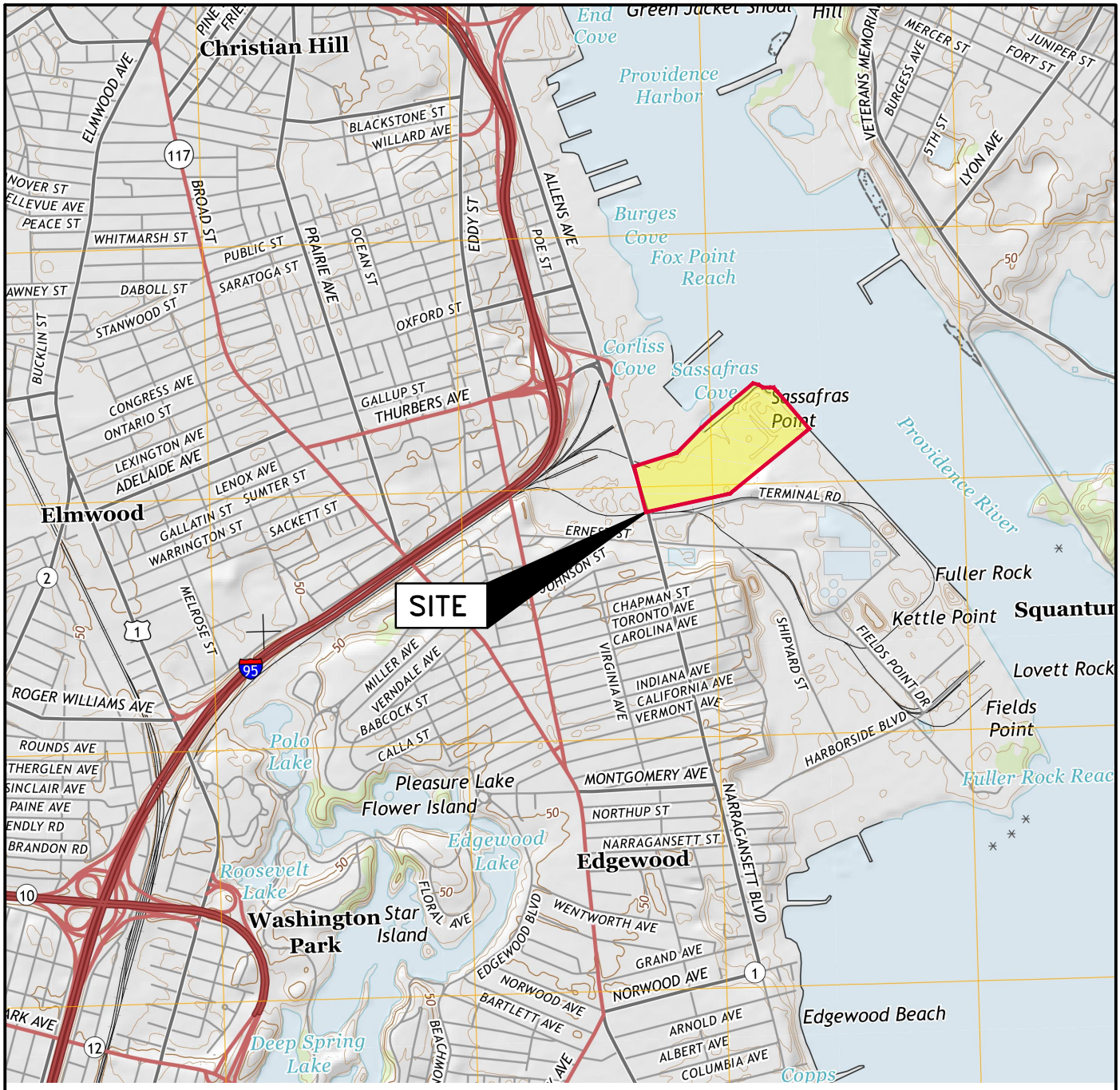
- work plans;
- sampling and field testing plans;
- technical reports and documents summarizing results and recommendations;
- relevant correspondence;
- press releases;
- public information materials;
- updates to the PIP;
- public meeting summaries;
- summaries of responses to comments received; and
- copies of public notices about the Site.

See the "Key Things to Remember" portion of this document to find out more about these communication tools.

5.0 FUTURE PLAN REVIEW AND AMENDMENTS

National Grid may revise this PIP whenever necessary for projects subject to the Remediation Regulations. All revisions will be subject to review and approval by the Department. If revisions are proposed, National Grid will prepare a revised PIP for review and approval by the Department. A final revised PIP will then be placed in the information repositories and a notice of its availability will be sent to the Site's mailing and email lists.

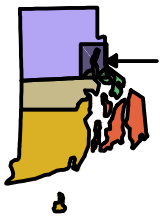
FIGURES



0 1000' 2000' 4000'

SCALE IN FEET 1" = 2000'

RHODE ISLAND



QUADRANGLE LOCATION

SOURCE:

BASE MAP FROM THE FOLLOWING USGS QUADRANGLE MAP:
PROVIDENCE, RHODE ISLAND (2015)

DIGITAL TOPOGRAPHIC MAPS PROVIDED BY USGSSTORE.GOV.

CONTOUR ELEVATIONS REFERENCE NAVD 88,
CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS

N W E S

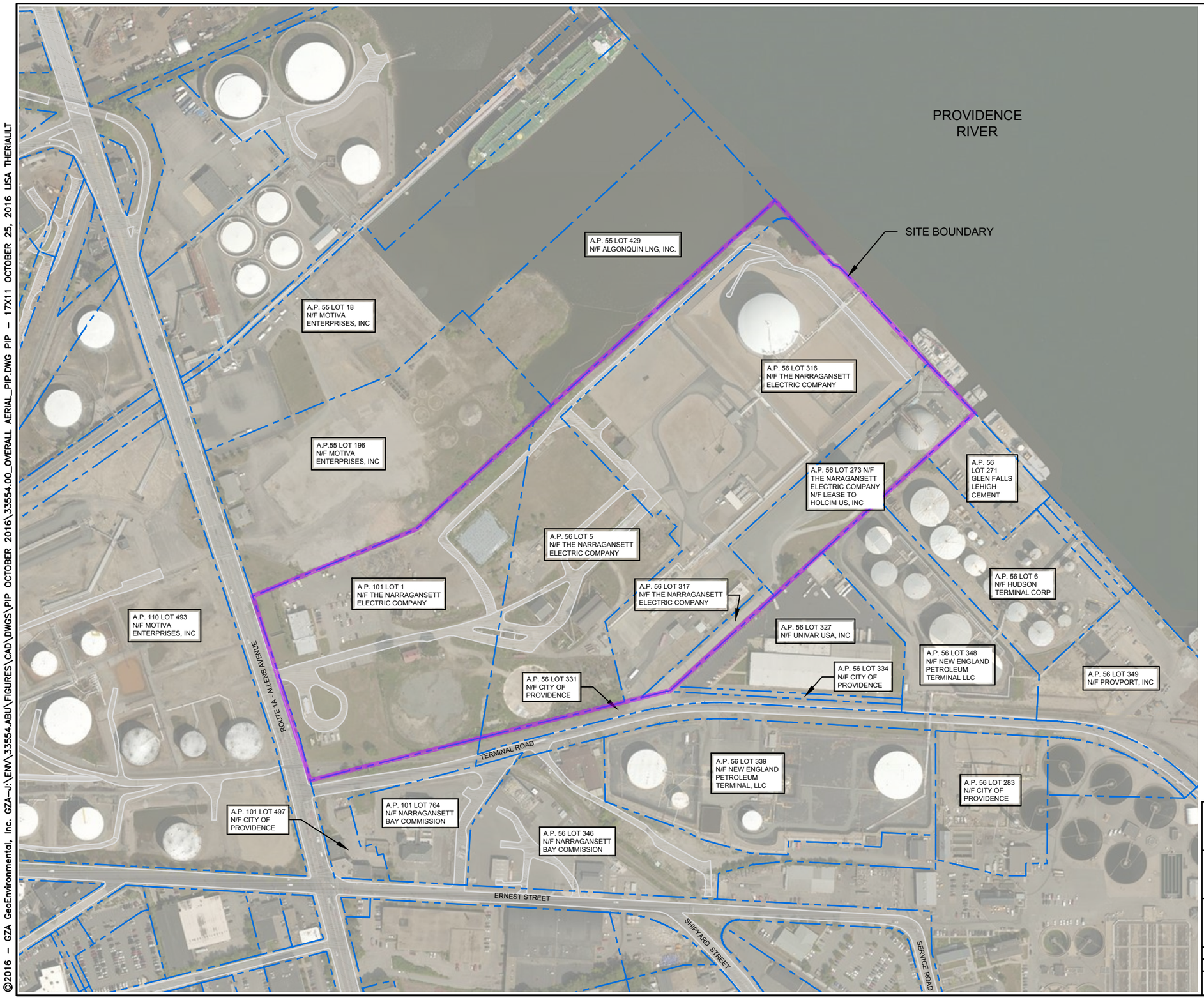
NATIONAL GRID
642 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
nationalgrid

LOCUS PLAN

PROJ MGR: MSK	REVIEWED BY: MJP	CHECKED BY: JJC	FIGURE 1
DESIGNED BY: SDN	DRAWN BY: LDT	SCALE: AS NOTED	
DATE: OCTOBER 2016	PROJECT NO. 33554.00	REVISION NO. 0	SHEET NO. 1 OF 2



LEGEND:

PROPERTY LINES

642 ALLENS AVENUE
FORMER MGP SITE BOUNDARY

REFERENCE NOTES:

1. THIS MAP CONTAINS THE ESRI ARCGIS ONLINE BING MAPS AERIAL LAYER PACKAGE. IMAGE COURTESY OF USGS EARTHSTAR GEOGRAPHICS SIO © MICROSOFT CORPORATION 2015.
2. PARCEL AND STREET DATA PROVIDED BY THE CITY OF PROVIDENCE PLANNING AND DEVELOPMENT DEPARTMENT. PARCELS OF REAL ESTATE ASSESSED AS OF DECEMBER 31, 2012. GIS DATA ARE FOR PLANNING PURPOSES ONLY. THESE DATA DO NOT REPRESENT A LEGALLY RECORDED PLAN, DEED, SURVEY OR ENGINEERING SCHEMATIC AND ARE NOT INTENDED TO BE USED AS SUCH.
3. SITE BOUNDARIES ARE APPROXIMATE.

N W E S

0 150' 300' 600'
SCALE IN FEET 1" = 300'

NATIONAL GRID
642 ALLENS AVENUE
PROVIDENCE, RHODE ISLAND

OVERALL AERIAL SITE PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com

PREPARED FOR: nationalgrid

PROJ MGR: MSK	REVIEWED BY: MSK	CHECKED BY: SDN	FIGURE 2
DESIGNED BY: SDN	DRAWN BY: LDT	SCALE: AS NOTED	
DATE: OCTOBER, 2016	PROJECT NO. 33554.00	REVISION NO. 0	SHEET NO. 2 OF 2

EXHIBIT I

SEPTEMBER 6, 2016
PUBLIC INVOLVEMENT PLAN PROCESS
INITIATION LETTER

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

Public Involvement Plan Process Initiation Letter
File No. SR -28-1152
Formerly Case No. 98-004

September 6, 2016

Amy A. Willoughby
Lead Environmental Scientist
New England Site Investigation & Remediation Group
National Grid
40 Sylvan Road, E3.691
Waltham, MA 02451

RE: Providence Gas Co. – AA
A.k.a. Former New England Gas Company MGP property
642 Allens Avenue, Providence, Rhode Island
Plat Map 56 / Lot 5, Plat Map 101 / Lot 1

Dear Ms. Willoughby:

On November 9, 2011, the Rhode Island Department of Environmental Management (the Department) amended the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in an efficient manner.

In the matter of the above referenced "Site" (as defined in the Industrial Property Remediation and Reuse Act), the Department's Office of Waste Management (OWM) has received a written request in the form of a petition from the community, submitted in accordance with Rule 7.07.E (Public Involvement Plans) of the 2011 Remediation Regulations, that a Public Involvement Plan (PIP) be developed and approved for the Site. A copy of the petition, submitted to the Department on August 31, 2016, is included as an attachment to this letter.

The Department acknowledges that informal discussions with National Grid about the request for a PIP have already been conducted. This letter is a formal request from the Department asking National Grid to initiate the process of developing an approvable PIP associated with the planned environmental cleanup of the Providence Gas Co. – AA Site, and any other site redevelopment activities requiring remedial actions that fall under the jurisdiction of the Remediation Regulations.

Please notify this office within seven days of the receipt of this letter of your plans and proposed schedule for conducting the PIP development process.

If you have any questions regarding this letter or would like the opportunity to meet with Department personnel, please contact me by telephone at (401) 222-2797, extension 7109 or by e-mail at joseph.martella@dem.ri.gov.

Sincerely,

Joseph T. Martella II
Senior Engineer
Rhode Island DEM
Office of Waste Management

cc: Ronald Gagnon, RIDEM/OCTA
Kelly J. Owens, RIDEM.OWM
Susan Forcier, Esq., RIDEM/OLS
Gregory Swift, RIDEM/OWR
Barbara Morin, RIDOH/Center for Healthy Homes & Environment
Rich Lucia, RI CRMC
Robert E. Azar, Providence Planning and Development
Julian Rodrigues-Drix, RIDOH & EJLRI
Margaret S. Kilpatrick, GZA

Attachment: Petition Requesting Public Involvement Plan

RECEIVED
DEM/OWM
2016 SEP -2 P 1:42

Petition to the Rhode Island Department of Environmental Management and National Grid to cease approval and implementation of any and all remediation work and related permitting activities at the Providence MGP site until a Public Involvement Plan is developed and approved.

Preamble:

The waterfront site of the former Providence Gas Company Manufactured Gas Plant (MGP) located at 642 Allens Avenue in Providence, RI (hereafter referred to as "Site") is known to have a long history of contamination from oil and/or hazardous materials (OHM). The Site extends from Allens Ave on the west to the Providence River on the east, and is bordered by the Motiva oil terminal on the north, Terminal Road on the southwest, and ProvPort tenants to the southeast (UNIVAR chemical company and New England Petroleum). MGP operations from 1910 to 1954 released byproducts including coke, coal tar, ammonia, toluene, and benzene.

B.P. Clapp operated an ammonia works at the property starting in 1910, the United States Government operated a toluene facility during 1918, and a liquefied petroleum gas (LPG/Propane) distribution plan began operations in 1952. In 1973, Algonquin Gas Transmission Company, LLC and Algonquin LNG, Inc., subsidiaries of Duke Energy, negotiated with Providence Gas Company to build a 600,000 barrel Liquefied Natural Gas (LNG) storage tank at the Providence MGP site, with Algonquin LNG providing regasified natural gas to the Providence Gas Company distribution network. In September 2000, the Southern Union Company purchased the Providence Gas Company and changed its name to the New England Gas Company (NEGC). In December 2002, KeySpan Energy Development Corporation purchased Algonquin LNG from Duke Energy Gas Transmission, making KeySpan LNG LLC a wholly-owned subsidiary operating as a tenant on the New England Gas Company property. St. Lawrence Cement Company was also a tenant of NEGC on the Providence MGP Site, changing its name to Holcim (Canada) Inc. in 2009. In February 2006, National Grid PLC acquired KeySpan Corp for $7.3 billion and also purchased New England Gas Company from Southern Union. National Grid, through its subsidiary National Grid LNG LLC is the current owner of the Providence MGP Site.

Numerous substances which pose a risk to public health, safety, and the environment have been recorded at the site, and include but are not limited to: complex mixtures of different polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), phenolic compounds, volatile organic compounds (VOCs) including benzene and naphthalene, polychlorinated biphenyls (PCBs), ferri- and ferrocyanide compounds, asbestos, and metals including lead and arsenic. Many locations in the site contained multiple hazardous substances at levels that exceed allowances.[1]

Since 1994, there have been some actions taken to remediate the site in order to facilitate expansion of the LNG storage facility.[2] Environmental Science Services (ESS) was contracted to conduct tests and prepare a Remedial Action Work Plan ("RAWP"), which was submitted to RIDEM in

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[1] "Remedial Action Closure Report: Former Manufactured Gas Plant, 642 Allens Ave" prepared by VHB/Vanasse Hangen Brusslin, Inc. for the New England Gas Company, and submitted to RIDEM November 2002.

[2] "Site Investigation Report: Former Manufactured Gas Plant, 642 Allens Ave" prepared by VHB/Vanasse Hangen Brusslin, Inc. for the New England Gas Company, and submitted to RIDEM April 2003.

December 1998. The RAWP defined objectives for objectives for surface soils, subsurface soils within 100 feet from Providence River, and subsurface soils more than 100 feet from shoreline. In June 1999 RIDEM issued a Temporary Remedial Action Permit (TRAP), and Algonquin LNG excavated part of the site by the LNG truck loading area and containment dike. Following Southern Union's acquisition of the site, RIDEM rejected the Draft Interim RAWP submitted by Environmental Operations, Inc. in July 2001 as well as a Modified RAWP submitted by Vanasse Hangen Brustlin, Inc in September 2001. RIDEM approved modifications in April 2002 and a new TRAP was issued, leading to excavation of contaminated soil and waste in six areas on the site, which was transported and disposed of at facilities in Dunmore Pennsylvania, Loudon New Hampshire, and Emelle Alabama. In total, 16,864 tons of material were excavated and removed, of which 9,558 tons were classified as hazardous. In addition, a wastewater treatment system designed to remove particulate solids, floating oils, dissolved organics, and cyanide treated and discharged 296,691 gallons of wastewater.[3]

While some specific areas of the Site were considered remediated following the activities described above, the remaining areas, which constitute a majority of the land, have not been remediated. In addition, records show releases of oil and/or hazardous materials (OHM) on all surrounding properties.[4] It must be noted that while active RIDEM oversight was present throughout the previously conducted remediation activities, this pre-dated the Public Involvement Plan regulations, amended in November 2011 as described below. As such, there was not sufficient public involvement in the planning, approval, or oversight of previously conducted remediations.

Current Activities:

On April 1, 2016, National Grid LNG LLC (NGLNG, the owner and responsible party for Site remediation), submitted an abbreviated application to the Federal Energy Regulatory Commission (FERC) seeking a Certificate of Public Convenience and Necessity to construct the *Fields Point Liquefaction Project* (hereinafter "Liquefaction Facility"). NGLNG is also submitting an additional application to FERC for a storage tank containment enhancement project, the "Bund Wall Project" to be constructed at the same time as the Liquefaction Facility. In Section 7.3.6 of Environmental Resource Report #7 (Soils) in NGLNG's application, it states:

While remedial actions have removed surficial contaminated soil from the Site to the extent practicable, some Site soils that exceed applicable RIDEM criteria remain, especially along the northern and eastern access roads that surround the LNG containment berm, within the truck offloading area, and within the southwestern-most portion of the Project Site. Soils in these areas are primarily contaminated by metals, semi-volatile organic compounds ("SVOCs"), and petroleum (FERC 2005). During explorations performed in the liquefaction work area of the Site, coal tar-like and fuel oil-like impacts were observed in the fill layer, as evidenced by elevated levels of Volatile Organic Compounds ("VOCs), Polycyclic Aromatic Hydrocarbons ("PAHs"), Total Petroleum Hydrocarbon ("TPH"), metals and cyanide. In addition, light non-aqueous phase liquids ("LNAPLs") were observed in some monitoring wells screened within the fill layer... Slight visual and olfactory evidence of fuel oil-like impacts were detected in the underlying upper

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[3] "Remedial Action Closure Report". November 2002.

[4] "Site Investigation Report". April 2003.

organic silt layer in two test borings within the proposed liquefaction work area. The horizontal extent of soil impacts covers the entire proposed liquefaction work area.[5]

NGLNG intends to remove portions of previously installed soil caps, excavate and store contaminated soils on site, and install foundation piles into contaminated soils as part of the construction of the facility. NGLNG anticipates "that soils will be stockpiled at the Site for approximately one month, although soils will continuously be generated during soil disturbance activities for approximately six months."[6] Protections planned by NGLNG include placing soil stockpiles on plastic sheets with 6 mil thickness, covering piles with plastic sheets at the end of each day, and use of hay bales. In order to conduct these activities, NGLNG has submitted a Short Term Remedial Action Plan (STRAP) to RIDEM for approval.

Community Concerns:

Community residents, organizations, and elected officials have expressed strong concerns and opposition to NGLNG's proposal through submitted comments and testimonies, published articles, community forums, and regular demonstrations, starting in August 2015 through the present. Broadly, concerns over the concentration of known historical contamination and currently operating polluting facilities in close proximity to low income communities of color have lead to charges of environmental racism. The U.S. Environmental Protection Agency's EJSCREEN tool confirms that the area surrounding the Site is ranked as high risk on numerous environmental justice indicators.[7] As such, there are paramount concerns over the cumulative impacts and risks of any additional release of toxins, in a community that is already overburdened by historical legacies of pollution and ongoing toxic releases recorded on the EPA Toxic Release Inventory. Specific to the Site at 642 Allens Ave, concerns include but are not limited to:

- Removal of parts of the existing soil cap installed during previous remediations, which undoes previous progress taken to improve the Site and risks spreading additional contamination.
- Disturbing soils that have not been previously remediated, opening up pathways for the release and spread of known contamination with potential for serious environmental and health impacts.
- Unsafe storage of excavated contaminated soils during construction, which are exposed and at risk to flooding, storm surges, and high winds.
- Lack of continual ongoing monitoring of air, soil, and groundwater.
- Potential for improper handling of materials that would violate the terms of the proposed soil management plan or STRAP, with a lack of external oversight to continually monitor activities.
- Potential for hazardous materials from the site to reach offsite through blowing dust, stormwater, or accidental offsite transport on vehicles or persons, resulting in potential impact to sensitive populations including but not limited to pedestrian or commuter traffic along Allens Ave,

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[5] Environmental Report, NGLNG Fields Point Liquefaction Project, Resource Report 7, Soils, Section 7.3.6. Submitted to the Federal Energy Regulatory Commission on April 1, 2016.

[6] ibid

[7] "Environmental Racism: ongoing and underlying environmental justice issues." Environmental Justice League of RI. http://www.rifuture.org/ejlri-3.html as accessed August 8, 2016.

patients or staff at Providence Community Health Centers, students or faculty at Meeting Street School, or workers at the Site or at neighboring facilities.

- Lack of public engagement and responsiveness to concerns by NGLNG, leading to a general lack of knowledge, understanding, or communication about hazards and risks to both community members and workers who could be negatively impacted.

Petition:

Based upon the information contained in the above sections for Preamble, Current Activities, and Community Concerns, the petition of certain community members with included signatures brings to the attention of the RI Department of Environmental Management's amended site remediation regulations, passed in November 2011. In regards to the requirement for a Public Involvement Plan (PIP):

E. Public Involvement Plans*: The Performing Party shall develop, and submit to the Department for review and approval in both hard copy and electronic format (as specified by the Department), a site-specific public involvement plan for any Contaminated-Site for which the Department has received a Notification of Release and for which a minimum of twenty-five (25) residents, local officials or other interested parties have requested, in writing and in the form of a petition, that a formal process be set up for their participation in cleanup planning. The Public Involvement Plan shall address all relevant and applicable requirements of Rule 7.07 A, B, C, and D.*

Based on this regulation, the petitioners request that approval and implementation of any and all remediation work is halted at the Providence MGP Site until a PIP is approved and implemented. This specifically includes, but is not limited to, the Short Term Remedial Action Plan that NGLNG is proposing for activities on the site, as well as other RIDEM permits for activities related to the Fields Point Liquefaction Facility proposed by NGLNG.

The PIP should provide a framework for the public to shape what the public meetings will look like, what their format would be, and how information and monitoring samples are communicated to the public, as well as how additional members of the public can become involved in the PIP process. More so, the PIP should recognize members of the community as mechanisms of oversight. To this end, it should include a clear mandate and protocol for investigating reports that community members make about emissions (i.e., individual complaints about dust clouds, soil disturbances, strong chemical smells, etc).

Petition Signatures to RIDEM and National Grid: Public Involvement Plan for Former Manufactured Gas Plant on 642 Allens Ave, Providence RI

Printed Name	Signature	Address	Email	Phone
1 C. Kelly Smith	C. Kelly Smith	103 Holden St. Prov 02908	Mesa4me@aol.com	401-274-2008
2 Michael Alston	Michael Alston	162 Miller Ave 02905	a.panther.4.life@gmail.com	401-248-5011
3 Viviane Hanna	[illegible]	162 Miller Ave	viv43@hotmail.com	4014441007
4 LEO SCHULZ	Leo Schulz	389 MONTGOMERY AVE	LEO.SCHULZ2401@GM	401-545-1021
5 David Ramos	[illegible]	122 Broad St. (Quisqueya) Prov. RI. 02905	—	401.785.2077
6 Laura Frost	[illegible]	116 Blackstone St Providence RI 02906	laura.frost856@hotmail.com	(401) 545-0217
7 Julian Drix	[illegible]	93 Calla St. 02905	Julian@ejlri.org	607-280-2471
8 Gina Rodriguez	Gina Rodriguez	93 Calla St 02905	gina.ritesandreason@gmail.com	4014401858
9 Christopher Lauth	[illegible]	743 Westminster St	chris@youthpriderl.org	401.421.5626
10 Leann Letellier	Leann Letellier	67 Gallatin St	leann.letellier@gmail	401-688-3739
11 Charisma Sampson	Charisma Sampson	101 Westerna Ave	Charismasampson02903@gmail.com	401-830-0171
12 Benjamin Chaplin	Benjamin Chaplin	181 California Ave. Apt 2	Benjaminchaplinpro@gmail.com	
13 Leslie Noriega	[illegible]	74 gallatin sta	Lilynoriega@live.com	(401) 785-2927
14 Justin Hernandez	Justin Hernandez	175 Roger Williams Ave.	justinhernandez121@gmail.com	(401) 572-4949
15 Aleita cook	Aleita cook	85 Potter	aleitacook14@gmail.com	(347) - 347-3118
16 Seena Chhan	Seena Chhan	207 Wendell St.	Seena@ejlri.org	
17 Jesus Holguin	Jesus Holguin	3 Bell St	Jesus@ejlri.org	401 368 5693

36. Christina Ergas 39 Windmill St Christina_Ergas@brown.edu 214-632-4971

Petition Signatures to RIDEM and National Grid: Public Involvement Plan for Former Manufactured Gas Plant on 642 Allens Ave, Providence RI

Printed Name	Signature	Address	Email	Phone
18 TENETIA COOKE	Tenetia Cooke	20 SPICER ST	TenetiaCooke29@gmail.com	383-7396
19 Ivan Calderon	Ivan Calderon	10 Priscilla Ave	UNK.POOCH@Gmail.com	965-8966
20 Sheila Calderon	Sheila Calderon	10 Priscilla Ave	sheila1666se@gmail	225-9303
21 KEITH OLIVEIRA	[illegible]	63 ROANOKE ST.	KEITHOLIVEIRA@VERIZON.NET	401-751-7618
22 Erroll Lomba	[illegible]	41 Woodmont St	E.lomba@gmail.com	401 351-1740
23 Angela Ankoma	[illegible]	116 Vineyard street Prov.	angie.bannerman@gmail.com	401-864-81660
24 Monica Huertas	[illegible]	216 Ohio Ave	monicavchuertas@gmail.org	4012804059
25 [illegible]	[illegible]	216 Ohio Ave	Jhuertas0609@gmail.org	401-6991212.
26 Justice Gaines	Justice Gaines	304B Wickenden St	justicegaines7@gmail.com	908-698-7069
27 JARON BROWNE	[illegible]	2817 BIRDSALL AVE Alexandria, VA	jaron@ggjdiznk.org	415-377-2822
28 Patrick Him	Patrick Him	177 Mawney St.	Partrick@prysm.us	401-332-5045
29 Sabine Adrian	[illegible]	67 Rosedale St	sabine@providencestudentunion.org	401-952-7868
30 SVON KEO	[illegible]	103 ALGER AVE.	SVON@prysm.us	
31 Danny Svay	Danny Svay	649 PUBLIC ST.	Danny5@prysm.us	401-592-9700
32 ERIC LARSON	[illegible]	28 Sycamore St	geographias@yahoo.com	401 575 2846
33 KATE AUBIN	Kate Aubin	39 MOORLAND AVE	SUPER8KATE@YAHOO.COM	401.374.3697
34 TOMMY SVAY	Tommy Svay	649 Public St.	Tommy@prysm.us	401-261-1140
35 Cristina Cabrera	[illegible]	95 Park Pl Pawtucket, RI	ccabreraefa@gmail.com	401-450-1486

EXHIBIT II

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of National Grid for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed 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 during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, National Grid and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

GEOHYDROLOGICAL LIMITATIONS

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that National Grid or others authorized to use this report obtain additional 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.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

EXHIBIT III

MAY 13, 2014 PUBLIC NOTIFICATION

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

530 Broadway
Providence
Rhode Island
02909
401-421-4140
Fax: 401-751-8613
http://www.gza.com

May 13, 2014
File No. 03.0033554.00-C

Notice to Abutter
Planned Site Investigation Activities
642 Allens Avenue
Providence, Rhode Island
RIDEM Case No. 98-004

The purpose of this letter is to notify you that The Narragansett Electric Company d/b/a National Grid (National Grid) will be conducting additional environmental investigation activities at 642 Allens Avenue in Providence, Rhode Island (herein referred to as the "Site"). The Site is further designated as Assessor's Plat (A.P.) 101 Lot 1, A.P. 56 Lots 5 and 316 of the City of Providence Tax Assessor's plat maps and is the location of a National Grid natural gas regulator station, compressed natural gas (CNG) fueling station, liquefied natural gas (LNG) facility and office building. This notice is being provided to abutting property owners and tenants in accordance with requirements established in the Rhode Island Department of Environmental Management's (RIDEM's) *Rules and Regulation for the Investigation and Remediation of Hazardous Materials* (Remediation Regulations). Should you be an owner of property that is leased, we request that you please provide a copy of this letter to your tenants.

The planned investigation activities are further described in a *Supplemental Site Investigation Work Plan* (SSIWP) which was prepared by GZA GeoEnvironmental, Inc. (GZA) on behalf of National Grid and submitted to RIDEM in March 2014. The investigation activities will be conducted as described in the SSIWP by GZA on behalf of National Grid. The purpose of the environmental investigations is to further evaluate the nature and extent of impacts to soil and groundwater at the Site. The investigation will involve the completion of test borings, test pit explorations, the installation of monitoring wells, and the sampling of environmental media (soil and groundwater) for laboratory testing. The field work for the investigation is scheduled to begin the week of May 19, 2014 and is expected to require approximately two months to complete.

If you would like more information or have any questions, please contact Amy Willoughby of National Grid at 781-907-3644.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

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

James J. Clark, P.E.
Principal

MSK/JJC:tja

cc: Joe Martella, RIDEM
Amy Willoughby, National Grid

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Owner of Record	Mailing Address	
Motiva Enterprises LLC	PO Box 4369	Houston, TX 77210-4369
Motiva Enterprises LLC, Michael Sullivan, NE Complex Manager	520 Allens Avenue	Providence, RI 02905
Narragansett Electric Company	40 Sylvan Road	Waltham, MA 02451-2286
City of Providence	25 Dorrance Street	Providence, RI 02903
Narragansett Bay Water Quality Management District	235 Promenade Street # S500	Providence RI 02908-5734
Holcim US Inc.	201 Jones Road	Waltham, MA 02451
New England Telephone dba Verizon New England	140 West Street	New York, NY 10007

Joe Martella, RIDEM Office of Waste Management	235 Promenade Street	Providence RI 02908

EXHIBIT IV

CONTACT LIST

Exhibit IV – PIP
CONTACT LIST
642 Allens Avenue
Providence, Rhode Island
RIDEM Case No. 98-004 / Site Remediation File No. SR-28-1152

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