

September 5, 2014

### VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

> Docket 4514 - 2014 Distribution Adjustment Charge (DAC) RE: Responses to Division Data Requests – Set 1

Dear Ms. Massaro:

On behalf of National Grid, I am enclosing ten (10) copies of the Company's responses to the first set of data requests issued by the Rhode Island Division of Public Utilities and Carriers on August 15, 2014 in the above-referenced docket.

This filing also contains a Motion for Protective Treatment in accordance with Rule 1.2(g) of the Commission's Rules of Practice and Procedure and R.I.G.L. § 38-2-2(4)(B). The Company seeks protection from public disclosure of certain customer information, which is provided in the Company's response to Division 1-16. Accordingly, the Company has provided the PUC with the un-redacted confidential Division 1-16 for its review, and has included redacted copies of this response in the filing.

Thank you for your attention to this filing. If you have any questions, please contact me at (401) 784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosure

Docket 4514 Service List cc:

Leo Wold, Esq. Steve Scialabba **Bruce Oliver** 

<sup>&</sup>lt;sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

# Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate was electronically transmitted to the individuals listed below.

Bound versions of this filing are being hand delivered to the RI Public Utilities Commission and the RI Division of Public Utilities and Carriers.

Pamela V. Corpora

September 5, 2014

Date

# Docket No. 4514 - National Grid -2014 Annual Distribution Adjustment Charge Filing ("DAC") - Service List as of 8/27/14

Name/Address	E-mail	Phone
Jennifer Brooks Hutchinson, Esq.	Jennifer.hutchinson@nationalgrid.com	401-784-7667
National Grid	Celia.obrien@nationalgrid.com	
280 Melrose St.	Joanne.scanlon@nationalgrid.com	
Providence, RI 02907		
Yi-An Chen	Yi-an.Chen@nationalgrid.com	
National Grid	Ann.leary@nationalgrid.com	
William R. Richer	William.richer@nationalgrid.com	
National Grid		
Leo Wold, Esq.	LWold@riag.ri.gov	401-222-2424
Dept. of Attorney General 150 South Main St.	Sscialabba@dpuc.ri.gov	
Providence RI 02903	dmacrae@riag.ri.gov	
Trovidence Id 02903	Jmunoz@riag.ri.gov	
Bruce Oliver	Boliver.rha@verizon.net	703-569-6480
Tim Oliver		Statement Value of Statement Val
Revilo Hill Associates	timoliver@revilohill.com	
7103 Laketree Drive	timonver(@revnomm.com	
Fairfax Station, VA 22039		
David Effron	Djeffron@aol.com	603-964-6526
Berkshire Consulting		
12 Pond Path		
North Hampton, NH 03862-2243		
File an original & nine (9) copies w/:	Luly.massaro@puc.ri.gov	401-780-2107
Luly E. Massaro, Commission Clerk	Patricia.lucarelli@puc.ri.gov	
Public Utilities Commission	1 au loia. tuomonito puo. 11. gov	
89 Jefferson Blvd.	Sharon.ColbyCamara@puc.ri.gov	
Warwick RI 02888		

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS RHODE ISLAND PUBLIC UTILITIES COMMISSION

\_\_\_\_

2014 Distribution Adjustment Clause Docket No. 4514

\_\_\_\_\_

# NATIONAL GRID'S REQUEST FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION

National Grid<sup>1</sup> hereby requests that the Rhode Island Public Utilities Commission (PUC) provide confidential treatment and grant protection from public disclosure of certain confidential and proprietary information submitted in this proceeding, as permitted by PUC Rule 1.2(g) and R.I.G.L. § 38-2-2(4)(B). National Grid also hereby requests that, pending entry of that finding, the PUC preliminarily grant National Grid's request for confidential treatment pursuant to Rule 1.2 (g)(2).

### I. BACKGROUND

On September 5, 2014, National Grid filed with the PUC its responses to the Division's First Set of Data Requests in this docket. Data Request 1-16(a) requests the names of the customers relating to AGT projects that the Company has identified for the 2014-2015 period. The Company considers customer information confidential and proprietary to that customer. Therefore, the Company has provided a redacted public version of Division 1-16(a), as well as a confidential version of this response pursuant to Rule 1.2(g)(2).

### II. LEGAL STANDARD

-

<sup>&</sup>lt;sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

The PUC's Rule 1.2(g) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I.G.L. §38-2-1, et seq. Under APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I.G.L. §38-2-2(4). Therefore, to the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information to be confidential and to protect that information from public disclosure.

In that regard, R.I.G.L. §38-2-2(4)(B) provides that the following types of records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where disclosure of information would be likely either (1) to impair the Government's ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. Providence Journal Company v. Convention Center Authority, 774 A.2d 40 (R.I.2001).

The first prong of the test is satisfied when information is voluntarily provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. Providence Journal, 774 A.2d at 47.

III. **BASIS FOR CONFIDENTIALITY** 

The Company seeks protective treatment of the name of the customer provided in

the response to Division 1-16(a). The Company treats customer information as

confidential and proprietary to the customer, and customers have come to expect that

National Grid will maintain this information on a confidential basis. In addition, the PUC

has historically granted protective treatment over the disclosure of the names and other

identifying information of the Company's customers. Public disclosure of this

information would substantially harm National Grid's customer who has not otherwise

consented to the public disclosure of its information, and would undermine National

Grid's integrity with its customers. Accordingly, the Company requests that the PUC

grant protective treatment to the Company's response to Division 1-16(a).

IV. **CONCLUSION** 

For the reasons set forth above, the Company respectfully requests that the PUC

grant its Motion for Protective Treatment as stated herein.

Respectfully submitted,

NATIONAL GRID

In Bing High-

By its attorney,

Jennifer Brooks Hutchinson, Esq. (RI Bar #6167)

National Grid 280 Melrose Street

Providence, RI 02907

(401) 784-7288

Dated: September 5, 2014

-3-

### Division 1-1

# Request:

Re: The August 1, 2014 Environmental Report for the Period April 1, 2013 through March 31, 2014

Re: the 642 Allens Avenue project, please:

- a. Provide a description of the nature and substance of topic discussed with RIDEM in the referenced November 2013 meeting, as well as a list of attendees for that meeting identified by Name, organization, and title.
- b. Indicate when a closure letter from RIDEM for Phase 1 remedial activities is anticipated.
- c. Provide the results of the Company's semi-annual groundwater/non-aqueous phase liquid gauging and groundwater sampling for each semi-annual gauging for the over the five-year period ended March 31, 2014.
- d. Identify the costs of maintaining the boom in the Providence River over the last year (i.e., April 1, 2013 through March 31, 2014) and explain why continued maintenance of that boom is necessary from an environmental protection perspective.

## Response:

- a. The purpose of the November 2013 meeting between the Company and RIDEM was to review past site activities with RIDEM and update them on upcoming and on-going activities at the site. The Company reviewed the regulatory history of the Site including past environmental investigations and remedial actions. In addition, the Company discussed completed and proposed facility-based projects that required environmental support, as well as the proposed Supplemental Site Investigation program, which was subsequently conducted in May and June, and on-going monitoring activities. Attendees to the meeting included: Joseph T. Martella II, Office of Waste Management, Rhode Island Department of Environmental Management, Senior Engineer; Margaret Kilpatrick, GZA GeoEnvironmental, Inc., Senior Project Manager; and Amy A. Willoughby, The Narragansett Electric Company, d/b/a National Grid, Lead Environmental Scientist.
- b. The Company does not know when it will receive an Interim Letter of Compliance (closure letter for the Phase 1 activities) from RIDEM; however, in the meantime, the

# Division 1-1, page 2

- c. Company is working with RIDEM and moving forward with site investigation and remediation activities at the Site.
- d. The results of the Company's semi-annual groundwater/non-aqueous phase liquid gauging and groundwater sampling for each semi-annual gauging for the five-year period ending March 31, 2014 are included as Attachment DIV 1-1.
- e. Maintenance was performed on the boom in the Providence River on October 7, 2013 at a total cost of \$7,972.02. Costs incurred by GZA GeoEnvironmental, Inc. for oversight of the boom replacement and inspection totaled \$574.97. The remaining \$7,397.06 in spend was for Clean Harbors Environmental Services, Inc. to remove and replace the existing boom. Sheen outbreaks within the cove area continue on a regular basis and the boom is necessary to control this sheen.

Page 1 of 22

# GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

642 Allens Avenue Providence, Rhode Island

8/25/2014 GZA File No. 03.00033554.00

	Sample ID: RCA-1							
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives			See Note (2)			
1,1-Dichloroethane	NE	NE	< 0.001	< 0.001		< 0.001	0.0005	< 0.0010
1,2,4-Trimethylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002	< 0.005	< 0.005		< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Acetone	NE	NE	< 0.025	< 0.025		< 0.01	< 0.01	< 0.0100
Benzene	18	0.14	0.0031	< 0.001		0.0038	0.0038	0.0036
Carbon Tetrachloride	NE	0.07	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4	< 0.001	< 0.001		0.013	0.0165	0.0103
Ethylbenzene	16	1.6	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Isopropylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Methyl tert-Butyl Ether	NE	5	< 0.001	< 0.001		< 0.001	0.0006	< 0.0010
Naphthalene	NE	2.67	0.0051	< 0.001		< 0.002	0.0009	0.0124
n-Butylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
n-Propylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
sec-Butylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Styrene	50	2.2	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Toluene	21	1.7	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Vinyl Chloride	NE	0.002	< 0.001	< 0.001		< 0.001	< 0.001	0.001
Xylene O	NE	NE	< 0.001	< 0.001		< 0.001	< 0.001	< 0.0010
Xylene P,M	NE	NE	< 0.002	< 0.002		< 0.002	< 0.002	< 0.0020
Xylenes (Total)	NE	NE	< 0.003	< 0.003		< 0.003	< 0.003	< 0.0020
Total VOCs	NE	NE	0.0082	< 0.122		0.0168	0.0223	0.0273

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regu
- (2) Could not locate well - possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 2 of 22

## GROUNDWATER MONITORING DATA

### Natural Gas Regulation Facility Area

8/25/2014 GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:		RCA-3								
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA				
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013				
		RIDEM										
VOCs (ppm)	UCL	GB GW Objectives			See Note (3)							
1,1-Dichloroethane	NE	NE	< 0.001	< 0.001		< 0.005	< 0.001	< 0.0010				
1,2,4-Trimethylbenzene	NE	NE	0.074	0.034		0.08	0.0758	0.0668				
1,2-Dibromo-3-Chloropropane	NE	0.002	< 0.005	< 0.005		< 0.01	< 0.005	< 0.0050				
1,3,5-Trimethylbenzene	NE	NE	0.011	0.0028		0.011	0.0072	0.0085				
4-Isopropyltoluene	NE	NE					0.0024	0.0023				
Acetone	NE	NE	< 0.025	< 0.025		< 0.05	< 0.01	< 0.0100				
Benzene	18	0.14	< 0.0025	< 0.001		< 0.005	0.0129	0.0113				
Carbon Tetrachloride	NE	0.07	< 0.001	< 0.001		< 0.005	< 0.001	< 0.0010				
cis-1,2-Dichloroethene	69	2.4	< 0.001	< 0.001		< 0.005	< 0.001	< 0.0010				
Ethylbenzene	16	1.6	0.0049	0.0046		0.017	0.032	0.0323				
Isopropylbenzene	NE	NE	0.01	0.0043		0.014	0.0098	0.0098				
Methyl tert-Butyl Ether	NE	5	< 0.001	< 0.001		< 0.005	< 0.001	< 0.0010				
Naphthalene	NE	2.67	0.46	0.13		0.54	0.466	0.417 D				
n-Butylbenzene	NE	NE	0.0059	0.0032		0.005	0.0052	0.005				
n-Propylbenzene	NE	NE	0.0072	0.0037		0.0084	0.0054	0.0059				
sec-Butylbenzene	NE	NE	< 0.0025	0.0014		< 0.005	0.0016	0.0016				
Styrene	50	2.2	< 0.001	< 0.001		< 0.005	0.0003	< 0.0010				
tert-Butylbenzene	NE	NE	< 0.001	< 0.001		< 0.005	0.0006	< 0.0010				
Toluene	21	1.7	< 0.0025	< 0.001		< 0.005	0.0053	0.0048				
Vinyl Chloride	NE	0.002	< 0.001	< 0.001		< 0.005	< 0.001	< 0.0010				
Xylene O	NE	NE	0.0036	0.0027		0.011	0.018	0.0195				
Xylene P,M	NE	NE	0.0052	0.0029		0.014	0.0132	0.0121				
Xylenes (Total)	NE	NE	0.0052	0.0056		0.025	0.0311	0.0316				
Total VOCs	NE	NE	0.5818	0.1896		0.7004	0.6557	0.5969				
Total VOCs	NE	NE	0.5818	0.1896		0.7004	0.6557	0.5969				

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regul

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 3 of 22

## GROUNDWATER MONITORING DATA

### Natural Gas Regulation Facility Area

8/25/2014 GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:			RCA	-11		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives	See note (8)	See note (8)	See note (8)			
1,1-Dichloroethane	NE	NE				< 0.001	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE				< 0.001	0.0001	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002				< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Acetone	NE	NE				< 0.01	< 0.01	< 0.0100
Benzene	18	0.14				< 0.001	0.0092	0.0999
Carbon Tetrachloride	NE	0.07				< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4				< 0.001	< 0.001	< 0.0010
Ethylbenzene	16	1.6				< 0.001	0.0005	0.0012
Isopropylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Methyl tert-Butyl Ether	NE	5				< 0.001	< 0.001	< 0.0010
Naphthalene	NE	2.67				< 0.002	0.0032	0.0145
n-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
n-Propylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
sec-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Styrene	50	2.2				< 0.001	0.0003	< 0.0010
tert-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Toluene	21	1.7				< 0.001	0.0004	< 0.0010
Vinyl Chloride	NE	0.002	•			< 0.001	< 0.001	< 0.0010
Xylene O	NE	NE				< 0.001	0.0002	< 0.0010
Xylene P,M	NE	NE				< 0.002	0.0003	< 0.0020
Xylenes (Total)	NE	NE				< 0.003	0.0005	< 0.0020
Total VOCs	NE	NE				< 0.122	0.0142	0.1156

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regula
- (2) Could not locate well possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 4 of 22

## GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

642 Allens Avenue Providence, Rhode Island

8/25/2014 GZA File No. 03.00033554.00

		Sample ID:									
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA			
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013			
		RIDEM									
VOCs (ppm)	UCL	GB GW Objectives									
1,1-Dichloroethane	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
1,2,4-Trimethylbenzene	NE	NE	0.015	0.019	0.012	0.008	0.0045	0.0029			
1,2-Dibromo-3-Chloropropane	NE	0.002	< 0.005	< 0.005	< 0.005	< 0.002	< 0.005	< 0.0050			
1,3,5-Trimethylbenzene	NE	NE	< 0.001	< 0.005	< 0.001	< 0.001	0.0002	< 0.0010			
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010			
Acetone	NE	NE	< 0.025	< 0.025	< 0.025	< 0.01	< 0.01	< 0.0100			
Benzene	18	0.14	0.0075	0.0051	0.0093	0.0068	0.0074	0.0103			
Carbon Tetrachloride	NE	0.07	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
cis-1,2-Dichloroethene	69	2.4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
Ethylbenzene	16	1.6	0.0013	< 0.005	0.0012	0.0086	0.0019	< 0.0010			
Isopropylbenzene	NE	NE	0.0023	< 0.005	0.0021	0.002	0.0017	0.001			
Methyl tert-Butyl Ether	NE	5	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
Naphthalene	NE	2.67	0.16	0.27	0.13	0.098	0.102	0.0784			
n-Butylbenzene	NE	NE	0.0017	< 0.005	0.0018	0.0017	0.0019	0.0016			
n-Propylbenzene	NE	NE	< 0.001	< 0.005	< 0.001	< 0.001	0.0006	< 0.0010			
sec-Butylbenzene	NE	NE	< 0.001	< 0.005	< 0.001	< 0.001	0.0006	< 0.0010			
Styrene	50	2.2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
tert-Butylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
Toluene	21	1.7	0.001	< 0.005	0.0011	0.0022	0.0021	0.0013			
Vinyl Chloride	NE	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010			
Xylene O	NE	NE	0.0011	< 0.005	0.0012	0.0077	0.004	0.0026			
Xylene P,M	NE	NE	< 0.002	< 0.01	< 0.002	0.012	0.0047	0.0032			
Xylenes (Total)	NE	NE	0.0011	< 0.015	0.0012	0.0197	0.0088	0.0058			
Total VOCs	NE	NE	0.1899	0.2941	0.1587	0.147	0.1316	0.1013			

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1	) Me	hod 2 GB	Obiective of	criteria for na	phthalene develo	ped by	V GZA in accordance	e with the metho	ds described in	the Remediation Regul
----	------	----------	--------------	-----------------	------------------	--------	---------------------	------------------	-----------------	-----------------------

<sup>(2)</sup> Could not locate well - possibly buried

- (5) Could not access well
- (6) Well was found destroyed
- Well was found damaged and was not able to be sampled (7)
- (8) Well was not included in the sampling program

Well not sampled due to observed presence of sheen and/or NAPL (3)

<sup>(4)</sup> Well found damaged, no sample collected.

Page 5 of 22

# GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

8/25/2014 GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:			VHI	B-1		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM	1					
VOCs (ppm)	UCL	GB GW Objectives	See note (8)	See note (8)	See note (8)	See note (8)	See note (8)	
1,1-Dichloroethane	NE	NE						< 0.0010
1,2,4-Trimethylbenzene	NE	NE						< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002						< 0.0050
1,3,5-Trimethylbenzene	NE	NE						< 0.0010
4-Isopropyltoluene	NE	NE	·					< 0.0010
Acetone	NE	NE						< 0.0100
Benzene	18	0.14						< 0.0010
Carbon Tetrachloride	NE	0.07						< 0.0010
cis-1,2-Dichloroethene	69	2.4						< 0.0010
Ethylbenzene	16	1.6						< 0.0010
Isopropylbenzene	NE	NE	1					0.0094
Methyl tert-Butyl Ether	NE	5						< 0.0010
Naphthalene	NE	2.67						0.0011
n-Butylbenzene	NE	NE						< 0.0010
n-Propylbenzene	NE	NE						0.0026
sec-Butylbenzene	NE	NE						0.0031
Styrene	50	2.2	1					< 0.0010
tert-Butylbenzene	NE	NE						< 0.0010
Toluene	21	1.7						< 0.0010
Vinyl Chloride	NE	0.002						< 0.0010
Xylene O	NE	NE						< 0.0010
Xylene P,M	NE	NE						< 0.0020
Xylenes (Total)	NE	NE	·					< 0.0020
Total VOCs	NE	NE						0.0162

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulat

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 6 of 22

### GROUNDWATER MONITORING DATA

### Natural Gas Regulation Facility Area

642 Allens Avenue Providence, Rhode Island 8/25/2014 GZA File No. 03.00033554.00

RIDEM   UCL   GB GW Objectives   See note (8)   See note (8)   See note (8)		Sample ID: VHB-3							
RIDEM   UCL   GB GW Objectives   See note (8)   See note (8)     See note (8)	ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
VOCs (ppm)   VOC			Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
I.1-Dichloroethane			RIDEM						
1.2,4-Trimethylbenzene	VOCs (ppm)	UCL	GB GW Objectives	See note (8)	See note (8)	See note (8)			
1,2-Dibromo-3-Chloropropane   NE   0.002	1,1-Dichloroethane	NE	NE				< 0.001	< 0.001	< 0.0010
1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
A-Isopropyltoluene	1,2-Dibromo-3-Chloropropane	NE	0.002				< 0.002	< 0.005	< 0.0050
Acetone	1,3,5-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Benzene	4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Carbon Tetrachloride         NE         0.07         <0.001         <0.001         <0.0010           cis-1,2-Dichloroethene         69         2.4         <0.001	Acetone	NE	NE				0.016	< 0.01	< 0.0100
cis-1,2-Dichloroethene         69         2.4          <0.001         <0.001         <0.0010           Ethylbenzene         16         1.6         <0.001	Benzene	18	0.14				0.0031	< 0.001	0.0013
Ethylbenzene         16         1.6               0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <0.001         <	Carbon Tetrachloride	NE	0.07				< 0.001	< 0.001	< 0.0010
NE	cis-1,2-Dichloroethene	69	2.4				< 0.001	< 0.001	< 0.0010
Methyl tert-Butyl Ether         NE         5         <0.001         <0.0010         <0.0010           Naphthalene         NE         2.67         0.02         <0.001	Ethylbenzene	16	1.6				< 0.001	< 0.001	< 0.0010
Naphthalene         NE         2.67         0.02         <0.001         0.0068           n-Butylbenzene         NE         NE         <0.001	Isopropylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
NE	Methyl tert-Butyl Ether	NE	5				< 0.001	< 0.001	< 0.0010
NE NE NE   C   C   C   C   C   C   C   C   C	Naphthalene	NE	2.67				0.02	< 0.001	0.0068
Sec-Butylbenzene   NE NE	n-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Styrene         50         2.2         <0.001         <0.001         <0.0010           tert-Butylbenzene         NE         NE         <0.001	n-Propylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
tert-Butylbenzene         NE         NE         <0.001         <0.0010         <0.0010           Toluene         21         1.7         <0.001	sec-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Toluene         21         1.7         <0.001         <0.001         <0.0010           Vinyl Chloride         NE         0.002         <0.001	Styrene	50	2.2				< 0.001	< 0.001	< 0.0010
Vinyl Chloride         NE         0.002         <0.001         <0.0010           Xylene O         NE         NE         <0.001	tert-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Xylene O         NE         NE         <0.001         <0.0010           Xylene P,M         NE         NE         <0.002		21	1.7				< 0.001	< 0.001	< 0.0010
Xylene P,M         NE         NE         < 0.002         < 0.002         < 0.0020           Xylenes (Total)         NE         NE         < 0.003	Vinyl Chloride	NE	0.002				< 0.001	< 0.001	< 0.0010
Xylenes (Total)         NE         NE         < 0.003         < 0.003         < 0.0020	Xylene O	NE	NE				< 0.001	< 0.001	< 0.0010
	Xylene P,M	NE	NE				< 0.002	< 0.002	< 0.0020
	Xylenes (Total)	NE	NE				< 0.003	< 0.003	< 0.0020
Total VOCs NE NE 0.0391 <0.6415 0.0081	Total VOCs	NE	NE				0.0391	< 0.6415	0.0081

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1	) Me	hod 2 GB	Obiective of	criteria for na	phthalene develo	ped by	V GZA in accordance	e with the metho	ds described in	the Remediation Regul
----	------	----------	--------------	-----------------	------------------	--------	---------------------	------------------	-----------------	-----------------------

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 7 of 22

8/25/2014

## GROUNDWATER MONITORING DATA

### Natural Gas Regulation Facility Area

GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:			VHB-	-6		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives						
1,1-Dichloroethane	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE	< 0.001	< 0.001	0.0012	< 0.001	< 0.001	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002	< 0.005	< 0.005	< 0.005	< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Acetone	NE	NE	< 0.025	< 0.025	< 0.025	< 0.01	< 0.01	< 0.0100
Benzene	18	0.14	< 0.001	< 0.001	< 0.001	< 0.001	0.0003	< 0.0010
Carbon Tetrachloride	NE	0.07	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
Ethylbenzene	16	1.6	< 0.001	< 0.001	0.0013	< 0.001	0.0002	< 0.0010
Isopropylbenzene	NE	NE	< 0.001	0.0015	0.0013	0.0012	0.0012	0.0014
Methyl tert-Butyl Ether	NE	5	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
Naphthalene	NE	2.67	0.021	0.0066	0.049	0.01	0.0108	0.0305
n-Butylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
n-Propylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
sec-Butylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	0.0002	< 0.0010
Styrene	50	2.2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
Toluene	21	1.7	< 0.001	< 0.001	< 0.001	< 0.001	0.0001	< 0.0010
Vinyl Chloride	NE	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010
Xylene O	NE	NE	< 0.001	< 0.001	0.0014	0.0014	0.0003	< 0.0010
Xylene P,M	NE	NE	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0020
Xylenes (Total)	NE	NE	< 0.003	< 0.003	0.0014	0.0014	0.0003	< 0.0020
Total VOCs	NE	NE	0.021	0.0081	0.0542	0.0126	0.0131	0.0319

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulati
- (2) Could not locate well possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 8 of 22

### GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

642 Allens Avenue Providence, Rhode Island

8/25/2014 GZA File No. 03.00033554.00

	Sample ID: VHB-7							
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						I
VOCs (ppm)	UCL	GB GW Objectives						
1,1-Dichloroethane	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
1,2,4-Trimethylbenzene	NE	NE	0.076	0.034	0.11	0.1	0.087	0.105 D
1,2-Dibromo-3-Chloropropane	NE	0.002	< 0.13	< 0.13	< 0.13	< 0.1	< 0.5	<0.0500 D
1,3,5-Trimethylbenzene	NE	NE	0.028	0.011	< 0.050	< 0.05	0.026	0.0333 D
4-Isopropyltoluene	NE	NE					< 0.1	<0.0100 D
Acetone	NE	NE	< 0.00063	< 0.00063	< 0.00063	< 0.5	<1	<0.100 D
Benzene	18	0.14	0.15	0.12	0.14	0.12	0.104	0.0761 D
Carbon Tetrachloride	NE	0.07	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
cis-1,2-Dichloroethene	69	2.4	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
Ethylbenzene	16	1.6	0.2	0.13	0.18	0.3	0.305	0.335 D
Isopropylbenzene	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	0.011	<0.0100 D
Methyl tert-Butyl Ether	NE	5	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
Naphthalene	NE	2.67	3.7	2.1	4.9	4.3	5.02	4.74 D
n-Butylbenzene	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
n-Propylbenzene	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
sec-Butylbenzene	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
Styrene	50	2.2	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
tert-Butylbenzene	NE	NE	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
Toluene	21	1.7	0.074	0.023	< 0.050	< 0.05	0.05	0.0568 D
Vinyl Chloride	NE	0.002	< 0.025	< 0.025	< 0.025	< 0.05	< 0.1	<0.0100 D
Xylene O	NE	NE	0.23	0.11	0.23	0.21	0.245	0.315 D
Xylene P,M	NE	NE	0.39	0.17	0.27	0.39	0.399	0.507 D
Xylenes (Total)	NE	NE	0.62	0.28	0.50	0.60	0.644	0.822 D
Total VOCs	NE	NE	4.848	2.698	5.830	5.420	6.247	6.1682
Notes:	•							

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in t	in the Remediation Regul
---	--------------------------

Could not locate well - possibly buried (2)

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

Well was found damaged and was not able to be sampled (7)

(8) Well was not included in the sampling program

Page 9 of 22 8/25/2014

GZA File No. 03.00033554.00

## GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

Avenue Avenue

642 Allens Avenue Providence, Rhode Island

	Collected By: Sample Date:	GZA	GZA	CZA	~ -		
	Sample Date:		GLA	GZA	GZA	GZA	GZA
		December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
	RIDEM						
UCL	GB GW Objectives	See Note (4)		See Note (2)			See Note (6)
NE	NE		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
NE	0.002		< 0.005		< 0.002	< 0.005	
NE	NE		< 0.001		< 0.001	< 0.001	
NE	NE					< 0.001	
NE	NE		< 0.025		< 0.01	< 0.01	
18	0.14		< 0.001		< 0.001	< 0.001	
NE	0.07		< 0.001		< 0.001	< 0.001	
69	2.4		< 0.001		< 0.001	< 0.001	
16	1.6		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
NE	5		< 0.001		< 0.001	< 0.001	
NE	2.67		< 0.001		< 0.002	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
50	2.2		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001		< 0.001	< 0.001	
21	1.7		< 0.01		< 0.001	< 0.001	
NE	0.002		< 0.001		< 0.001	< 0.001	
NE	NE		< 0.001	·	< 0.001	< 0.001	
NE	NE		< 0.002	·	< 0.002	< 0.002	
NE	NE	·	< 0.003		< 0.003	< 0.003	·
NE	NE		< 0.122		< 0.122	< 0.6415	
	NE N	NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           18         0.14           NE         0.07           69         2.4           16         1.6           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           SO         2.2           NE         NE           21         1.7           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE	NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           18         0.14           NE         0.07           69         2.4           16         1.6           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           SO         2.2           NE         NE           21         1.7           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE           NE         NE	NE         NE         <0.001           NE         NE         <0.001	NE         NE         <0.001           NE         NE         <0.001	NE         NE         <0.001         <0.001           NE         NE         <0.001	NE         NE         <0.001         <0.001         <0.001           NE         NE         <0.001

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regul

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 10 of 22

# GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

642 Allens Avenue Providence, Rhode Island

8/25/2014 GZA File No. 03.00033554.00

		Sample ID:			VHB	-10		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives	See Note (2)	See Note (3)	See Note (3)			
1,1-Dichloroethane	NE	NE				< 0.001	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE				0.0018	0.002	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002				< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Acetone	NE	NE				< 0.01	< 0.01	< 0.0100
Benzene	18	0.14				0.11	0.271	0.147 D
Carbon Tetrachloride	NE	0.07				< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4				< 0.001	< 0.001	< 0.0010
Ethylbenzene	16	1.6				0.0052	0.008	0.0019
Isopropylbenzene	NE	NE				0.0062	0.0097	0.0046
Methyl tert-Butyl Ether	NE	5				< 0.001	< 0.001	< 0.0010
Naphthalene	NE	2.67				0.016	0.0565	0.021
n-Butylbenzene	NE	NE				< 0.001	0.0008	< 0.0010
n-Propylbenzene	NE	NE				0.002	0.0027	0.0013
sec-Butylbenzene	NE	NE				< 0.001	0.0006	< 0.0010
Styrene	50	2.2				< 0.001	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE				< 0.001	0.0002	< 0.0010
Toluene	21	1.7				< 0.001	0.001	< 0.0010
Vinyl Chloride	NE	0.002				< 0.001	< 0.001	< 0.0010
Xylene O	NE	NE				0.0057	0.008	0.0052
Xylene P,M	NE	NE				< 0.002	0.0013	< 0.0020
Xylenes (Total)	NE	NE				0.0057	0.0093	0.0052
Total VOCs	NE	NE				0.1469	0.3618	0.181
Notes:				•	•			

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Ro
- (2) Could not locate well - possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 11 of 22

## 8/25/2014 GZA File No. 03.00033554.00

# GROUNDWATER MONITORING DATA

### **Natural Gas Regulation Facility Area**

642 Allens Avenue Providence, Rhode Island

		Sample ID:			VHB	3-21		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives	See Note (3)					
1,1-Dichloroethane	NE	NE		<1	<1	< 0.1	< 0.1	<0.0100 D
1,2,4-Trimethylbenzene	NE	NE		0.22	0.31	0.27	0.291	0.464 D
1,2-Dibromo-3-Chloropropane	NE	0.002		< 0.1	< 0.1	< 0.2	< 0.5	<0.0500 D
1,3,5-Trimethylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	0.075	0.0638 D
4-Isopropyltoluene	NE	NE					< 0.1	<0.0100 D
Acetone	NE	NE		< 0.2	< 0.2	<1	<1	<0.100 D
Benzene	18	0.14		< 0.1	< 0.1	0.11	0.147	0.303 D
Carbon Tetrachloride	NE	0.07		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
cis-1,2-Dichloroethene	69	2.4		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
Ethylbenzene	16	1.6		1.1	1.3	1.3	1.31	1.22 D
Isopropylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	0.028	0.0366 D
Methyl tert-Butyl Ether	NE	5		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
Naphthalene	NE	2.67		7.6	17	8.1	9.12	13.2 D
n-Butylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
n-Propylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
sec-Butylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
Styrene	50	2.2		< 0.1	< 0.1	< 0.1	0.019	0.0184 D
tert-Butylbenzene	NE	NE		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
Toluene	21	1.7		0.15	0.22	<0.1	0.218	0.227 D
Vinyl Chloride	NE	0.002		< 0.1	< 0.1	< 0.1	< 0.1	<0.0100 D
Xylene O	NE	NE		0.55	0.73	0.69	0.705	0.615 D
Xylene P,M	NE	NE		1.1	1.3	1.4	1.13	1.08 D
Xylenes (Total)	NE	NE		1.65	2.03	2.09	1.83	1.7 D
Total VOCs	NE	NE	-	10.72	20.86	12.07	13.043	17.2278

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regu
- (2) Could not locate well possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 12 of 22 8/25/2014

# GROUNDWATER MONITORING DATA

### 

GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:			RCA-	-22		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM			·	U	, and the second	
VOCs (ppm)	UCL	GB GW Objectives	See Note (5)	See Note (5)				
1,1-Dichloroethane	NE	NE			< 0.001	< 0.01	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE			< 0.01	< 0.01	0.0059	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002			< 0.005	< 0.02	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE			< 0.01	< 0.01	0.0001	< 0.0010
4-Isopropyltoluene	NE	NE					0.0003	< 0.0010
Acetone	NE	NE			< 0.025	< 0.1	0.0039	< 0.0100
Benzene	18	0.14			2.1	1.6	1.19	0.0085
Carbon Tetrachloride	NE	0.07			< 0.001	< 0.01	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4			< 0.001	< 0.01	< 0.001	< 0.0010
Ethylbenzene	16	1.6			0.072	0.089	0.0879	0.0022
Isopropylbenzene	NE	NE			0.042	0.041	0.0355	0.0071
Methyl tert-Butyl Ether	NE	5			< 0.001	< 0.01	< 0.001	< 0.0010
Naphthalene	NE	2.67			0.42	0.85	0.443	0.0055
n-Butylbenzene	NE	NE			< 0.01	< 0.01	0.0059	0.0013
n-Propylbenzene	NE	NE			0.012	0.012	0.0096	0.0022
sec-Butylbenzene	NE	NE			< 0.01	< 0.01	0.0019	< 0.0010
Styrene	50	2.2			< 0.001	< 0.01	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE			< 0.001	< 0.01	0.0003	< 0.0010
Toluene	21	1.7			< 0.01	< 0.01	0.0013	< 0.0010
Vinyl Chloride	NE	0.002			< 0.001	< 0.01	< 0.001	< 0.0010
Xylene O	NE	NE			0.02	0.019	0.0144	0.002
Xylene P,M	NE	NE			< 0.002	< 0.02	0.0038	< 0.0020
Xylenes (Total)	NE	NE			0.02	0.019	0.0182	0.002
Total VOCs	NE	NE			2.666	2.611	1.8038	0.0288

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulati

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 13 of 22 8/25/2014

### GROUNDWATER MONITORING DATA Liquid Natural Gas (LNG) Storage and Distribution Facility Area

Providence, Rhode Island

642 Allens Avenue

GZA File No. 03.00033554.00

_		Sample ID:			RCA-	-28		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives	See Note (5)	See Note (5)				
1,1-Dichloroethane	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
1,2,4-Trimethylbenzene	NE	NE			0.27	0.16	0.188	0.568 D
1,2-Dibromo-3-Chloropropane	NE	0.002			< 0.050	< 0.05	< 0.5	<0.0500 D
1,3,5-Trimethylbenzene	NE	NE			0.13	0.078	0.079	0.245 D
4-Isopropyltoluene	NE	NE					< 0.1	<0.0100 D
Acetone	NE	NE			< 0.050	< 0.25	<1	<0.100 D
Benzene	18	0.14			< 0.050	< 0.025	0.027	0.0539 D
Carbon Tetrachloride	NE	0.07			< 0.050	< 0.025	< 0.1	<0.0100 D
cis-1,2-Dichloroethene	69	2.4			< 0.050	< 0.025	< 0.1	<0.0100 D
Ethylbenzene	16	1.6			0.091	0.054	0.065	0.21 D
Isopropylbenzene	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
Methyl tert-Butyl Ether	NE	5			< 0.050	< 0.025	< 0.1	<0.0100 D
Naphthalene	NE	2.67			6	3.2	5.29	12.6 D
n-Butylbenzene	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
n-Propylbenzene	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
sec-Butylbenzene	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
Styrene	50	2.2			< 0.050	< 0.025	0.017	0.0851 D
tert-Butylbenzene	NE	NE			< 0.050	< 0.025	< 0.1	<0.0100 D
Toluene	21	1.7			0.3	0.14	0.191	0.691 D
Vinyl Chloride	NE	0.002			< 0.050	< 0.025	< 0.1	< 0.0100
Xylene O	NE	NE			0.35	0.2	0.244	0.876 D
Xylene P,M	NE	NE			0.67	0.35	0.414	1.56 D
Xylenes (Total)	NE	NE			1.02	0.55	0.658	2.43 D
Total VOCs	NE	NE			7.811	4.182	6.515	16.889

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regular
- (2) Could not locate well - possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

Page 14 of 22 8/25/2014

# GROUNDWATER MONITORING DATA

### **Liquid Natural Gas (LNG) Storage and Distribution Facility Area**

GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:			RCA-	-36		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM			·	3		
VOCs (ppm)	UCL	GB GW Objectives	See Note (5)	See Note (5)	See Note (2)			
1,1-Dichloroethane	NE	NE				< 0.001	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE				0.0170	0.0126	0.0051
1,2-Dibromo-3-Chloropropane	NE	0.002				< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE				0.0011	0.0007	< 0.0010
4-Isopropyltoluene	NE	NE					0.0003	< 0.0010
Acetone	NE	NE				< 0.01	< 0.01	< 0.0100
Benzene	18	0.14				0.11	0.0668	0.0522
Carbon Tetrachloride	NE	0.07				< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4				< 0.001	< 0.001	< 0.0010
Ethylbenzene	16	1.6				0.036	0.0218	0.0103
Isopropylbenzene	NE	NE				0.0061	0.0047	0.0023
Methyl tert-Butyl Ether	NE	5				< 0.001	< 0.001	< 0.0010
Naphthalene	NE	2.67				0.063	0.0404	0.0027
n-Butylbenzene	NE	NE				0.0016	0.0013	< 0.0010
n-Propylbenzene	NE	NE				0.0043	0.0027	0.0013
sec-Butylbenzene	NE	NE				0.0010	0.0008	< 0.0010
Styrene	50	2.2				< 0.001	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE				< 0.001	0.0003	< 0.0010
Toluene	21	1.7				0.001	0.0006	< 0.0010
Vinyl Chloride	NE	0.002				< 0.001	< 0.001	< 0.0010
Xylene O	NE	NE				0.0096	0.0066	0.0029
Xylene P,M	NE	NE				0.0025	0.0017	< 0.0020
Xylenes (Total)	NE	NE				0.0121	0.0083	0.0029
Total VOCs	NE	NE				0.2532	0.1613	0.0768

Notes:

Bold Value = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective =detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulat

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 15 of 22

GZA File No. 03.00033554.00

### ge 15 of 22 8/25/2014

### GROUNDWATER MONITORING DATA

### Liquid Natural Gas (LNG) Storage and Distribution Facility Area

642 Allens Avenue Providence, Rhode Island

Sample ID: RCA-38 ANALYTICAL **GZA GZA GZA GZA GZA GZA** Collected By: Sample Date: December 2009 June 2010 January 2011 August 2011 **July 2012** November 2013 **RIDEM** GB GW Objectives VOCs (ppm) **UCL** See note (8) See note (8) See note (8) 1,1-Dichloroethane NE NE < 0.001 < 0.001 < 0.0010 1,2,4-Trimethylbenzene NE NE < 0.001 < 0.001 < 0.0010 ,2-Dibromo-3-Chloropropane NE 0.002 < 0.002 < 0.005 < 0.0050 1,3,5-Trimethylbenzene NE NE < 0.001 < 0.001 < 0.0010 NE < 0.001 4-Isopropyltoluene NE < 0.0010 Acetone NE NE < 0.01 < 0.01 < 0.0100 18 < 0.001 0.14 < 0.001 < 0.0010 Benzene Carbon Tetrachloride NE 0.07 < 0.001 < 0.001 < 0.0010 cis-1,2-Dichloroethene 2.4 69 < 0.001 < 0.001 < 0.0010 Ethylbenzene 16 1.6 < 0.001 < 0.001 < 0.0010 Isopropylbenzene NE NE < 0.001 0.0004 < 0.0010 NE 5 < 0.001 Methyl tert-Butyl Ether < 0.001 < 0.0010 Naphthalene NE 2.67 < 0.002 < 0.0010 0.0004 n-Butylbenzene NE NE < 0.001 < 0.001 < 0.0010 n-Propylbenzene NE NE < 0.001 < 0.001 < 0.0010 sec-Butylbenzene NE NE < 0.001 0.0005 < 0.0010 Styrene 50 2.2 < 0.001 < 0.001 < 0.0010 NE NE < 0.001 tert-Butylbenzene 0.0002 < 0.0010 Toluene 21 1.7 < 0.001 < 0.001 < 0.0010 Vinyl Chloride NE 0.002 < 0.001 < 0.001 < 0.0010 Xylene O NE NE < 0.001 < 0.001 < 0.0010 Xylene P,M NE NE < 0.002 < 0.002 < 0.0020 Xylenes (Total) NE NE < 0.003 < 0.003 < 0.0020 Total VOCs NE NE < 0.122 0.0015 < 0.6451

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

(1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulation

(2) Could not locate well - possibly buried

(3) Well not sampled due to observed presence of sheen and/or NAPL

(4) Well found damaged, no sample collected.

(5) Could not access well

(6) Well was found destroyed

(7) Well was found damaged and was not able to be sampled

(8) Well was not included in the sampling program

Page 16 of 22

### GROUNDWATER MONITORING DATA

### Liquid Natural Gas (LNG) Storage and Distribution Facility Area

8/25/2014 GZA File No. 03.00033554.00

642 Allens Avenue Providence, Rhode Island

		Sample ID:				VHB-13		
ANALYTICAL		Collected By:	GZA	GZA	GZA	GZA	GZA	GZA
		Sample Date:	December 2009	June 2010	January 2011	August 2011	July 2012	November 2013
		RIDEM						
VOCs (ppm)	UCL	GB GW Objectives	See Note (5)	See Note (5)	See Note (5)			
1,1-Dichloroethane	NE	NE				< 0.001	< 0.001	< 0.0010
1,2,4-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
1,2-Dibromo-3-Chloropropane	NE	0.002				< 0.002	< 0.005	< 0.0050
1,3,5-Trimethylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
4-Isopropyltoluene	NE	NE					< 0.001	< 0.0010
Acetone	NE	NE				< 0.01	0.0035	< 0.0100
Benzene	18	0.14				< 0.001	< 0.001	< 0.0010
Carbon Tetrachloride	NE	0.07				< 0.001	< 0.001	< 0.0010
cis-1,2-Dichloroethene	69	2.4				< 0.001	< 0.001	< 0.0010
Ethylbenzene	16	1.6				< 0.001	< 0.001	< 0.0010
Isopropylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Methyl tert-Butyl Ether	NE	5				< 0.001	< 0.001	< 0.0010
Naphthalene	NE	2.67				< 0.002	< 0.001	< 0.0010
n-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
n-Propylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
sec-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Styrene	50	2.2				< 0.001	< 0.001	< 0.0010
tert-Butylbenzene	NE	NE				< 0.001	< 0.001	< 0.0010
Toluene	21	1.7				< 0.001	< 0.001	< 0.0010
Vinyl Chloride	NE	0.002				< 0.001	< 0.001	< 0.0010
Xylene O	NE	NE				< 0.001	< 0.001	< 0.0010
Xylene P,M	NE	NE				< 0.002	< 0.002	< 0.0020
Xylenes (Total)	NE	NE				< 0.003	< 0.003	< 0.0020
Total VOCs	NE	NE				< 0.122	0.0035	< 0.6451

Notes:

**Bold Value** = concentration detected above the Method Reporting Limit.

= concentration equals or exceeds the RIDEM GB Groundwater Objective

=detection limit equals or exceeds the RIDEM GB Groundwater Objective

"D" qualifier indicates analytes reported from a diluted run of the original analysis.

- (1) Method 2 GB Objective criteria for naphthalene developed by GZA in accordance with the methods described in the Remediation Regulations.
- (2) Could not locate well possibly buried
- (3) Well not sampled due to observed presence of sheen and/or NAPL
- (4) Well found damaged, no sample collected.
- (5) Could not access well
- (6) Well was found destroyed
- (7) Well was found damaged and was not able to be sampled
- (8) Well was not included in the sampling program

RIPUC Docket No. 4514
In Re: 2014 Distribution Adputention Adputention Page 178/13/2014

# 642 Allens Avenue Providence, Rhode Island

		Measured Well	Top of	m anvig	a .		Range of	Range of				De	cember 2009	)						J	June 2010			
Site	Well ID	Depth (Feet	Casing	Top of PVC Elevation	Grade Elevation	Type of Well	LNAPL	DNAPL	Depth to	Depth to	-	Total Well		LNAPL	DNAPL	Corrected	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected
Area	Well ID	below Top of	Elevation	(Feet)	(Feet)	Type of Wen	Observed	Observed	LNAPL	Water (ft)		Depth (ft)			Thickness		LNAPL	Water (ft)		Depth (ft)	Elevation	Thickness	Thickness	Groundwater
		PVC)	(Feet)	(,	(,		(feet)	(feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)
NG BG						D 11		) I'D				44.50	2.70	) IID	) I I	27.0		6.67		15.20	270	) I'D	1770	270
NG RCA-		15.4	10.66	11.44	0.10	Roadbox	NP	NP	-	5.72	-	14.73	NS 2.65	NP	NP	NS 2.65	-	6.67	-	15.39	NS	NP	NP	NS
NG RCA-		17.75 14.95	10.66	10.22 11.67	8.18 9.14	Standpipe	NP NP	trace NP	-	8.01	-	17.5	2.65	NP	NP	2.65	-	9.45	-	17.41	1.21	NP	NP	1.21
NG RCA-		14.95	10.79	10.46	9.14	Standpipe Standpipe	NP	NP NP		4.63	_	14.50	6.16	NP	NP	6.16		6.51	_	14.52	4.28	NP	NP	4.28
NG RCA-		15.28	11.64	11.30	9.61	Standpipe	NP	NP	-	4.03	-	14.30	0.10	INF	INF	0.10	-	0.51	-	14.32	4.20	INF	INF	4.26
NG RCA-		17.95	11.04	13.71	7.01	Standpipe	NP	NP NP																
NG RCA-		14.75		13.18		Standpipe	NP	NP																
NG VHB-		10.9		8.95	9.15	Roadbox	NP	NP																
NG VHB-		9.15	10.43	10.63	7.83	Standpipe	NP	NP																
NG VHB-		13.95	11.74	11.76	9.08	Standpipe	NP	NP	_	6.03	-	11.6	5.71	NP	NP	5.71								
NG VHB-		14.85	12.70	12.13	9.69	Standpipe	NP	NP	-	8.02	_	14.78	4.68	NP	NP	4.68	_	9.06	_	14.85	3.64	NP	NP	3.64
NG VHB-		11.5	12.70	11.12	11.13	Roadbox	NP	NP		0.02		11170		112	1,1		-	4.52	-	11.19	6.60	NP	NP	6.60
NG VHB-		17.04	18.16	17.81	14.59	Standpipe	NP - 0.01	NP		1							_	11.62	-	17.04	6.54	NP	NP	6.54
NG VHB-		16.92	14.23	14.04	9.19	Standpipe	NP	NP	-	6.13	-	14.7	8.10	NP	NP	8.10	_	6.37	-	15.0	7.86	NP	NP	7.86
NG VHB-		16.55	12.64	12.49	9.93	Standpipe	trace - 0.01	NP	trace	7.18	-	16.51	5.46	trace	NP	5.46	_	8.61	-	16.53	4.03	NP	NP	4.03
NG VHB-		17.67	12.10	11.80	9.99	Standpipe	NP - 0.01	NP		,0		10.01	5.10		- 111	2.10						. 11	- 111	05
NG VHB-		17.25	11.79	11.61	10.18	Standpipe	NP - 0.01	NP		1														
	S RW-1	10.42	11.21	11.01	9.33	Recovery Well	NP	NP															1	
	S RW-2	16.24	13.02		9.84	Recovery Well	NP - trace	NP		1														
	nown PVC Well	9.52	10.02	9.67	7.71	Standpipe	NP	NP		1														
110	iowii i vo weii	7.02		7.07	7.7.1	Билиргре	1,1	112																
LNG RCA-	-5	13.33	11.43	10.99	8.94	Standpipe	NP	NP																
LNG RCA-		17.2	10.50	10.26		Roadbox	NP	NP																
LNG RCA-		10.95	11.91	11.59	9.56	Standpipe	NP	NP																
LNG RCA-		9.52		13.72	10.48	Standpipe	1.44 - 1.91	NP																
LNG RCA-		13	11.22	11.62	9.03	Standpipe	NP	NP																
LNG RCA-		17.65		16.58		Standpipe	NP	NP																
LNG RCA-		14.79		13.45		Standpipe	trace - 0.11	NP																
LNG RCA-	-32	15.98		12.16		Standpipe	NP	NP																
LNG RCA-		13.12		9.67		Standpipe	NP	NP																
LNG RCA-		13.55	13.78	13.79	11.46	Standpipe	NP	NP																
LNG RCA-	-36 (Note 3)	14.05	10.72	10.51		Roadbox	NP	NP																
LNG RCA-	38	16.8		9.36		Standpipe	NP	NP																
LNG RCA-		14.6	12.77	12.56	10.13	Standpipe	NP	NP																
LNG RCA-	-40	16.75	11.45	10.91	9.42	Standpipe	trace	NP																
LNG VHB-	3-20	17	13.86	13.64	11.63	Standpipe	NP	NP																
LNG CHES	S RW-3	17.9	13.11		9.85	Recovery Well	NP	NP																
LNG CHES	S RW-4	12.35	11.85		8.79	Recovery Well	trace - 0.03	NP																
LNG CHES	S RW-5	13.8	12.37		9.86	Recovery Well	NP	NP																
LNG ESS F	RW-1	8.46		NS		Recovery Well	NP	NP																
LNG ESS F		11.07		NS		Recovery Well	NP	NP																
LNG ESS F		16.8	14.73		11.69	Recovery Well	NP	NP																
LNG ESS F	RW-4	14.95	14.48		11.39	Recovery Well	NP	NP																
LNG ESS F		17	14.84		11.56	Recovery Well	NP	NP																
LNG ESS F		17.09	16.22		13.35	Recovery Well	NP	NP																
LNG GZ-2		17.75	11.55	10.31	9.04	Standpipe	NP	NP																
LNG GZ-10		17.3	12.56	11.53	10.00	Standpipe	NP	NP																
LNG GZ-20		20	8.53	8.23	6.23	Standpipe	NP	NP																
LNG VHB-	3-13	15.90	11.58	11.42	12.04	Roadbox	NP	NP																

Notes

Well is located at the National Grid side of the Property

Well is located at the LNG Facility

Elevations are relative to City of Providence Datum

NP - Indicates No Product observed.

NS - Not Surveyed

Blanks indicate no measurement collected on that particular day.

Potentiometric elevations for wells exhibiting LNAPL include 0.85 correction factor.

Note 1. RCA-13 was noted to have an obstruction present in the well at a depth of approximately 7 feet in February 2013. After February 2013,

the monitoring well was too damaged to be gauged but could be sampled.

Note 2. VHB-8 was noted to have significant damage in February 2013 and was noted as destroyed in November 2013.

# 642 Allens Avenue Providence, Rhode Island

	Measured Well	Top of	T 6 DVC	C. 1		Range of	Range of				Ja	nuary 2011								July 2011			
Site Well ID	Depth (Feet	Casing	Top of PVC Elevation	Grade	Type of Well	LNAPL	DNAPL	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected
Area	below Top of	Elevation	(Feet)	(Feet)	Type of well	Observed	Observed	LNAPL	Water (ft)	DNAPL	Depth (ft)	Elevation	Thickness	Thickness	Groundwater	LNAPL	Water (ft)	DNAPL	Depth (ft)	Elevation	Thickness	Thickness	Groundwater
	PVC)	(Feet)	(Feet)	(Feet)		(feet)	(feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)
NG RCA-1	15.4		11.44		Roadbox	NP	NP									-	6.45	-	15.4	4.99	NP	NP	4.99
NG RCA-3	17.75	10.66	10.22	8.18	Standpipe	NP	trace	-	9.95	trace	17.65	0.71	NP	trace	0.71	-	8.51	trace	17.75	1.71	NP	trace	1.71
NG RCA-11	14.95	11.93	11.67	9.14	Standpipe	NP	NP		6.04		15.00	2.05	N.D.	ND	2.05	-	6.72	-	14.95	4.95	NP	NP	4.95
NG RCA-13	14.95	10.79	10.46	9.36	Standpipe	NP NP	NP	-	6.84	-	15.00	3.95	NP	NP	3.95	-	6.27	-	14.95	4.19	NP	NP	4.19
NG RCA-14	15.28	11.64	11.30	9.61	Standpipe	NP	NP									-	8.4	-	15.28	2.90	NP	NP	2.90
NG RCA-15 NG RCA-17	17.95 14.75		13.71 13.18		Standpipe	NP NP	NP NP									-	8.11 7.33	-	17.95 14.75	5.60 5.85	NP NP	NP NP	5.60 5.85
NG VHB-1	10.9		8.95	9.15	Standpipe	NP NP	NP NP										4.54	-	14.75		NP NP	NP NP	4.41
NG VHB-3	9.15	10.43	10.63	7.83	Roadbox	NP NP	NP NP							+		-	5.42	-	9.15	5.21	NP NP	NP NP	5.21
NG VHB-6	13.95	11.74	11.76	9.08	Standpipe Standpipe	NP NP	NP NP	_	8.18	-	14	3.56	NP	NP	3.56	-	7.74	-	13.95	4.02	NP NP	NP NP	4.02
NG VHB-7	14.85	12.70	12.13	9.69	Standpipe	NP	NP	-	9.75	-	14.9	2.95	NP	NP	2.95	<del>-</del>	8.89	-	14.85	3.24	NP	NP	3.24
NG VHB-8	11.5	12.70	11.12	11.13	Roadbox	NP NP	NP	-	9.13	-	14.9	2.93	NF	INF	2.93	-	5.21	-	11.5	5.91	NP	NP	5.91
NG VHB-10	17.04	18.16	17.81	14.59	+	NP - 0.01	NP	trace	12.35	-	17.04	5.81	trace	NP	5.81		11.7	-	17.04	6.11		NP	6.11
NG VHB-18	16.92	14.23	14.04	9.19	Standpipe Standpipe	NP - 0.01	NP	trace	14.33	_	17.04	5.01	trace	INF	5.01	trace	8.93	-	16.92	5.11	trace NP	NP NP	5.11
NG VHB-21	16.55	12.64	12.49	9.19	Standpipe	trace - 0.01	NP	_	9.05	_	16.55	3.59	NP	NP	3.59	-	8.51	-	16.55	3.98	NP	NP	3.98
NG VHB-22	17.67	12.10	11.80	9.99	Standpipe	NP - 0.01	NP	-	9.03	-	10.55	3.37	NF	INF	3.37	8.54	8.55	-	17.67	3.25	0.01	NP	3.26
NG VHB-23	17.07	11.79	11.61	10.18	Standpipe	NP - 0.01	NP									7.88	7.89	-	17.07	3.72	0.01	NP	3.72
NG CHES RW-1	10.42	11.79	11.01	9.33	Recovery Well	NP	NP									-	6.57	-	10.42	4.64	NP	NP	4.64
NG CHES RW-2	16.24	13.02		9.84	Recovery Well	NP - trace	NP										9.85	-	16.24	3.17	NP	NP	3.17
NG Unknown PVC W		13.02	9.67	7.71	Standpipe Standpipe	NP NP	NP									<del>                                     </del>	4.68	-	9.52	4.99	NP	NP	4.99
NO CHRIOWIT VC W	011 9.32		9.07	7.71	Standpipe	111	141									_	4.00	-	9.32	4.77	INI	INI	4.57
LNG RCA-5	13.33	11.43	10.99	8.94	Standpipe	NP	NP									-	10.04	-	13.33	0.95	NP	NP	0.95
LNG RCA-6	17.2	10.50	10.26	0.74	Roadbox	NP	NP		-							<del>  </del>	10.22	_	17.2	0.04	NP	NP	0.04
LNG RCA-20	10.95	11.91	11.59	9.56	Standpipe	NP	NP		-							<del>  </del>	8.16	-	10.95	3.43	NP	NP	3.43
LNG RCA-21	9.52	11.71	13.72	10.48	Standpipe	1.44 - 1.91	NP		-							10.07	13.65	-	13.75	0.07	3.58	NP	3.11
LNG RCA-22	13	11.22	11.62	9.03	Standpipe	NP	NP	_	9.92	_	13.05	1.30	NP	NP	1.30	-	9.08	_	13.75	2.54	NP	NP	2.54
LNG RCA-28	17.65	11.22	16.58	7.05	Standpipe	NP	NP	-	12.45	-	17.65	NS	NP	NP	NS	-	11.65	-	17.65	4.93	NP	NP	4.93
LNG RCA-29	14.79		13.45		Standpipe	trace - 0.11	NP		12.15		17.03	110	111	111	110	10.87	10.95	-	14.79	2.50	0.08	NP	2.57
LNG RCA-32	15.98		12.16		Standpipe	NP	NP									-	8.69	_	15.98	3.47	NP	NP	3.47
LNG RCA-33	13.12		9.67		Standpipe	NP	NP									_	7.44	-	13.12	2.23	NP	NP	2.23
LNG RCA-34	13.55	13.78	13.79	11.46	Standpipe	NP	NP									_	9.29	-	13.55	4.50	NP	NP	4.50
LNG RCA-36 (Note 3)	14.05	10.72	10.51	111.10	Roadbox	NP	NP									_	10.49	-	14.05	0.02	NP	NP	0.02
LNG RCA-38	16.8		9.36		Standpipe	NP	NP									_	7.86	-	16.8	1.50	NP	NP	1.50
LNG RCA-39	14.6	12.77	12.56	10.13	Standpipe	NP	NP									-	8.81	-	14.6	3.75	NP	NP	3.75
LNG RCA-40	16.75	11.45	10.91	9.42	Standpipe	trace	NP									-	10.01	-	16.75	0.90	NP	NP	0.90
LNG VHB-20	17	13.86	13.64	11.63	Standpipe	NP	NP									-	8.57	-	17	5.07	NP	NP	5.07
LNG CHES RW-3	17.9	13.11		9.85	Recovery Well	NP	NP									_	11.35	-	17.9	1.76	NP	NP	1.76
LNG CHES RW-4	12.35	11.85		8.79	Recovery Well	trace - 0.03	NP									10.92	10.94	-	12.35	0.91	0.02	NP	0.93
LNG CHES RW-5	13.8	12.37		9.86	Recovery Well	NP	NP									-	11.6	-	13.8	0.77	NP	NP	0.77
LNG ESS RW-1	8.46		NS		Recovery Well	NP	NP									-	5.11	_	8.46	NS	NP	NP	NS
LNG ESS RW-2	11.07		NS		Recovery Well	NP	NP									-	7.62	-	11.07	NS	NP	NP	NS
LNG ESS RW-3	16.8	14.73		11.69	Recovery Well	NP	NP									-	12.76	-	16.8	1.97	NP	NP	1.97
LNG ESS RW-4	14.95	14.48	1	11.39	Recovery Well	NP	NP									-	12.53	-	14.95	1.95	NP	NP	1.95
LNG ESS RW-5	17	14.84		11.56	Recovery Well	NP	NP									-	12.82	-	17	2.02	NP	NP	2.02
LNG ESS RW-6	17.09	16.22	İ	13.35	Recovery Well	NP	NP									-	14.27	-	17.09	1.95	NP	NP	1.95
LNG GZ-216	17.75	11.55	10.31	9.04	Standpipe	NP	NP									-	6.61	-	17.75	3.70	NP	NP	3.70
LNG GZ-104A	17.3	12.56	11.53	10.00	Standpipe	NP	NP									-	8.75	-	17.3	2.78	NP	NP	2.78
LNG GZ-201	20	8.53	8.23	6.23	Standpipe	NP	NP									<u> </u>							
	15.90	11.58		12.04	Roadbox	NP	NP	+	+	l			l	<b>!</b>	1		1						<del>                                     </del>

Notes

Well is located at the National Grid side of the Property

Well is located at the LNG Facility

Elevations are relative to City of Providence Datum

NP - Indicates No Product observed.

NS - Not Surveyed

Blanks indicate no measurement collected on that particular day.

Potentiometric elevations for wells exhibiting LNAPL include 0.85 correction factor.

Note 1. RCA-13 was noted to have an obstruction present in the well at a depth of approximately 7 feet in February 2013. After February 2013,

the monitoring well was too damaged to be gauged but could be sampled.

Note 2. VHB-8 was noted to have significant damage in February 2013 and was noted as destroyed in November 2013.

# 642 Allens Avenue Providence, Rhode Island

	Measured Well	Top of	Ton of DVC	Crada		Range of	Range of				Aı	igust 2011							Feb	ruary 2012			
Site Well ID	Depth (Feet	Casing	Top of PVC Elevation	Grade Elevation	Type of Well	LNAPL	DNAPL	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected
Area	below Top of	Elevation	(Feet)	(Feet)	Type of Wen	Observed	Observed	LNAPL	Water (ft)	DNAPL	Depth (ft)	Elevation	Thickness	Thickness	Groundwater	LNAPL	Water (ft)	DNAPL	Depth (ft)	Elevation	Thickness	Thickness	Groundwater
	PVC)	(Feet)	(1 cct)	(Feet)		(feet)	(feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)
NG RCA-1	15.4	10.66	11.44	0.10	Roadbox	NP	NP	-	6.66	-	15.4	4.78	NP	NP	4.78	-	6.33	-	15.5	5.11	NP	NP	5.11
NG RCA-3	17.75	10.66	10.22	8.18	Standpipe	NP	trace	-	8.45	trace	17.75	1.77	NP	trace	1.77	-	9.4	trace	17.55	0.82	NP	trace	0.82
NG RCA-11	14.95	11.93	11.67	9.14	Standpipe	NP	NP	-	6.92	-	14.95	4.75	NP	NP	4.75	-	6.91	-	15.05	4.76	NP	NP	4.76
NG RCA-13	14.95	10.79	10.46	9.36	Standpipe	NP	NP	-	6.92	-	14.95	3.54	NP	NP	3.54	-	5.88	-	15.07	4.58	NP	NP	4.58
NG RCA-14	15.28 17.95	11.64	11.30	9.61	Standpipe	NP NP	NP NP	-	9.91	-	15.28	1.39	NP	NP NP	1.39 5.35	-	8.81	-	15.35	2.49	NP	NP NP	2.49 5.35
NG RCA-15 NG RCA-17	14.75		13.71 13.18		Standpipe Standpipe	NP NP	NP NP	-	8.36 7.96	-	17.95 14.75	5.35	NP NP	NP NP	5.22	-	8.36 7.37	-	18.02 14.86	5.35	NP NP	NP NP	5.81
NG VHB-1	10.9		8.95	9.15	Roadbox	NP NP	NP	-	7.56	-	10.9	1.39	NP NP	NP NP	1.39	-	4.54	_	10.98	4.41	NP	NP	4.41
NG VHB-3	9.15	10.43	10.63	7.83		NP NP	NP	<del> </del>	6.41	_	9.15	4.22		NP	4.22	_	5.36	_	9.38	5.27	NP	NP	5.27
NG VHB-6	13.95	11.74	11.76	9.08	Standpipe Standpipe	NP NP	NP	trace -	8.26	-	13.95	3.50	trace NP	NP	3.50	-	7.38	-	13.75	4.38	NP	NP	4.38
NG VHB-7	14.85	12.70	12.13	9.69	Standpipe	NP	NP	-	9.3	_	14.85	2.83	NP	NP	2.83	_	9.29	-	14.98	2.84	NP	NP	2.84
NG VHB-8	11.5	12.70	11.12	11.13	Roadbox	NP	NP	_	5.74	_	11.5	5.38	NP	NP	5.38	_	5.4	_	11.6	5.72	NP	NP	5.72
NG VHB-10	17.04	18.16	17.81	14.59	Standpipe	NP - 0.01	NP	12.22	12.23	-	17.04	5.58	0.01	NP	5.59	trace	11.83	-	17.16	5.98	trace	NP	5.98
NG VHB-18	16.92	14.23	14.04	9.19	Standpipe	NP - 0.01	NP NP	12.22	9.16	-	16.92	4.88	NP	NP NP	4.88	uace -	9.15	_	17.10	4.89	NP	NP	4.89
NG VHB-10	16.55	12.64	12.49	9.93	Standpipe	trace - 0.01	NP	_	8.99	_	16.55	3.50	NP	NP	3.50	_	8.4	-	16.63	4.09	NP	NP	4.09
NG VHB-22	17.67	12.10	11.80	9.99	Standpipe	NP - 0.01	NP		9.06	_	17.67	2.74	NP	NP	2.74	trace	7.94	_	17.31	3.86	trace	NP	3.86
NG VHB-23	17.25	11.79	11.61	10.18	Standpipe	NP - 0.01	NP	8.50	8.55	-	17.25	3.06	0.05	NP	3.10	trace	8.8	-	17.85	2.81	trace	NP	2.81
NG CHES RW-1	10.42	11.75	11.01	9.33	Recovery Well	NP	NP	-	7.22	-	10.42	3.99	NP	NP	3.99	-	6.3	-	10.55	4.91	NP	NP	4.91
NG CHES RW-2	16.24	13.02		9.84	Recovery Well	NP - trace	NP	_	10.41	_	10.24	2.61	NP	NP	2.61	trace	10.24	_	10.35	2.78	trace	NP	2.78
NG Unknown PVC Well	9.52	13.02	9.67	7.71	Standpipe	NP	NP	_	7.68	_	9.52	1.99	NP	NP	1.99	-	4.6	_	9.55	5.07	NP	NP	5.07
Tio Chanowi I ve wen	7.52		7.07	7.71	Бинартре	111	111		7.00		7.32	1.//	111	111	1.77		1.0		7.55	3.07	111	111	3.07
LNG RCA-5	13.33	11.43	10.99	8.94	Standpipe	NP	NP	-	10.33	-	13.33	0.66	NP	NP	0.66	-	10.75	-	13.45	0.24	NP	NP	0.24
LNG RCA-6	17.2	10.50	10.26	0.5	Roadbox	NP	NP	_	10.55	_	17.2	-0.29	NP	NP	-0.29	_	11.2	-	17.27	-0.94	NP	NP	-0.94
LNG RCA-20	10.95	11.91	11.59	9.56	Standpipe	NP	NP	-	9.09	-	10.95	2.50	NP	NP	2.50	-	8.85	-	11.07	2.74	NP	NP	2.74
LNG RCA-21	9.52		13.72	10.48	Standpipe	1.44 - 1.91	NP	10.72	13.66	-	13.75	0.06	2.94	NP	2.56	10.95	13.74	-	13.94	-0.02	2.79	NP	2.35
LNG RCA-22	13	11.22	11.62	9.03	Standpipe	NP	NP	-	9.52	_	13	2.10	NP	NP	2.10	_	9.48	-	13.05	2.14	NP	NP	2.14
LNG RCA-28	17.65	-	16.58		Standpipe	NP	NP	-	12	-	17.65	4.58	NP	NP	4.58	-	12.02	-	17.7	4.56	NP	NP	4.56
LNG RCA-29	14.79		13.45		Standpipe	trace - 0.11	NP	trace	11.31	-	14.79	2.14	trace	NP	2.14	trace	11.73	-	14.79	1.72	trace	NP	1.72
LNG RCA-32	15.98		12.16		Standpipe	NP	NP	-	9.64	-	15.98	2.52	NP	NP	2.52	-	9.75	-	16.05	2.41	NP	NP	2.41
LNG RCA-33	13.12		9.67		Standpipe	NP	NP	-	7.74	-	13.12	1.93	NP	NP	1.93	-	8.37	-	13.26	1.30	NP	NP	1.30
LNG RCA-34	13.55	13.78	13.79	11.46	Standpipe	NP	NP	-	11.59	-	13.55	2.20	NP	NP	2.20	_	8.91	-	13.61	4.88	NP	NP	4.88
LNG RCA-36 (Note 3)	14.05	10.72	10.51		Roadbox	NP	NP	-	11.82	-	14.05	-1.31	NP	NP	-1.31	-	12.06	-	14.11	-1.55	NP	NP	-1.55
LNG RCA-38	16.8		9.36		Standpipe	NP	NP	-	8.19	-	16.8	1.17	NP	NP	1.17	_	8.78	-	16.64	0.58	NP	NP	0.58
LNG RCA-39	14.6	12.77	12.56	10.13	Standpipe	NP	NP	-	9.65	-	14.6	2.91	NP	NP	2.91	-	9.45	-	14.7	3.11	NP	NP	3.11
LNG RCA-40	16.75	11.45	10.91	9.42	Standpipe	trace	NP	-	10.37	-	16.75	0.54	NP	NP	0.54	trace	10.78	-	16.9	0.13	trace	NP	0.13
LNG VHB-20	17	13.86	13.64	11.63	Standpipe	NP	NP	-	8.91	-	17	4.73	NP	NP	4.73	-	8.85	-	17.17	4.79	NP	NP	4.79
LNG CHES RW-3	17.9	13.11		9.85	Recovery Well	NP	NP	-	12.25	-	17.9	0.86	NP	NP	0.86	-	12.35	-	18	0.76	NP	NP	0.76
LNG CHES RW-4	12.35	11.85		8.79	Recovery Well	trace - 0.03	NP	11.27	11.3	-	12.35	0.55	0.03	NP	0.58	11.67	11.68	-	12.45	0.17	0.01	NP	0.18
LNG CHES RW-5	13.8	12.37		9.86	Recovery Well	NP	NP	-	11.9	-	13.8	0.47	NP	NP	0.47	_	12.3	-	13.8	0.07	NP	NP	0.07
LNG ESS RW-1	8.46		NS		Recovery Well	NP	NP	_	6.71	_	8.46	NS	NP	NP	NS	_	5.41	_	8.6	NS	NP	NP	NS
LNG ESS RW-2	11.07		NS		Recovery Well	NP	NP	_	8.24	-	11.07	NS	NP	NP	NS	_	8.35	-	11.2	NS	NP	NP	NS
LNG ESS RW-3	16.8	14.73		11.69	Recovery Well	NP	NP	-	13.25	-	16.8	1.48	NP	NP	1.48	-	13.46	-	16.81	1.27	NP	NP	1.27
LNG ESS RW-4	14.95	14.48	1	11.39	Recovery Well	NP	NP	-	13.02	-	14.95	1.46	NP	NP	1.46	-	13.25	-	15.04	1.23	NP	NP	1.23
LNG ESS RW-5	17	14.84		11.56	Recovery Well	NP	NP	-	13.31	-	17	1.53	NP	NP	1.53	-	13.52	-	17.06	1.32	NP	NP	1.32
LNG ESS RW-6	17.09	16.22	1	13.35	Recovery Well	NP	NP	-	14.77	_	17.09	1.45	NP	NP	1.45	-	14.99	-	17.12	1.23	NP	NP	1.23
LNG GZ-216	17.75	11.55	10.31	9.04	Standpipe	NP	NP	-	7.65	-	17.75	2.66	NP	NP	2.66	-	6.88	-	17.65	3.43	NP	NP	3.43
LNG GZ-104A	17.3	12.56	11.53	10.00	Standpipe	NP	NP	-	9.4	_	17.3	2.13	NP	NP	2.13	-	9.19	-	17.41	2.34	NP	NP	2.34
LNG GZ-201	20	8.53	8.23	6.23	Standpipe	NP	NP				17.10	2.1.0	- 112	- 112	2.13	-	9.62	-	20.04	-1.39	NP	NP	-1.39
	20	0.55	0.23	0.20	~ap.pc	NP	NP	+	10.47		15.90	0.95	NP	NP	0.95	<b>!</b>	10.73		15.86	0.69		. 11	0.69

Notes

Well is located at the National Grid side of the Property

Well is located at the LNG Facility

Elevations are relative to City of Providence Datum

NP - Indicates No Product observed.

NS - Not Surveyed

Blanks indicate no measurement collected on that particular day.

Potentiometric elevations for wells exhibiting LNAPL include 0.85 correction factor.

Note 1. RCA-13 was noted to have an obstruction present in the well at a depth of approximately 7 feet in February 2013. After February 2013,

the monitoring well was too damaged to be gauged but could be sampled.

Note 2. VHB-8 was noted to have significant damage in February 2013 and was noted as destroyed in November 2013.

# 642 Allens Avenue Providence, Rhode Island

	Measure	ed Well	Top of	Top of DVC	Cuada		Range of	Range of					July 2012							Feb	ruary 2013			
Site Well	ID Depth		Casing	Top of PVC Elevation	Grade Elevation	Type of Well	LNAPL	DNAPL	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected	Depth to	Depth to	Depth to	Total Well	GW	LNAPL	DNAPL	Corrected
Area	below 1	-	Elevation	(Feet)	(Feet)	Type of Wen	Observed	Observed	LNAPL	Water (ft)		Depth (ft)	Elevation	Thickness	Thickness	Groundwater	LNAPL	Water (ft)	DNAPL	Depth (ft)	Elevation		Thickness	Groundwater
	PV	C)	(Feet)	(= ===)	(= 555)		(feet)	(feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)	(ft)		(ft)		(feet)	(feet)	(feet)	Elevation (feet)
VG										- 11			7.00	) I I		7.02		4.40					3.775	
NG RCA-1	15.		10.66	11.44	0.10	Roadbox	NP	NP	-	6.41	-	15.41	5.03	NP	NP	5.03	-	6.69	-	15.4	4.75	NP	NP	4.75
NG RCA-11	17.		10.66	10.22	8.18	Standpipe	NP	trace	-	7.91	trace	17.55	2.31	NP	trace	2.31	-	9.25	trace	17.65	0.97	NP	trace	0.97
NG RCA-11 NG RCA-13	14.9		11.93	11.67 10.46	9.14 9.36	Standpipe	NP NP	NP NP	-	6.95 7.21	-	14.95 15.07	4.72 3.25	NP NP	NP NP	4.72 3.25	-	6.95 5.81	-	15	4.72 4.65	NP NP	NP NP	4.72 4.65
NG RCA-13 NG RCA-14	15.3		11.64		9.36	Standpipe	NP NP	NP NP		9.03	-	15.07	2.27	1		2.27				15.3	2.59	NP NP	NP NP	2.59
NG RCA-14	17.9		11.04	11.30 13.71	9.01	Standpipe Standpipe	NP NP	NP NP	-	8.32	-	18.05	5.39	NP NP	NP NP	5.39	-	8.71 8.4	-	15.5	5.31	NP NP	NP NP	5.31
NG RCA-17	14.			13.71		Standpipe	NP NP	NP	-	7.38	-	14.8	5.80	NP	NP	5.80	-	6.87	-	14.85	6.31	NP	NP	6.31
NG VHB-1	10.			8.95	9.15	Roadbox	NP	NP		4.81	_	10.85	4.14	NP	NP	4.14	_	4.88	_	10.88	4.07	NP	NP	4.07
NG VHB-3	9.1		10.43	10.63	7.83	Standpipe	NP	NP	_	6.49	_	9.11	4.14	NP	NP	4.14	_	4.97	_	9.4	5.66	NP	NP	5.66
NG VHB-6	13.9		11.74	11.76	9.08	Standpipe	NP	NP	_	8.61	-	12.7	3.15	NP	NP	3.15	-	7.38	-	12.25	4.38	NP	NP	4.38
NG VHB-7	14.3		12.70	12.13	9.69	Standpipe	NP	NP	_	9.46	-	14.91	2.67	NP	NP	2.67	_	9.38	_	14.9	2.75	NP	NP	2.75
NG VHB-8	11.		12.70	11.12	11.13	Roadbox	NP	NP	_	5.9	-	11.6	5.22	NP	NP	5.22	-	5.25	-	10	5.87	NP	NP	5.87
NG VHB-10	17.0		18.16	17.81	14.59	Standpipe	NP - 0.01	NP	12.45	12.47	-	17.16	5.34	0.02	NP	5.36	_	12.81	-	17.15	5.00	NP	NP	5.00
NG VHB-18	16.9		14.23	14.04	9.19	Standpipe	NP	NP	-	9.21	-	17	4.83	NP	NP	4.83	-	9.23	-	17	4.81	NP	NP	4.81
NG VHB-21	16.:		12.64	12.49	9.93	Standpipe	trace - 0.01	NP	9.31	9.32	-	16.63	3.17	0.01	NP	3.17	8.56	8.57	-	17.3	3.92	0.01	NP	3.92
NG VHB-22	17.0		12.10	11.80	9.99	Standpipe	NP - 0.01	NP	8.82	8.86	-	17.31	2.94	0.04	NP	2.97	_	8.88	-	17.8	2.92	NP	NP	2.92
NG VHB-23	17.3	25	11.79	11.61	10.18	Standpipe	NP - 0.01	NP	-	9.44	-	17.85	2.17	NP	NP	2.17	8.21	8.22	-	17.8	3.39	0.01	NP	3.39
NG CHES RW-1	1 10.4	42	11.21		9.33	Recovery Well	NP	NP	-	7.89	-	10.5	3.32	NP	NP	3.32	-	6.86	-	10.3	4.35	NP	NP	4.35
NG CHES RW-2	2 16.3	24	13.02		9.84	Recovery Well	NP - trace	NP	-	10.57	-	10.61	2.45	NP	NP	2.45	trace	10.42	-	16.3	2.60	trace	NP	2.60
NG Unknown PV	VC Well 9.5	52		9.67	7.71	Standpipe	NP	NP	-	5.75	-	9.14	3.92	NP	NP	3.92	-	4.15	-	9.35	5.52	NP	NP	5.52
						1																		
LNG RCA-5	13.3	33	11.43	10.99	8.94	Standpipe	NP	NP	-	10.44	-	13.45	0.55	NP	NP	0.55	-	10.59	-	13.55	0.40	NP	NP	0.40
LNG RCA-6	17.	.2	10.50	10.26		Roadbox	NP	NP	-	10.65	-	17.2	-0.39	NP	NP	-0.39	-	11.21	-	17.26	-0.95	NP	NP	-0.95
LNG RCA-20	10.9	95	11.91	11.59	9.56	Standpipe	NP	NP	-	9.1	-	11.07	2.49	NP	NP	2.49	-	8.83	-	14.35	2.76	NP	NP	2.76
LNG RCA-21	9.5	52		13.72	10.48	Standpipe	1.44 - 1.91	NP	11.17	12.82	-	14.35	0.90	1.65	NP	2.30	11.41	12.85	-	14.35	0.87	1.44	NP	2.10
LNG RCA-22	13	3	11.22	11.62	9.03	Standpipe	NP	NP	-	9.69	-	13.05	1.93	NP	NP	1.93	-	9.77	-	13.2	1.85	NP	NP	1.85
LNG RCA-28	17.0	65		16.58		Standpipe	NP	NP	-	12.08	-	17.7	4.50	NP	NP	4.50	-	12.28	-	17.75	4.30	NP	NP	4.30
LNG RCA-29	14.	79		13.45		Standpipe	trace - 0.11	NP	11.50	11.61	-	14.45	1.84	0.11	NP	1.84	trace	11.98	-	14.45	1.47	trace	NP	1.47
LNG RCA-32	15.9	98		12.16		Standpipe	NP	NP	-	10.75	-	16.01	1.41	NP	NP	1.41	-	9.98	-	12.9	2.18	NP	NP	2.18
LNG RCA-33	13.	12		9.67		Standpipe	NP	NP	-	8.08	-	13.2	1.59	NP	NP	1.59	-	8.51	-	13.3	1.16	NP	NP	1.16
LNG RCA-34	13.:	55	13.78	13.79	11.46	Standpipe	NP	NP	-	7.1	-	13.55	6.69	NP	NP	6.69	-	6.75	-	13.55	7.04	NP	NP	7.04
LNG RCA-36 (No	ote 3) 14.0	05	10.72	10.51		Roadbox	NP	NP	-	10.24	-	14.1	0.27	NP	NP	0.27	-	11.62	-	14.07	-1.11	NP	NP	-1.11
LNG RCA-38	16.	.8		9.36		Standpipe	NP	NP	-	8.48	-	16.7	0.88	NP	NP	0.88	-	9.05	-	16.7	0.31	NP	NP	0.31
LNG RCA-39	14.	.6	12.77	12.56	10.13	Standpipe	NP	NP	-	9.85	-	14.65	2.71	NP	NP	2.71	-	9.86	-	14.75	2.70	NP	NP	2.70
LNG RCA-40	16.	75	11.45	10.91	9.42	Standpipe	trace	NP	trace	10.47	-	16.8	0.44	trace	NP	0.44	trace	10.85	-	16.8	0.06	trace	NP	0.06
LNG VHB-20	17	7	13.86	13.64	11.63	Standpipe	NP	NP	-	8.91	-	17.05	4.73	NP	NP	4.73	-	9.12	-	17.2	4.52	NP	NP	4.52
LNG CHES RW-3	3 17.	.9	13.11		9.85	Recovery Well	NP	NP	-	12.31	-	17.92	0.80	NP	NP	0.80	-	12.71	-	17.9	0.40	NP	NP	0.40
LNG CHES RW-4	4 12.3	35	11.85		8.79	Recovery Well	trace - 0.03	NP	trace	11.4	-	12.4	0.45	trace	NP	0.45	trace	11.77	-	12.5	0.08	trace	NP	0.08
LNG CHES RW-5	5 13.	.8	12.37		9.86	Recovery Well	NP	NP	-	12.08	-	13.8	0.29	NP	NP	0.29	-	12.4	-	13.8	-0.03	NP	NP	-0.03
LNG ESS RW-1	8.4	6		NS		Recovery Well	NP	NP	-	6.59	-	8.46	NS	NP	NP	NS	-	5.27	-	8.55	NS	NP	NP	NS
LNG ESS RW-2	11.0			NS		Recovery Well	NP	NP	-	8.18	-	11.1	NS	NP	NP	NS	-	8.39	-	11.2	NS	NP	NP	NS
LNG ESS RW-3	16.	.8	14.73		11.69	Recovery Well	NP	NP	-	13.36	-	16.8	1.37	NP	NP	1.37	-	13.68	-	16.85	1.05	NP	NP	1.05
LNG ESS RW-4	14.9	95	14.48		11.39	Recovery Well	NP	NP	-	13.14	-	15	1.34	NP	NP	1.34	-	13.44	-	15.05	1.04	NP	NP	1.04
LNG ESS RW-5	17	7	14.84		11.56	Recovery Well	NP	NP	-	13.44	-	17.05	1.40	NP	NP	1.40	-	13.74	-	17.05	1.10	NP	NP	1.10
LNG ESS RW-6	17.0	09	16.22		13.35	Recovery Well	NP	NP	-	14.86	-	17.1	1.36	NP	NP	1.36	-	15.16	-	17.15	1.06	NP	NP	1.06
LNG GZ-216	17.	75	11.55	10.31	9.04	Standpipe	NP	NP	-	7.72	-	17.68	2.59	NP	NP	2.59	-	7.22	-	17.65	3.09	NP	NP	3.09
LNG GZ-104A	17.	.3	12.56	11.53	10.00	Standpipe	NP	NP	-	9.49	-	17.43	2.04	NP	NP	2.04	-	9.62	-	17.42	1.91	NP	NP	1.91
LNG GZ-201	20	)	8.53	8.23	6.23	Standpipe	NP	NP	-	7.7	-	20.05	0.53	NP	NP	0.53	-	8.98	-	20.10	-0.75	NP	NP	-0.75
LNG VHB-13	15.9	90	11.58	11.42	12.04	Roadbox	NP	NP	-	10.5	-	15.84	0.92	NP	NP	0.92	-	10.71	-	15.85	0.71	NP	NP	0.71

Notes

Well is located at the National Grid side of the Property

Well is located at the LNG Facility

Elevations are relative to City of Providence Datum

NP - Indicates No Product observed.

NS - Not Surveyed

Blanks indicate no measurement collected on that particular day.

Potentiometric elevations for wells exhibiting LNAPL include 0.85 correction factor.

Note 1. RCA-13 was noted to have an obstruction present in the well at a depth of approximately 7 feet in February 2013. After February 2013,

the monitoring well was too damaged to be gauged but could be sampled.

Note 2. VHB-8 was noted to have significant damage in February 2013 and was noted as destroyed in November 2013.

Attachment DIV 1-1
RIPUC Docket No. 4514
In Re: 2014 Distribution Adlignment CO 1990 1995 1972014

# 642 Allens Avenue Providence, Rhode Island

		Measured Well	Top of				Range of	Range of				Nov	vember 2013	}		
Site Area	Well ID	Depth (Feet below Top of PVC)	Casing Elevation (Feet)	Top of PVC Elevation (Feet)	Grade Elevation (Feet)	Type of Well	LNAPL Observed (feet)	DNAPL Observed (feet)	Depth to LNAPL (ft)	Depth to Water (ft)	Depth to DNAPL (ft)	Total Well Depth (ft)	GW Elevation (feet)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Corrected Groundwater Elevation (feet)
NG	DCA 1	15.4		11.44		D II	ND	NID		7.10		15.45	4.25	NID	NID	4.25
NG	RCA-1	15.4	10.66	11.44	0.10	Roadbox	NP	NP	-	7.19	-	15.45	4.25	NP	NP	4.25
NG	RCA-3	17.75	10.66	10.22	8.18	Standpipe	NP	trace	-	9.44	trace	17.7	0.78	NP	trace	0.78
NG	RCA-11	14.95	11.93	11.67	9.14	Standpipe	NP	NP	-	7.41	-	14.72	4.26	NP	NP	4.26
NG	RCA-13	14.95	10.79	10.46	9.36	Standpipe	NP	NP		0.74			See Note 1	N.D.	N.D.	1.54
NG	RCA-14	15.28	11.64	11.30	9.61	Standpipe	NP	NP	-	9.76	-	15.35	1.54	NP	NP	1.54
NG	RCA-15	17.95		13.71		Standpipe	NP	NP	-	8.77	-	18	4.94	NP	NP	4.94
NG	RCA-17	14.75		13.18 8.95	0.15	Standpipe	NP ND	NP NP	-	8.2	-	14.9	4.98	NP NP	NP NP	4.98
NG	VHB-1	10.9	10.42		9.15	Roadbox	NP		-	4.81	-	10.9	4.14			4.14
NG	VHB-3	9.15 13.95	10.43 11.74	10.63	7.83	Standpipe	NP NP	NP NP	-	6.54	-	9.5 13.8	4.09 2.28	NP NP	NP NP	4.09 2.28
NG	VHB-6 VHB-7		12.70	11.76 12.13	9.08	Standpipe	NP NP	NP NP	-	9.48	-		2.28	NP NP	NP NP	2.28
NG		14.85	12.70		9.69	Standpipe			-	10.07	-	15	See Note 2	NP	NP	2.06
NG	VHB-8 VHB-10	11.5 17.04	10.16	11.12 17.81	11.13	Roadbox	NP NP 0.01	NP NP	12.24	12.25				0.01	ND	4.57
NG NG			18.16 14.23	17.81	14.59	Standpipe	NP - 0.01 NP	NP NP	13.24	13.25 9.62	-	15.2	4.56 4.42	0.01 NP	NP NP	4.57
	VHB-18	16.92			9.19	Standpipe			-		-	16.74				4.42
NG NG	VHB-21 VHB-22	16.55	12.64 12.10	12.49 11.80	9.93	Standpipe	trace - 0.01 NP - 0.01	NP NP	10.35	10.26	-	16.6	2.23	trace	NP NP	2.23 1.45
		17.67 17.25			9.99	Standpipe		NP NP	10.55	10.36	-	17.8	1.44 1.75	0.01	NP NP	
NG NG	VHB-23 CHES RW-1	17.25	11.79 11.21	11.61	10.18 9.33	Standpipe Recovery Well	NP - 0.01 NP	NP NP	-	9.86 8.97	-	17.3 10.5	2.24	NP NP	NP NP	1.75 2.24
NG	CHES RW-1	16.24				· · · · · · · · · · · · · · · · · · ·		NP NP	<b>+</b>	11.22	-			NP NP	NP NP	1.80
		9.52	13.02	0.67	9.84	Recovery Well	NP - trace	NP NP	-		-	16.2	1.80	NP NP	NP NP	3.89
NG	Unknown PVC Well	9.52		9.67	7.71	Standpipe	NP	NP	-	5.78	-	9.5	3.89	NP	NP	3.89
LNC	DCA 5	12.22	11.42	10.00	8.94	Standnina	ND	NP		10.77		12.45	0.22	NP	ND	0.22
LNG	RCA-5	13.33 17.2	11.43 10.50	10.99	8.94	Standpipe	NP NP	NP NP	-	10.77	-	13.45 17.2	-0.35	NP NP	NP NP	0.22
	RCA-6	10.95		10.26	0.50	Roadbox	NP NP	NP NP	-	10.61	-			NP NP	NP NP	-0.35 1.32
LNG	RCA-20 RCA-21	9.52	11.91	11.59 13.72	9.56	Standpipe		NP NP	12.26	10.27	-	11.03	1.32 -0.45	1.91	NP NP	1.32
LNG	RCA-21 RCA-22		11.22		10.48	Standpipe	1.44 - 1.91	NP NP		14.17 10.3	-	14.35		NP	NP NP	1.17
	RCA-22 RCA-28	13	11.22	11.62 16.58	9.03	Standpipe	NP ND	NP NP	-	10.3	-	13.05	1.32	NP NP	NP NP	4.12
LNG	RCA-28 RCA-29	17.65 14.79		13.45		Standpipe	NP	NP NP	-		-	17.48 12.35	4.12	NP NP	NP NP	1.66
LNG	RCA-29 RCA-32	15.98		12.16		Standpipe	trace - 0.11	NP NP	-	11.79	-		1.66 1.77	NP NP	NP NP	1.77
	RCA-32 RCA-33			9.67		Standpipe	NP NP	NP NP	1	10.39	-	12.8 13.2	1.77	NP NP	NP NP	1.56
LNG	RCA-33	13.12 13.55	13.78	13.79	11.46	Standpipe	NP NP	NP NP	-	8.11 7.01	-	12.81	6.78	NP NP	NP NP	6.78
LNG	RCA-34 (Note 3)	14.05	10.72	10.51	11.40	Standpipe Roadbox	NP NP	NP NP	-	10.28	-	11.8	0.78	NP NP	NP NP	0.23
LNG	RCA-38 (Note 3)	16.8	10.72	9.36		1	NP NP	NP NP		9.25		16.5	0.23	NP NP	NP NP	0.23
LNG	RCA-38	14.6	12.77	12.56	10.13	Standpipe	NP NP	NP NP	-	10.8	-	14.64	1.76	NP NP	NP NP	1.76
LNG	RCA-39	16.75	11.45	10.91	9.42	Standpipe Standpipe	trace	NP NP	_	10.8	-	16.85	0.21	NP NP	NP NP	0.21
LNG	VHB-20	17	13.86	13.64	11.63	Standpipe	NP	NP NP	-	9.26		16.88	4.38	NP NP	NP NP	4.38
LNG	CHES RW-3	17.9	13.11	13.04	9.85	Recovery Well	NP	NP	_	12.8	-	17.92	0.31	NP	NP	0.31
LNG	CHES RW-3	12.35	11.85	<del> </del>	8.79	Recovery Well	trace - 0.03	NP NP	11.60	11.61	_	17.92	0.31	0.01	NP NP	0.25
LNG	CHES RW-5	13.8	12.37		9.86	Recovery Well	NP	NP	-	12.25		13.7	0.12	NP	NP	0.12
LNG	ESS RW-1	8.46	1 4.41	NS	7.00	Recovery Well	NP	NP	_	7.35	_	8.45	NS NS	NP	NP	NS NS
LNG	ESS RW-1	11.07		NS		Recovery Well	NP NP	NP NP	-	8.68	_	11.1	NS NS	NP NP	NP NP	NS NS
	ESS RW-2	16.8	14.73	110	11.69	Recovery Well	NP NP	NP	<del>  </del>	13.94		16.8	0.79	NP	NP	0.79
	ESS RW-4	14.95	14.73	1	11.39	Recovery Well	NP NP	NP	-	13.66	_	15	0.79	NP	NP	0.82
		17	14.46	1	11.56	Recovery Well	NP NP	NP	<del>  </del>	14.01		17.03	0.82	NP	NP	0.83
	ESS RW-5	17.09	16.22	<del> </del>	13.35	Recovery Well	NP NP	NP NP	-	15.45	-	17.03	0.83	NP NP	NP NP	0.83
	GZ-216	17.75	11.55	10.31	9.04	Standpipe	NP NP	NP	-	8.67		17.65	1.64	NP	NP	1.64
	GZ-104A	17.73	12.56	11.53	10.00	Standpipe	NP	NP	_	10.21	_	17.53	1.32	NP	NP	1.32
	GZ-104A GZ-201	20	8.53	8.23	6.23	Standpipe	NP NP	NP NP	-	8.1	_	20.08	0.13	NP NP	NP NP	0.13
	VHB-13	15.90	11.58	11.42	12.04	Roadbox	NP NP	NP	-	10.9	_	15.86	0.13	NP	NP	0.13
Notes	,11D-1 <i>3</i>	13.70	11.50	11.72	12.04	TORUDOA	111	141		10.9		15.00	0.32	141	141	0.32

Notes

Well is located at the National Grid side of the Property

Well is located at the LNG Facility

Elevations are relative to City of Providence Datum

NP - Indicates No Product observed.

NS - Not Surveyed

Blanks indicate no measurement collected on that particular day.

Potentiometric elevations for wells exhibiting LNAPL include 0.85 correction factor.

Note 1. RCA-13 was noted to have an obstruction present in the well at a depth of approximately 7 feet in February 2013. After February 2013,

the monitoring well was too damaged to be gauged but could be sampled.

Note 2. VHB-8 was noted to have significant damage in February 2013 and was noted as destroyed in November 2013.

# NAPL RECOVERY

File No. 03:00033554.00 8/19/2014

# 642 Allens Avenue Providence, Rhode Island

Well ID	Date	Start	Depth to LNAPL	Depth to Water	LNAPL Thickness	Estimated Volume	<b>Tide Condition</b>
	E /1 /2011	Pumping	(feet)	(feet)	(feet)	Purged (gallons)	) ID
	7/1/2011	NR	10.07	13.65	3.58	NR	NR
	8/3/2011	NR	10.72	13.66	2.94	NR	NR
	2/3/2012	13:00	10.95	13.74	2.79	2.25 gal	Mid
	2/8/2012	14:30	10.93	13.28	2.35	2 gal	Low
	2/15/2012	11:20	11.28	12.75	1.47	1.25 gal	Low
	2/23/2012	13:13	11.56	12.6	1.04	0.75 gal	Low
	3/2/2012	13:45	11.77	12.52	0.75	1 gal	High
	3/9/2012	12:30	11.38	12.29	0.91	0.75 gal	Low to Mid
	4/13/2012	9:43	11.88	13.45	1.57	1.5 gal	Low to Mid
	5/16/2012	13:18	10.6	12	1.4	1 gal	Mid
	6/29/2012	9:16	10.7	12.55	1.85	1 gal	Low
	7/19/2012	9:21	11.17	12.82	1.65	1 gal	High
	8/24/2012	9:45	10.62	12.25	1.63	1.5 gal	Mid
	9/25/2012	13:24	10.85	12.33	1.48	2 gal	Mid
	10/31/2012	9:35	10.71	12.6	1.89	1.5 gal	High
RCA-21	11/19/2012	13:45	10.87	12.55	1.68	0.75 gal	High to Mid
KCA-21	12/20/2012	12:00	11.4	12.76	1.36	1 gal	High
	2/1/2013	11:30	11.41	12.85	1.44	1 gal	High
	2/26/2013	12:20	10.45	12.35	1.9	1 gal	Low
	3/25/2013	11:15	10.53	10.6	0.07	NR	Mid
	4/24/2013	10:30	11.09	12.43	1.34	1 gal	Mid
	5/31/2013	10:00	11.65	12.75	1.1	0.75 gal	Mid to Low
	6/25/2013	11:30	10.15	10.51	0.36	0.25 gal	Mid
	7/31/2013	7:00	10.9	12.77	1.87	1.25 gal	Mid
	8/28/2013	12:00	10.9	12.42	1.52	1.5 gal	Mid
	9/27/2013	11:00	10.83	12.25	1.42	1 gal	Mid
	10/30/2013	14:00	10.97	12.13	1.16	1 gal	Mid
	11/19/2013	10:30	12.26	14.17	1.91	1 gal	Low to Mid
	12/20/2013	10:45	11.45	12.72	1.27	1.25 gal	Mid to Low
	1/27/2014	10:00	10.98	12.32	1.34	0.5 gal	Low
	2/25/2014	13:00	10.81	11.8	0.99	0.5 gal	Mid
	3/20/2014	9:00	11.08	11.7	0.62	0.5 gal	Mid to High

Notes: Well is located at the LNG Facility

NR = Not Recovered

Volume purged was noted as a mixture of LNAPL and groundwater

## Division 1-2

### Request:

Re: the 642 Allens Avenue project, please:

- a. Document and explain why costs for "emergency utility repairs including and an expedited upgrade to 900 feet of 16-inch water line" are considered environmental remediation expenses.
- b. Identify the starting point and end point of the referenced 16-inch water line and identify all customers served by that line.
- c. Explain the factors that created the need for the referenced upgrade and the reasons for expediting that upgrade.
- d. Detail the nature and costs of all other "emergency utility repairs for which costs are included in the 642 Allens Avenue Project for the April 1,2013 March 31, 2014 period.

### Response:

- a. All costs within this reporting period related to "emergency utility repairs" and "expedited upgrade to 900-feet of 16-inch water line" were for environmental support only during the implementation of these two projects. The environmental support costs are considered an environmental remediation expense due to the presence of manufactured gas plant (MGP) impacted soil and groundwater within the areas of the utility repairs and upgrades. The Company has developed a Soil Management Plan for the site and soil and groundwater encountered during this work was managed in accordance with the Soil Management Plan. Excess soil generated during the utility repairs was disposed of at a National Grid approved facility and groundwater was either treated on-Site prior to discharge to the ground surface in accordance with a RIDEM-approved plan or shipped off-Site for disposal at a National Grid approved facility. In this case, the Company believes that it is more cost-effective and in the best interest of customers to pay for the incremental costs associated with performing this environmental support work in an environmentally-impacted area as opposed to completely remediating the contamination at the site.
- b. Refer to Attachment DIV1-2 for the plan that depicts the starting point and end point of the water line project. Please be advised that due to the voluminous nature of this attachment, the Company is providing DIV 1-2 on CD-ROM. I have The 16-inch diameter water line serves the fire suppression system for the National Grid Liquefied Natural Gas (LNG) Plant.

# Division 1-2, page 2

- c. The 16-inch water line experienced an unexpected failure on May 31, 2013 which resulted in the need for an emergency repair of an approximately 40-foot section of the water line. Based on the observations of the poor condition of the water line, the Company determined that an expedited replacement of approximately 900 feet of the fire suppression water line was required to be performed prior to the start of the vaporization season.
- d. One additional "emergency utility repair" was conducted during the reporting period and costs included are for environmental support only. The project was related to the Company's emergency repair of an 18-inch diameter low pressure natural gas line and due to the depth of the excavation, dewatering was necessary to facilitate access for crews. Environmental support for the emergency gas leak repair totaled \$109,901 and included \$82,870 for Clean Harbors Environmental Services, Inc. supporting groundwater dewatering, treatment and discharge. In addition, GZA Geo Environmental, Inc. provided oversight for groundwater and soil management activities for \$27,031.

## Division 1-3

# Request:

Re: the "Cost Breakdown by Category" for the 642 Allens Avenue project, please:

- a. Detail the Consulting activities for which payments were made during the reporting period;
- b. Identify the organization that provided each consulting service;
- c. Provide copies of all reports, studies, or other documents which communicated the results of activities undertaken or completed by consultants for which payments were made during the reporting period.

## Response:

- a. Consulting activities conducted during the reporting period for which payment was made include preparation and participation in meeting with RIDEM; annual groundwater and semi-annual groundwater/non-aqueous phase liquid(NAPL) monitoring; reporting to RIDEM; environmental oversight for the natural gas leak repair, Hoxie Run project, utility pole replacement; review of historic plans and documents for the Site; monthly site visits and monthly NAPL recovery; boom repair/maintenance oversight; environmental support for manhole and catch basin repairs in the north west corner of the Site; preparation of the Supplemental Site Investigation Work Plan; environmental support/oversight for the LNG water line repair and replacement activities; and health and safety monitoring for the Hoxie Run project.
- b. GZA GeoEnvironmental, Inc. conducted the services described in subpart (a) above. Coneco Engineers and Scientists conducted the health and safety monitoring for the Hoxie Run project.

## Division 1-3, page 2

- c. The following reports, studies, or other documents were prepared during the reporting period:
  - Underground Injection Control Temporary Permit Request by GZA GeoEnvironmental, Inc., dated, April 8, 2013;
  - Summary Letter Report Temporary On-site Treated Groundwater Discharge Permit, by GZA GeoEnvironmental, Inc., dated May 23, 2013;
  - *RIPDES DMR Quarter 1 and Notice of Termination*, by GZA GeoEnvironmental, Inc., dated June 12, 2013;
  - Water Line Upgrade Ground water Discharge Permit Application, by GZA GeoEnvironmental, Inc., dated July 31, 2013;
  - Groundwater Monitoring Report 2012, by GZA GeoEnvironmental, Inc., dated August 19, 2013;
  - Summary of Hoxie Run Natural Gas Line Upgrade, by GZA GeoEnvironmental, Inc., dated December 12, 2013;
  - Supplemental Site Investigation Work Plan (SSIWP), by GZA GeoEnvironmental, Inc., dated February 27, 2014.

Please see Attachment DIV 1-3 for copies of the reports, studies, or other documents listed above prepared during the reporting period. Due to the voluminous nature of this attachment, the Company is providing Attachment DIV 1-3 on CD-ROM.

# Division 1-4

# Request:

Re: the "Cost Breakdown by Category" for the 642 Allens Avenue project, please provide full supporting detail for the "Construction/Disposal/Removal Costs" showing separately costs of each construction, disposal, and removal activity and clearly identifying all costs associated with:

- a. Emergency utility repairs
- b. Expedited water line upgrades
- c. Other activities

### Response:

Please refer to Attachment DIV 1-4 for supporting detail for the "Construction/Disposal/Removal" costs for the reporting period.

### Division Data Request DIV 1-4

Date	Payee	Amount	Description of Service	Response
02/05/13	Clean Harbors Environmental Services, Inc.	\$15,719.12	Environmental support for emergency repair natural gas leak	DIV 1-4a
04/03/13	Clean Harbors Environmental Services, Inc.	\$15,148.10	Environmental support for emergency repair natural gas leak	DIV 1-4a
03/04/13	Clean Harbors Environmental Services, Inc.	\$10,434.64	Environmental support for emergency repair natural gas leak	DIV1-4a
06/04/13	Clean Harbors Environmental Services, Inc.	\$8,263.61	Environmental support for emergency repair natural gas leak	DIV 1-4a
07/08/13	Clean Harbors Environmental Services, Inc.	\$33,304.81	Operate and decontamination of groundwater treatment system	DIV 1-4a
07/02/03	Clean Harbors Environmental Services, Inc.	\$19,794.69	Environmental support for emergency water line repair	DIV 1-4b
10/01/13	Clean Harbors Environmental Services, Inc.	\$9,451.58	Environmental support for water line upgrade	DIV 1-4b
11/04/13	Clean Harbors Environmental Services, Inc.	\$12,932.01	Environmental support for water line upgrade	DIV 1-4b
12/04/13	Clean Harbors Environmental Services, Inc.	\$29,137.73	Environmental support for water line upgrade	DIV 1-4b
10/16/13	Environmental Soil Management, Inc.	\$56,735.58	Thermal Treatment for soil from water line upgrade	DIV 1-4b
10/28/13	Environmental Soil Management, Inc.	\$25,707.83	Thermal Treatment for soil from water line upgrade	DIV 1-4b
11/06/13	Environmental Soil Management, Inc.	\$30,329.81	Thermal Treatment for soil from water line upgrade	DIV 1-4b
10/31/14	Environmental Soil Management, Inc.	\$37,159.14	Thermal Treatment for soil from water line upgrade	DIV 1-4b
11/20/13	Environmental Soil Management, Inc.	\$5,404.53	Thermal Treatment for soil from water line upgrade	DIV 1-4b
11/20/13	Environmental Soil Management, Inc.	\$41,648.66	Thermal Treatment for soil from water line upgrade	DIV 1-4b
11/20/13	Environmental Soil Management, Inc.	\$48,556.88	Thermal Treatment for soil from water line upgrade	DIV 1-4b
01/11/13	Clean Harbors Environmental Services, Inc.	\$890.35	Drum pick up/waste removal	DIV1-4c
05/14/13	Clean Harbors Environmental Services, Inc.	\$1,183.76	Environmental support for pole replacement	DIV1-4c
05/21/13	Clean Harbors Environmental Services, Inc.	\$858.23	Drum pick up/waste removal	DIV 1-4c
07/24/13	Clean Harbors Environmental Services, Inc.	\$647.89	Replace absorbent boom in catch basin	DIV 1-4c
07/31/13	Clean Harbors Environmental Services, Inc.	\$272.82	Restore Engineered Cap	DIV 1-4c
09/05/13	Clean Harbors Environmental Services, Inc.	\$516.08	Drum pick up/waste removal	DIV 1-4c
09/19/13	Clean Harbors Environmental Services, Inc.	\$992.96	Replace absorbent boom in catch basin	DIV 1-4c
10/01/13	Clean Harbors Environmental Services, Inc.	\$2,107.90	Environmental support for sewer manhole repair	DIV 1-4c
10/02/13	Clean Harbors Environmental Services, Inc.		Environmental support for pole replacement	DIV 1-4c
10/14/13	Clean Harbors Environmental Services, Inc.	\$3,946.43	Environmental Support for sewer manhole repair	DIV 1-4c
10/16/13	Clean Harbors Environmental Services, Inc.	\$7,397.06	Replace boom along shoreline	DIV 1-4c
12/26/13	Clean Harbors Environmental Services, Inc.	\$493.97	Drum pick up/waste removal	DIV 1-4c
03/11/14	Clean Harbors Environmental Services, Inc.	\$469.04	Drum pick up/waste removal	DIV 1-4c

TOTAL: \$421,734.02

### Division 1-5

# Request:

Re: the "Cost Breakdown by Category" for the 642 Allens Avenue project, please provide full supporting detail for the "Other Costs" associated with the 642 Allens Avenue project for the reporting period.

# Response:

The amount for "Other Costs" associated with the 642 Allens Avenue project for the reporting period was \$52,149. These costs include \$51,752 in Company labor and burden for management of the 642 Allens Avenue project and \$397 for Hudson Valley Aerial for aerial photographs of the Site. The Company project management activities performed during this reporting period were associated with oversight of the consultants and contractors performing environmental work at the Site including review of corresponding invoices, coordination with Company personnel related to environmental support during planned and emergency projects at the Site, communications and/or meetings with RIDEM, Narragansett Bay Commission, and the United States Coast Guard. In addition, project management activities included review of permit applications, draft monitoring reports, environmental summary reports, and disposal documentation and preparation for the Supplemental Site Investigation.

# Division 1-6

# Request:

Re: the 170 Allens Avenue project, please:

- a. Detailed document the manner in which the dollar amounts of the Cargill reimbursements for costs incurred for the 170 Allens Avenue project were determined including the supporting workpapers, studies and analyses for those determinations.
- b. Identify when Cargill was billed for the referenced \$1,482,810 for the 170 Allens Avenue project and explain why the Company uses "cash" accounting rather than "accrual" accounting for reporting of such environmental cost reimbursements.
- c. Explain why the Company was required to pay fees to the City of Providence for "the easement to perform the remedy," and document the dollar amounts of all fees paid to the City of Providence for the easement.
- d. Detail the nature and physical parameters of the referenced easement obtained from the City of Providence.
- e. Document all rental fees for dock use in 2012 that were included in the 2014 report, identify when those fees were billed, and provide a five-year history of rental fees billed and received for the referenced dock facilities.

# Response:

- a. Per a confidential agreement with Cargill, Inc. ("Cargill"), Cargill reimburses the Company a percentage share of all costs associated with the upland investigation and remediation of the site and certain ancillary costs associated with this project. The invoices to Cargill include charges related to actual applicable invoices paid by the Company that have been included in this and previous filings. Two invoices were sent to Cargill during the reporting period:
  - The first invoice that was sent on April 16, 2013 was in the amount of \$227,043 and covered the period from May 1, 2011 through April 1, 2013. Payment was received in May 2013 and was included in the "Other Costs" for this project during the reporting period.
  - The second invoice that was sent on February 20, 2014 was in the amount of \$1,482,811 and covered the period from April 2, 2013 through January

# Division 1-6, page 2

31, 2014. Payment was received on March 27, 2014 but the project did not get credited until April 2, 2014.

In addition, please see the response to Division Request 1-7c for the workpapers, studies and analyses that Cargill shared in the costs of preparing.

b. As indicated above, Cargill was invoiced for \$1,482,810.55 on February 20, 2014 and the Company received payment on March 27, 2014. However, the project did not get credited for the payment until April 2, 2014 after the reporting period and was not included in this filing.

As a general matter for rate making purposes, the Company recovers costs based on cash expenditures, and excludes accrued costs from those recoveries as well as from rate base and deferred costs that earn a rate of return. Similarly, amounts billed to third parties, but not yet received, would also be excluded from cost recovery, rate base and deferred costs that earn a rate of return. However, in the process of preparing this response, the Company discovered that it had actually received the \$1,482,810 from Cargill on March 27, 2014 shortly before the end of the Company's March 31, 2014 fiscal year end, but this payment did not post in fiscal year (FY) 2014 and instead posted in the following month of April, which is the first month in FY2015. Consequently, the Company should have reflected this receipt of cash from Cargill in its FY2014 Environmental Response Costs (ERC) reconciliation The Company has adjusted the FY2014 ERC reconciliation to reflect the credit of \$1,482,810 as shown in Attachment DIV 1-6-b page 5, line 4 (b). As a result, this reduces the Environmental Response Cost Factor from \$0.0014 per therm as filed on August 29, 2014, to \$0.0011 per therm, or \$0.0003 per therm. This revision results in an annual decrease for a residential heating customer using 846 therm of \$0.25. See Attachment DIV 1-6b for the revised Schedule YC-1R and Schedule YC-4R.

c. The RIDEM-approved remedy for the upland portion of the site included a subsurface barrier wall and non-aqueous phase liquid collection trench. This wall/collection trench was installed continuously along a portion of the shoreline

# Division 1-6, page 3

of the river and eastern edge of the site. To be effective, the wall/collection trench was installed across Public Street, a public way. A permanent easement was required by the City of Providence to install this wall/collection trench in the public way. In addition, a temporary construction easement was required to conduct the work in the public way during the installation of the wall/collection trench, which also included revising the stormwater collection system to allow passage of stormwater through the wall/collection trench. The amount paid for these easements was based on an objective appraisal of the use of the City's property on a temporary and permanent basis. Please see Attachment DIV 1-6-c for a copy of the payment and City of Providence easement appraisal showing the requested details.

- d. The easement includes a temporary construction easement covering 3,011.86 square feet for installing the above referenced wall/collection trench and associated stormwater collection system and a perpetual easement covering 305.53 square feet for the purposes of monitoring, maintaining and repairing the wall/collection trench. Please see Attachment DIV 1-6-d for a copy of the petition to the City of Providence for the easement and the subsequent resolutions of the City of Providence granting the easement that show the requested details. Note that a second resolution was required to correct a typographical error regarding costs for the easement in the original resolution.
- e. The dock was leased by American Cruise Lines, Inc. during 2012 between May and October. The bill for the season's usage was issued on January 8, 2013 after extended discussions regarding the usage information. Please see Attachment DIV 1-6-e for a spreadsheet of the fees for the 2012 season. Payment was received in February 2013, but the project did not get credited until April 3, 2014. Except for the 2012 season, the dock has not been leased since the Company purchased the property in February 2012 because of ongoing remediation during 2013 and 2014. Except for the payment from American Cruise Lines for the 2012 season, no other payments have been received by the Company for use of the dock in the previous 5 year period.

> The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 Schedule YC-1R Page 1 of 1

National Grid - RI Gas Summary of DAC Factors Effective November 1, 2014

No.	<u>Description</u>	Reference	<u>Amount</u>	Fac	tor	_
				Residential/ Small/ Medium C&I	Large/ X-Large	
1	System Pressure (SP)	<u>YC-2S</u>	\$1,488,789	\$0.0039	\$0.0039	
2	Advanced Gas Technology Program (AGT)	<u>YC-3</u>	\$0	\$0.0000	\$0.0000	
3	Low Income Assistance Program (LIAP)		\$0	\$0.0000	\$0.0000	
4	Environmental Response Cost Factor (ERCF)	<u>YC-4</u>	\$420,632	\$0.0011	\$0.0011	
5	Pension Adjustment Factor (PAF)	<u>YC-5</u>	(\$2,034,108)	(\$0.0052)	(\$0.0052)	
6	On-System Margin Credits (MC)	<u>YC-6</u>	\$135,571	\$0.0003	\$0.0003	
7	Reconciliation Factor (R)	<u>YC-7S</u>	\$1,312,366	\$0.0038	\$0.0025	
8	Service Quality Factor (SQP)		\$0	\$0.0000	\$0.0000	
)	Earnings Sharing Mechanism (ESM)		<u>\$0</u>	<u>\$0.0000</u>	\$0.0000	
10	Subtotal	Sum ([1]:[9])	\$1,323,249	\$0.0039	\$0.0026	
11	Uncollectible Percentage	Dkt 4323	3.18%	3.18%	3.18%	
12	DAC factors grossed up for uncollectible	[10]/(1-[11])	\$1,366,711	\$0.0040	\$0.0026	per therm
13	Revenue Decoupling Adjustment (RDA)	<u>YC-8</u>	(\$8,989,002)	(\$0.0325)	\$0.0000	
14	Revenue Decoupling Adjustment Reconciliation	<u>YC-7S</u>	(\$754,074)	(\$0.0027)	\$0.0000	
15	DAC factor	[12]+[13]+[14]	(\$8,376,365)	(\$0.0312)	\$0.0026	per therm

		ISR Reconciliation w/o uncollectible <sup>1</sup>	Uncollectible Percentage <sup>2</sup>	ISR Reconciliation*	Base DAC Component* <sup>3</sup>	DAC Component Subtotal Rates*	ISR Component*4	November 1, 2014 DAC Rates*
ine lo.		(therms)		(therms) (A)	(therms) (B)	(therms) (C) =(A) + (B)	(therms) (D)	(therms) (E) = (C)+(D)
6 R	Res-NH	\$0.0087	3.18%	\$0.0089	(\$0.0312)	(\$0.0223)	\$0.0222	(\$0.0001)
7 R	Res-NH-LI	\$0.0087	3.18%	\$0.0089	(\$0.0312)	(\$0.0223)	\$0.0222	(\$0.0001)
8 R	Res-H	\$0.0029	3.18%	\$0.0029	(\$0.0312)	(\$0.0283)	\$0.0148	(\$0.0135)
9 R	Res-H-LI	\$0.0029	3.18%	\$0.0029	(\$0.0312)	(\$0.0283)	\$0.0148	(\$0.0135)
0 S	Small	\$0.0029	3.18%	\$0.0029	(\$0.0312)	(\$0.0283)	\$0.0153	(\$0.0130)
1 N	Medium	\$0.0024	3.18%	\$0.0024	(\$0.0312)	(\$0.0288)	\$0.0115	(\$0.0173)
2 I	Large LL	\$0.0019	3.18%	\$0.0019	\$0.0026	\$0.0045	\$0.0092	\$0.0137
3 L	Large HL	\$0.0017	3.18%	\$0.0017	\$0.0026	\$0.0043	\$0.0091	\$0.0134
4 X	XL-LL	\$0.0001	3.18%	\$0.0001	\$0.0026	\$0.0027	\$0.0028	\$0.0055
25 X	XL-HL	\$0.0005	3.18%	\$0.0005	\$0.0026	\$0.0031	\$0.0035	\$0.0066

#### \*Factors Include Uncollectible Allowance

- <sup>1</sup> Schedule YC-9S
- <sup>2</sup> Per Docket No. 4323
- <sup>3</sup> Section 1, Line 15
- <sup>4</sup> FY 15 ISR component per Docket No. 4474

> The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 Schedule YC-4R Page 1 of 4

#### National Grid - RI Gas Environmental Response Cost (ERC) Factor Effective November 1, 2014

Line No.	<u>Description</u>	Column / Line	Amount	
1	Amortization of Pre-FY2003 expenses	Col M, Ln 3	\$0	
2	Amortization of FY2003 expenses	Col M, Ln 6	\$0	
3	Amortization of FY2004 expenses - year 10 of 10	Col M, Ln 9	\$0	
4	Amortization of FY2005 expenses - year 9 of 10	Col M, Ln 12	\$13,668	
5	Amortization of FY2006 expenses - year 8 of 10	Col M, Ln 15	\$43,602	
6	Amortization of FY2007 expenses - year 7 of 10	Col M, Ln 18	(\$75,829)	
7	Amortization of FY2008 expenses - year 6 of 10	Col M, Ln 21	(\$4,575)	
8	Amortization of FY2009 expenses - year 5 of 10	Col M, Ln 24	\$96,575	
9	Amortization of FY2010 expenses - year 4 of 10	Col M, Ln 27	\$208,826	
10	Amortization of FY2011 expenses - year 3 of 10	Col M, Ln 30	\$452,295	
11	Amortization of FY2012 expenses - year 3 of 10	Col M, Ln 33	\$558,394	
12	Amortization of FY2013 expenses - year 2 of 10	Col M, Ln 36	\$136,852	
13	Amortization of FY2014 expenses - year 1 of 10	Col M, Ln 39	\$300,824	
14		Subtotal	\$1,730,632	=
15	Base Rate Embedded ERC Funding		\$1,310,000	
16	Cost in excess of Allowance		\$420,632	
17	Firm Throughput		38,110,517	dths
18	Environmental Response Cost Factor per decatherm		\$0.0110	per dth
19	Environmental Response Cost Factor per therm		\$0.0011	per therm

- 14 Lines (1) to (13)
- 15 Docket No. 3401
- 16 Line (14) Line (15)
- 17 Company Forecast
- 18 Line (16) / Line (17)
- 19 Line (18) / 10

> The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 Schedule YC-4R Page 2 of 4

National Grid - RI Gas	vironmental Response Cost (ERC) Factor
	Environ

														ii. A				1 1	
FY2014 (m)		80	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)	\$96,575	\$208,826	\$452,295	\$558,394	\$136,852		\$1,382,515	\$20,322,722 \$3,008,237	\$23,330,959	\$8,484,410 \$1,382,515	\$9,866,925	\$13,464,034
FY2013 (I)	80	(\$601,270)	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)	\$96,575	\$208,826	\$452,295	\$558,394			\$644,393	\$18,954,201 \$1,368,521	\$20,322,722	\$7,840,017 \$644,393	\$8,484,410	\$11,838,312 \$13,464,034
FY2012 (k)	\$1,251,027	(\$601,267)	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)	\$96,575	\$208,826	\$452,295				\$1,337,029	\$13,370,265 \$5,583,936	\$18,954,201	\$6,502,988 \$1,337,029	\$7,840,017	\$11,114,184
(j)	\$1,251,025	(\$601,267)	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)	\$96,575	\$208,826					\$884,732	\$8,847,318 \$4,522,947	\$13,370,265	\$5,618,256 \$884,732	\$6,502,988	\$6,867,277
FY2010 ()	\$1,251,025 \$1,251,025	(\$601,267)	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)	\$96,575						\$675,906	\$6,759,054 \$2,088,264	\$8,847,318	\$4,363,019 \$4,942,350 \$579,331 \$675,906	\$1,900,783 \$2,503,245 \$3,119,378 \$3,779,113 \$4,363,019 \$4,942,350 \$5,618,256	\$2,059,942 \$1,430,281 \$1,816,704 \$3,229,062
FY2009 (h)		(\$601,267)	(\$47,296)	\$13,671	\$43,602	(\$75,829)	(\$4,575)							\$579,331	\$5,793,300 \$965,754	\$6,759,054	\$4,363,019 \$579,331	\$4,942,350	\$1,816,704
EY2008 (g)	\$1,251,025	(\$601,267)	(\$47,296)	\$13,671	\$43,602	(\$75,829)								\$583,906	\$5,839,055 (\$45,755)	\$5,793,300	\$3,779,113 \$583,906	\$4,363,019	\$1,430,281
FY2007 (f)	\$1,251,025	(\$601,267)	(\$47,296)	\$13,671	\$43,602									\$659,735	\$6,597,346 (\$758,291)	\$5,839,055	\$3,119,378 \$659,735	\$3,779,113	\$2,059,942
(e)	\$1,251,025 \$1,251,025	(\$601,267)	(\$47,296)	\$13,671										\$616,133	\$6,161,326 \$436,020	\$6,597,346	\$2,503,245 \$616,133	\$3,119,378	\$5,246,554 \$4,123,836 \$3,638,081 \$3,477,968
FY2005 (d)		(\$601,267)	(\$47,296)											\$602,462	\$6,024,619 ) \$136,707	\$6,161,326	\$1,900,783	\$2,503,245	\$3,658,081
FY2004 (c)	\$1,251,025	(\$601,267)												\$649,758	\$6,497,579 ) (\$472,960)	\$6,024,619	\$1,251,025 \$649,758		\$4,123,836
FY2003 (b)	\$1,251,025													\$1,251,025	\$12,510,252 (\$6,012,673)	\$6,497,579	\$0 \$1,251,025	\$1,251,025	\$5,246,554
EY2002 (a)														80	\$12,510,252	\$12,510,252	80 80	80	\$12,510,252
NO	\$12,510,252	(\$6,012,673)	(\$472,960)	\$136,707	\$436,020	(\$758,291)	(\$45,755)	\$965,754	\$2,088,264	\$4,522,947	\$5,583,936	\$1,368,521	\$3,008,237		IN COSTS		AL REMEDIATK		ATION COSTS
- ENVIRONMENTAL AMORTIZATION	June 30, 2002 NET ERC costs net of insurance Amortization Period (years)	FY 2003 NET ERC costs net of insurance Amortization Period (years)	FY 2004 NET ERC costs net of insurance Amortization Period (years)	FY 2005 NET ERC costs net of insurance Amortization Period (years)	FY 2006 NET ERC costs net of insurance Amortization Period (years)	FY 2007 NET ERC costs net of insurance Amortization Period (years)	FY 2008 & adjustment for FY2007 NET ERC costs net of insurance Amortization Period (years)	FY 2009 NET ERC costs net of insurance Amortization Period (years)	FY 2010 NET ERC costs net of insurance Amortization Period (years)	FY 2011 NET ERC costs net of insurance Amortization Period (years)	FY 2012 NET ERC costs net of insurance Amortization Period (years)	FY 2013 NET ERC costs net of insurance Amortization Period (years)	FY 2014 NET ERC costs net of insurance Amortization Period (years)	Amortization Expense sub-total	ENVIRONMENTAL REMEDIATION COSTS. Beginning Balance Environmental Expenditures, net of Insurance	Ending Balance	ACCUMULATED ENVIRONMENTAL REMEDIATION Beginning Balance Amortzation Expense (1)	Ending Balance	NET ENVIRONMENTAL REMEDIATION COSTS
Line No.	3 5 -	4 % 9	r & 6	10	13	16 17 18	19 20 21	22 23 24	25 26 27	28 29 30	31 32 33	34 35 36	37 38 39	40	38 39 40	4	44 43	45	46

(1) Amortization Expense is shown on a June 30 basis

> The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 Schedule YC-4R Page 3 of 4

Line No.	ENVIRONMENTAL AMORTIZATION	(n)	(o)	FY2017 (p)	FY2018 (q)	FY2019 (r)	FY2020 (s)	FY2021 (t)	FY2022 (u)	FY2023 (v)	FY2024 (w)	
3 2 -	June 30, 2002 NET ERC costs net of insurance \$12,510,252 Amorization Period (years)	52										
4 %	FY 2003 NET ERC costs net of insurance (\$6,012,673) Amortization Period (years) 10	10										
r & 0	FY 2004 NET ERC costs net of insurance (\$472,960) Amortization Period (years) 10	00)										
12	FY 2005 NET ERC costs net of insurance \$136,707 Amortization Period (years) 10	77 10 \$13,668	80									
13 15	FY 2006 NET ERC costs net of insurance \$436,020 Amortization Period (years) 10	20 10 \$43,602	\$43,602	98								
16 17 18	FY 2007  NET ERC costs net of insurance (\$758,291)  Amortization Period (years) 10	10 (\$75,829)	(\$75,829)	(\$75,830)	80							
19 20 21	FY 2008 & adjustment for FY 2007 NET ERC costs net of insurance (\$45,755) Amortization Period (years) 10	10 (\$4,575)	(\$4,575)	(\$4,575)	(\$4,580)	80						
22 23 24	FY 2009 NET ERC costs net of insurance \$965,754 Amortization Period (years) 10	54 10 \$96,575	\$96,575	\$96,575	\$96,575	896,579	80					
25 26 27	FY 2010 NET ERC costs net of insurance \$2,088,264 Amortization Period (years) 10	54 10 \$208,826	\$208,826	\$208,826	\$208,826	\$208,826	\$208,830	80				
28 29 30	FY 2011 NET ERC costs net of insurance \$4,522,947 Amortization Period (years) 10	10 \$452,295	\$452,295	\$452,295	\$452,295	\$452,295	\$452,295	\$452,292	80			
31 32 33	FY 2012 NET ERC costs net of insurance \$5,583,936 Amortization Period (years) 10	36 10 \$558,394	\$558,394	\$558,394	\$558,394	\$558,394	\$558,394	\$558,394	\$558,390	80		
34 35 36	FY 2013 NET ERC costs net of insurance \$1,368,521 Amortization Period (years) 10	10 \$136,852	\$136,852	\$136,852	\$136,852	\$136,852	\$136,852	\$136,852	\$136,852	\$136,853	80	
37 38 39	FY 2014 NET ERC costs net of insurance \$3,008,237 Amortization Period (years) 10	37 10 \$300,824	\$300,824	\$300,824	\$300,824	\$300,824	\$300,824	\$300,824	\$300,824	\$300,824	\$300,821	8
40	Amortization Expense sub-total	\$1,730,632	\$1,716,964	\$1,673,361	\$1,749,186	\$1,753,770	\$1,657,195	\$1,448,362	\$996,066	\$437,677	\$300,821	80
38 39 40	ENVIRONMENTAL REMEDIATION COSTS Beginning Balance Environmental Expenditures, net of Insurance	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959 \$0
41	Ending Balance	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959	\$23,330,959
44 44	ACCUMULATED ENVIRONMENTAL REMEDIA Beginning Balance Amortzation Expense (1)	\$9,866,925 \$1,730,632	\$11,597,557	\$13,314,521 \$1,673,361	\$14,987,882 \$1,749,186	\$16,737,068 \$1,753,770	\$18,490,838 \$1,657,195	\$20,148,033 \$1,448,362	\$21,596,395 \$996,066	\$22,592,461 \$437,677	\$23,030,138 \$300,821	\$23,330,959 \$0
45	Ending Balance	\$11,597,557	\$13,314,521	\$14,987,882	\$16,737,068	\$18,490,838	\$20,148,033	\$21,596,395	\$22,592,461	\$23,030,138	\$23,330,959	\$23,330,959
46	NET ENVIRONMENTAL REMEDIATION COSTS 811,733,402	TS \$11,733,402	\$10,016,438	\$8,343,077	\$6,593,891	\$4,840,121	\$3,182,926	\$1,734,564	\$738,498	\$300,821	80	08

Amortization Expense is shown on a June 30 basis

> The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 Schedule YC-4R Page 4 of 4

## National Grid - RI Gas Environmental Response Cost (ERC) Factor ERC FY 2014 Detail

Line No	<u>-</u>		Total Costs ending 3/31/2013	FY 2014 Costs ending 03/31/2014	Total Costs ending 3/31/2014
			(a)	<b>(b)</b>	$(\mathbf{c}) = (\mathbf{a}) + (\mathbf{b})$
1	Environm	nental Expenses			
2	907 & 90	8 Allens Avenue	\$19,366,948	\$716,489	\$20,083,438
3	307	PCB Reg Pipe Abandon.	\$748,003	\$217,676	\$965,679
4	379	Petroleum Site	\$6,430,012	\$1,378,016	\$7,808,028
5	700	18 & 21 Holders COR	\$2,776,743	\$0	\$2,776,743
6	161	Canal Street, Westerly	\$29,133	\$0	\$29,133
7	178	Site Inv Connell Hwy Newp	\$44,092	\$0	\$44,092
8	144	Westerly Soil Investigation	\$82,184	\$0	\$82,184
9	171	Contaminated Regulators	\$2,949,447	\$80,472	\$3,029,919
10	781	Mendon Road	\$121,355	\$0	\$121,355
11	782	Tidewater	\$1,267,751	\$76,505	\$1,344,256
12	783	Hamlet	\$111,105	\$1,967	\$113,072
13		Thames & Wellington	\$5,056,689	\$255,258	\$5,311,947
14		Misc MGP (NEG)	\$231,971	\$63,769	\$295,740
15		Insurance Recovery	\$1,040,903	\$150,980	\$1,191,882
16		East Providence (First Ave) Holder	\$131,533	\$67,105	\$198,639
17		Sub-Total	\$40,387,869	\$3,008,237	\$43,396,107

18	Insurance Recovery/Set	tlement
----	------------------------	---------

19 910 Environmental Insurance Settlement

\$0

20 Net FY2014 Environmental Response Costs

\$3,008,237

<sup>4(</sup>b) This amount reflects a credit of \$1,482,810 that the Company received in April 2014

<sup>17</sup> Lines (2) through (16)

<sup>20</sup> Line (17) + Line (19)

Check Date: 06/18/2013

nationalgrid

Attachment DIV CFreck Number: 7000404117
R.I.P.U.C. Docket No. 4514

Vendor ID:

4000005855

Amount of the 2014 stribution Adjustment Charge Filing \$5,304.75

Vendor Name:

CITY OF PROVIDENCE

Discounts Taken:

Value Date:

06/18/2013

Amount of Payment:

\$5,304.75

Please be advised that NATIONAL GRID USA SERVICE COMPANY, INC has generated a payment on behalf of THE NARRAGANSETT ELECTRIC COMPANY. The invoice payment details are as follows:

Origin	Invoice Number	Invoice Date	Invoice Received Date	Gross Amount	Discount Taken	Paid Amount	PO ID	Payment Message
NONPO	6112013	06/11/2013	06/18/2013	\$5,304.75	\$0.00	\$5,304.75		Public Street National Grid Easement
				\$5,304.75	\$0.00	\$5,304.75		

Contact the Accounts Payable Department at 1-888-483-2123 to receive payments electronically, update account information or make inquiries.

National Grid USA - Accounts Payable Department - 300 Erie Blvd West, Syracuse, NY 13202

1-888-4TDC-123 (1-888-483-2123)

ACTIVE PAPER - THE BACK OF THIS DOCUMENT INCLUDES A CHEMICAL WASH WARNING BOX

National Grid 300 Erie Boulevard West Syracuse, NY 13202-4250

Citibank, NA One Penn's Way New Castle, DE 19720

62-20/311

7000404117

Date 06/18/2013

Check Amount \$5,304.75\*\*\*\*

Pay

\*\*\*\* FIVE THOUSAND THREE HUNDRED FOUR AND 75/100 DOLLARS \*\*\*\*

To

CITY OF PROVIDENCE

The PO BOX 1456

Order

PROVIDENCE, RI 02901-1456

Of

**Authorized Signature** Void after 120 Days

# AAA

# ANDOLFO APPRAISAL ASSOCIATES, INC.

# REAL ESTATE APPRAISERS AND CONSULTANTS THE BUSH BUILDING 216 WEYBOSSET STREET • PROVIDENCE • RHODE ISLAND 02903 (401) 273-8989 • FAX (401) 273-2510

May 29, 2013 (Amended from April 22, 2013)

Mr. David Quinn
City Tax Assessor
City of Providence
25 Dorrance Street
Providence, Rhode Island 02903

Re: Proposed Perpetual Easement and Temporary Construction Easement Across Public Street, Providence

Dear Mr. Quinn:

Pursuant to your request we have personally inspected the real estate located on Public Street, otherwise designated as Lots 325 and 489 on Plat 46 of the Tax Assessor's Plat Maps for the City of Providence, State of Rhode Island. The subject is located in the Upper South Providence neighborhood of the city.

The purpose of our inspection and subsequent analysis was to estimate the "as is" fee simple market values of a 15-day temporary construction easement and a perpetual easement for storm water management, or any other purpose, as requested by National Grid. Notably, the easement is needed by National Grid in order for the company to comply with Rhode Island Department of Environmental Management Remediation Regulations as relating to the former Carqill site at 170 Allens Avenue.

Specifically, the proposed easements will run along the center line of Public Street (for 120.11 feet along the length of the parcel and 25.08 feet in width). The temporary easement contains 3,011.86 square feet, while the permanent easement, as located within the boundaries of the temporary easement area, contains 305 square feet according to a map supplied by National Grid. The subject is located in a W-3 Waterfront: Port/maritime Industrial District. The City's Department of Public Works has no objection to this request; however, they will require a Class 1 Survey for recording prior to sale.

We have taken into account a number of factors in arriving at the fee simple market value for the requested easement. The petitioner will gain use of the parcel to further enhance the commercial viability or use of the Cargill site and any other adjacent properties that they may have an interest in

Attachment DIV 1-6c R.I.P.U.C. Docket No. 4514 ANDOLFO APPRAISAL ASSOCIATES Reinge 14 Distribution Adjustment Charge Filing Page 3 of 3

Mr. David Quinn Page 2 May 29, 2013 (Amended from April 22, 2013)

Based on an analysis of comparable sales as contained within the offices of Andolfo Appraisal Associates, Inc., a value of \$22.00 per foot is hereby estimated for this site.

For the perpetual easement, this value must be reduced by 25% due to fact that the City is not giving up its full fee ownership of the property, i.e., the street, as the proposed easement will affect only a portion of it.

#### Perpetual Easement

305 square feet x \$22.00 per square foot =  $$6,710 \times 75\% = $5,032.50$ 

#### Temporary Construction Easement

3,011.86 square feet x \$22.00 p/square foot = \$66,261 fee simple market value

\$66,261 x .10 land earnings rate x \$6,626.10 annual rent

 $$6,620.10 \div 365 \text{ days} = $18.15 \text{ rent. per day}$ 

15 days of construction x \$18.15 per day = \$272.25

Therefore, total compensation due to the City has been calculated at \$5,304.75 given this revised scope of work as submitted by the petitioner, National Grid.

Respectfully submitted,

ANDOLFO APPRAISAL ASSOCIATES, INC.

William G. Floriani
Certified Residential Appraiser

Thomas S. Andrew

Manual Adulto Mass

Thomas S. Andolfo, MAI

Certified General Appraiser

WGF: TSA/fad

# CITY OF PROVIDENCE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

## PETITION TO THE CITY COUNCIL

TO THE HONORABLE CITY COUNCIL OF THE CITY OF PROVIDENCE: The undersigned respectfully petitions your honorable body

Amended May 22, 2013

# PETITION TO THE PROVIDENCE CITY COUNCIL FOR AN EASEMENT ON PUBLIC STREET, PROVIDENCE, RHODE ISLAND

WHEREAS, the undersigned, The Narragansett Electric Company d/b/a National Grid, is the owner of the following parcels of land: those certain parcels of real estate appearing on the Providence Assessor's Plat 46, Lots 481, 489, and 501 (the "National Grid Lots"). Those lots along with Plat 46, Lots 128 and 325, will be referred to herein as "170 Allens Avenue" or the "Site"; and

WHEREAS, 170 Allens Avenue is the site of a former manufactured gas plant and bulk petroleum storage and distribution terminal; and

WHEREAS, the Rhode Island Department of Environmental Management ("RIDEM") issued a September 3, 2009 *Letter of Non-Compliance* (Amended November 23, 2009) to National Grid and the other potentially responsible parties, including Cargill, Incorporated ("Cargill"), Dr. Patrick Conley and the Rhode Island State Pier Properties, related to contamination at the 170 Allens Avenue Site; and

WHEREAS, National Grid and Cargill responded to the RIDEM Letter of Non-Compliance by submitting to RIDEM a Supplemental Site Investigation Data Report (September 2010), a Remedial Alternative Evaluation Report (December 2010), a Sediment Field Investigation Report (July 2011), and a Remedial Alternative Evaluation Report Addendum – Containment Wall Design (December 2011), all in accordance with Rule 7.08 of the RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations"); and

WHEREAS, RIDEM issued a publicly-noticed *Program Letter* in February 2012 indicating that the investigation was complete; and

WHEREAS, RIDEM, in accordance with Rule 7.09 of the Remediation Regulations, issued a *Remedial Decision Letter* on July 6, 2012, that formally approved the Site investigation and identified the preferred remedial approach for the Site; and

WHEREAS, the approved preferred remedial approach identified by RIDEM includes containment of non-aqueous phase liquids (NAPL) via installation of a continuous stone collection trench equipped with a partially penetrating liner

Attachment DIV 1-6d R.I.P.U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 2 of 10

downgradient of Lots 325 and 489, and requires the integration of stormwater management systems as depicted on the plans included in <u>Exhibit A</u>; and

WHEREAS, National Grid and Cargill, in accordance with Rule 9.00 of the Remediation Regulations, submitted a Remedial Action Workplan to RIDEM on December 3, 2012;

WHEREAS, Lots 325 and 489 are divided by the eastern end of Public Street, a public way located on land owned by the City of Providence; and

WHEREAS, the approved preferred remedial approach identified by RIDEM requires the installation of a below-grade stone collection trench across the eastern end of Public Street between Lots 325 and 489 in an area twenty-six (26) feet across and three (3) feet wide; and

WHEREAS, the preferred remedial approach identified by RIDEM also requires the installation of two (2) 60-inch diameter concrete manholes and associated stormwater piping within the eastern end of Public Street between Lots 325 and 489 as part of the stormwater management system integration; and

WHEREAS, National Grid will require temporary access to an area of Public Street measuring approximately 26-feet wide and 120-feet long for a period of approximately three weeks to complete installation; and

WHEREAS, National Grid will require the ability to maintain, monitor and repair the stone collection trench, manholes, below grade piping and monitoring wells at the eastern end of Public Street (the "Public Street Area") following installation;

NOW, THEREFORE, the undersigned respectively petitions this Honorable City Council to take all steps necessary and appropriate to grant a perpetual easement, effective on or before June 25, 2013, to National Grid to comply with the approved preferred remedial approach identified by RIDEM at the 170 Allens Avenue Site on the sections of Public Street Area indicated on Exhibit A. Specifically, National Grid requests:

- (1) a temporary construction easement for the hatched area covering 3,011.86 square feet as identified in Exhibit A for purposes of installing a stone collection trench, two (2) concrete manholes, and below grade piping and groundwater monitoring wells consistent with the plans shown in Exhibit A;
- (2) a perpetual easement for the shaded area covering 305.53 square feet as identified in Exhibit A for purposes of monitoring, maintaining and repairing as necessary a stone collection trench, two (2) concrete manholes, and below grade piping and groundwater monitoring wells consistent with the plans shown in Exhibit A.

Attachment DIV 1-6d R.I.P.U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 3 of 10

Pursuant to this easement, National Grid shall have the right to install, maintain, repair, and replace the improvements indicated in Exhibit A. Further, the City, as landowner, shall grant National Grid the authority to apply for all necessary permits and approvals required to accomplish the same.

Attachment DIV 1-6d R.I.P.U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing

Any questions regarding this Petition may be addressed to:

Robin L. Main, Esquire Hinckley, Allen & Snyder LLP 50 Kennedy Plaza, Suite 1500 Providence, RI 02903 401-274-2000

Kenneth E. Lento, P.E., LSP Project Manager Site Investigation & Remediation Group - New England National Grid 40 Sylvan Road Waltham, MA 02451 617-791-2627

> THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID

Name: Roid Mi
Title: Partner

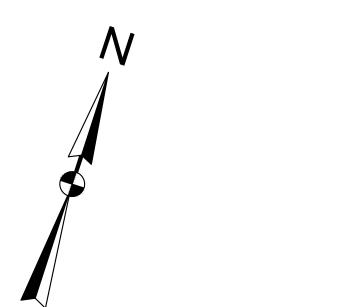
#51624929 (57972/133068)

Attachment DIV 1-6d R.I.P.U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 5 of 10

# **EXHIBIT A**

Page 6 of 10

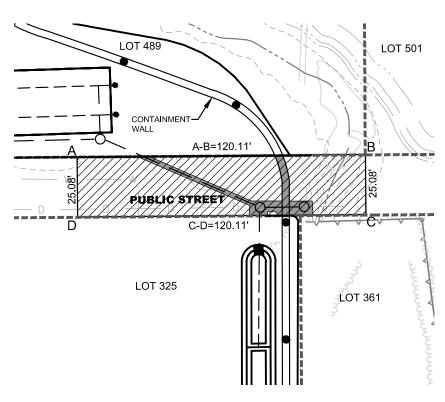
R L P U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing



PROVIDENCE, R.I.
P. W. DEPT. ENGINEERING OFFICE
STREET LINE SECTION

Plan No. <u>064843</u>

Date <u>April 9, 2013</u>



Notes: Hatched area (A-B-C-D-A) delineates the *temporary* construction work area; total square footage = 3,011.86
Gray shaded area indicates proposed easement; total square footage = 305.53

CITY OF PROVIDENCE, R.I.
Public Works Dept. Engineering Office
Showing Proposed easement for Public
Street

Drawn by M. Strubel Checked by
Scale 1"=40' Date 4-9-2013

Correct Approved

CHEIF ENGINEER

Lot numbers taken from A.P. 46

Fork 10648 For Rege 7 of 169

# THE CITY OF PROVIDENCE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# RESOLUTION OF THE CITY COUNCIL

No. 272

EFFECTIVE ADDRESS June 17, 2013

IT IS HEREBY RESOLVED, That His Honor, the Mayor, is authorized to grant non-exclusive sub-surface easement below Public Street and its abutting sidewalk areas in the City of Providence to The Narragansett Electric Company, d/b/a National Grid ("National Grid"). Said easement shall be granted specifically upon the following provisions:

- 1. The easement shall be utilized only for the installation and maintenance of a belowgrade stone collection trench across the eastern end of Public Street between Lots 325 and 489 in an area twenty-six (26) feet across and three (3) feet wide; the installation of two (2) 60-inch diameter concrete manholes and associated stormwater piping within the eastern end of Public Street between Lots 325 and 489 as part of the stormwater management system integration; and temporary access to an area of Public Street measuring approximately 26-feet wide and 120-feet long for a period of approximately three weeks to complete installation. The temporary construction easement shall not exceed 3,011.86 square feet and the perpetual easement shall not exceed 305.53 square feet, plus or minus, with dimensions indicated as a shaded area on the accompanying plan entitled: "Providence, RI Department of Public Works Engineering Office, Street Line Section Plan No. 064843 dated April 9, 2013."
- 2. The easement shall be deemed to run with the land and shall operate against any successors in title and the easement or a memorandum of same shall be recorded by National Grid in the Office of Land Records for the City of Providence.
- 3. National Grid shall tender to the City the sum of five thousand three hundred four dollars and seventy five cents (\$5304.75) in legal tender of the United States of America, of which three thousand thirty two dollars and fifty cents (\$3,032.50) will be paid for the perpetual easement and two hundred seventy two dollars and twenty five cents (\$272.25) will be paid for the temporary construction easement.
- National Grid shall execute an indemnification and hold-harmless agreement with the
   City of Providence, to be approved by the City's Department of Law.

Attachment DIV 1-6d R.I.P.U.C. Docket No. 4514

00072 hage: 2014 Distribution Adjustment Charge Filing

Page.

- 5. National Grid shall supply the City of Providence with a comprehensive general liability insurance policy during the period of construction naming said City of Providence, its agents, officers, servants and employees as additional-named insureds in a sum not less than one hundred thousand dollars (\$100,000.00) which policy shall be approved by the City's Department of Law.
- 6. National Grid shall restore the portion of Public Street affected by construction to substantially its previous condition.
- 7. Such other terms and conditions as may be reflected in the record and minutes of the City Council Committee on Public Works and/or as may be deemed appropriate by the Mayor or the Department of Law.

IN CITY COUNCIL

JUN 0 6 2013

READ AND PASSED

CLERK

Effective without the Mayor's Signature

Anna M. Stetson City Clerk

Attachment DIV 1-6d

Pock = 10648

Attachment DIV 1-6d

Dock = 10648

In Re: 2014 Distribution Adjustment Charge Filing Page 9 of 10 PROVIDENCE, R.I. P. W. DEPT. ENGINEERING OFFICE STREET LINE SECTION Plan No. <u>064843</u> Date <u>April 9, 2013</u> LOT 488 C-D=120.11' **LOT 325 LOT 361** \\GZAPROV\Joba\EN\J3576.00.jp\\FIGURES\GZA DWGS\CAPPWG\8.5x13 W1AR.dwg May 16, 2013—3:45pm Notes: Hatched area (A-B-C-D-A) delineates the temporary construction work area; total square footage = 3,011.86 Gray shaded area indicates proposed easement; total square footage = 305.53CITY OF PROVIDENCE, R.I. Public Works Dept. Engineering Office Showing Proposed easement for Public Street

Drawn by M. Strubel Checked by\_ Scale 1"=40" Date 4-9-2013 Associate Engr Correct Approved

CHEIF ENGINEER

Lot numbers taken from A.P. 46

#### RECEIVED:

Providence Received for Record Jul 25,2013 at 02:14:02P Document Num: 00072745 John A Murphy Recorder of Deeds

EFFECTIVE WITHOUT THE MAYOR DSVSTGNATURE R.I.P.U.C. Docket No. 4514

In Re: 2014 Distribution Adjustment Charge Filing

Page 10 of 10

# THE CITY OF PROVIDENCE

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

# RESOLUTION OF THE CITY COUNCIL

No. 317

EFFECTIVE AND MINE July 12, 2013

WHEREAS, The Narragansett Electric Company, d/b/a National Grid ("National Grid") is the present beneficiary of City Counsel Resolution No. 272 (effective June 17, 2013); and

WHEREAS, Said resolution contemplated a temporary construction easement not to exceed 3,011.86 square feet and a perpetual easement not to exceed 305.53 square feet for the installation and maintenance of a below-grade stone collection trench across the eastern end of Public Street between Lots 325 and 489 in an area twenty-six (26) feet across and three (3) feet wide; the installation of two (2) 60-inch diameter concrete manholes and associated stormwater piping within the eastern end of Public Street between Lots 325 and 489 as part of the stormwater management system integration; and temporary access to an area of Public Street measuring approximately 26-feet wide and 120-feet long for a period of approximately three weeks to complete installation; and

WHEREAS, The resolution requires amendment to correct the amount of legal tender to be paid for the easement.

NOW, THEREFORE, BE IT RESOLVED, That Paragraph three (3) of Resolution No. 272, effective June 17, 2013, shall be amended to read as follows:

RESOLVED, DECREED, AND ORDERED:

National Grid shall tender to the City the sum of five thousand three hundred four dollars and seventy five cents (\$5,304.75) in legal tender of the United States of America, of which five thousand thirty two dollars and fifty cents (\$5,032.50) will be paid for the perpetual easement and two hundred seventy two dollars and twenty five cents (\$272.25) will be paid for the temporary construction easement.

IN CITY COUNCIL

JUL 0.2 2013

Effective without the Mayor's Signature

Discussion King Jose A Mine.

116 Anna M. Stetson City Clerk

A true copy

31-33. **:**2-1

Anna M. Stetson

Arrival Date	Time	е	Time for Day	Departure Date	Time	е	Time For Day	Total Hours	Max Hrs Reg Rate F	Rate	Boat Size (ft)	4mo	unt Due
May 19, 2012	11:00 PM	11:59 PM	1.00	May 20, 2012	12:00 AM	1:30 PM		14.50	26.00	3.17	215		681.55
May 25, 2012	7:00 PM	11:59 PM	5.00	May 26, 2012	12:00 AM	8:00 AM		13.00	26.00	3.17	215		681.55
June 10, 2012	12:00 PM	11:59 PM	12.00	June 10, 2012	12:00 AM	1:30 PM		25.50	26.00	3.17	205		649.85
June 16, 2012	11:00 PM	11:59 PM	1.00	June 17, 2012	12:00 AM	1:30 PM	13.50	14.50	26.00	3.17	205		649.85
June 22, 2012	6:00 PM	11:59 PM	6.00	June 23, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205		649.85
June 29, 2012	6:00 PM	11:59 PM	6.00	June 30, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205		649.85
July 6, 2012	6:00 PM	11:59 PM	6.00	July 7, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205		649.85
July 8, 2012	11:00 PM	11:59 PM	1.00	July 10, 2012	12:00 AM	1:30 PM		14.50	26.00	3.17	166		526.22
July 13, 2012	6:00 PM	11:59 PM	6.00	July 14, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205	\$	649.85
July 20, 2012	6:00 PM	11:59 PM	6.00	July 21, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205	\$	649.85
July 27, 2012	6:00 PM	11:59 PM	6.00	July 28, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205	\$	649.85
												\$	7,088.12
August 3, 2012	6:00 PM	11:59 PM	6.00	August 4, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205.00	\$	649.85
August 10, 2012	6:00 PM	11:59 PM	6.00	August 11, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205.00		649.85
August 13, 2012	2:00 PM	11:59 PM	10.00	August 14, 2012	12:00 AM	1:30 PM		23.50	26.00	3.17	166.00		526.22
August 17, 2012	6:00 PM	11:59 PM	6.00	August 18, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205.00		649.85
August 17, 2012 August 24, 2012	6:00 PM	11:59 PM	6.00	August 16, 2012 August 25, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205.00		649.85
August 31, 2012	6:00 PM	11:59 PM	6.00	September 1, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17		\$	649.85
												\$	3,775.47
September 3, 2012	5:00 PM	11:59 PM	7.00	September 4, 2012	12:00 AM	1:30 PM	13.50	20.50	26.00	3.17	166.00	s	526.22
September 7, 2012	6:00 PM	11:59 PM	6.00	September 8, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205.00		649.85
September 14, 2012	6:00 PM	11:59 PM	6.00	September 15, 2012	12:00 AM	1:30 PM	13.50	19.50	26.00	3.17	205.00		649.85
September 21, 2012	6:00 PM	11:59 PM	6.00	September 22, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205.00		649.85
September 24, 2012	5:00 PM	11:59 PM	7.00	September 25, 2012	12:00 AM	1:30 PM		20.50	26.00	3.17	166.00		526.22
September 28, 2012	6:00 PM	11:59 PM	6.00	September 29, 2012	12:00 AM	1:30 PM		19.50	26.00	3.17	205.00		649.85
September 29, 2012	4:00 AM	1:30 PM	9.50	Ocptomber 25, 2012	12.00 / ((V)	1.001 101	10.00	9.50	26.00	3.17	215.00		681.55
September 29, 2012	8:00 AM	11:59 PM	16.00	September 30, 2012	12:00 AM	1:30 PM	13.50	29.50	26.00	3.17	166.00		526.22
October 5, 2012	6:30 PM	11:59 PM	5.50	October 6, 2012	12:00 AM	8:30 AM		14.00	26.00	3.17	166.00		526.22
						Ext	ra layover time	3.50				\$	83.00
							Boat length	166.00			Cambi Cab fa	Φ.	E 400.00
						extra d	charge per foot sub total 2 segments	0.25 41.50 2.00	Parkii	ng income	Sept/Oct fees for lease term		5,468.83 9,375.00
					Additonal	Due for Sep	ot 30 dock time	83.00		Total due	for lease term	\$ 2	25,707.42

\$0.25 per ft for each two hr layover

# Division 1-7

# Request:

Re: the "Cost Breakdown by Category" for the 170 Allens Avenue project, please:

- a. Detail the Consulting activities for which payments were made during the reporting period;
- b. Identify the organization that provided each consulting service;
- c. Provide copies of all reports, studies, or other documents which communicated the results of activities undertaken or completed by consultants for which payments were made during the reporting period.

## Response:

- a. Consulting activities conducted during the reporting period for which payment was made include cost estimating, periodic reporting/meetings, groundwater/non-aqueous phase liquid gauging/monitoring/recovery, remedy design/preparation of bid package, bidding support, permitting, hazardous materials survey of buildings to be demolished, construction oversight, site perimeter air monitoring, preparation of Remedial Action Closure Report, preparation of environmental land use restriction submittals, preparation of Public Street easement submittal, and project management.
- b. GZA GeoEnvironmental, Inc. conducted the cost estimating, periodic reporting/meetings, groundwater/non-aqueous phase liquid gauging/monitoring/recovery, remedy design/preparation of bid package, bidding support, permitting, hazardous materials survey of buildings to be demolished, construction oversight, site perimeter air monitoring, preparation of Remedial Action Closure Report, preparation of environmental land use restriction submittals, preparation of Public Street easement submittal activities. EECS, Inc. conducted the project management activities.

# Division 1-7, page 2

- c. The following reports, studies, or other documents were prepared during the reporting period:
  - Technical Specifications and Design Drawings for Site Remedial Implementation Bid Solicitation Package, 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated April 2013.
  - Petition for Easement on Public Street by The Narragansett Electric Company d/b/a National Grid, 170 Allens Avenue, by Hinckley, Allen, & Snyder, LLP, dated April 17, 2013.
  - Quarterly Groundwater Monitoring Summary Report #66, Former Northeast Petroleum Bulk Storage Terminal, by GZA GeoEnvironmental, Inc., dated May 3, 2013.
  - April 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated May 13, 2013.
  - May 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated June 19, 2013.
  - Notice of Start of Work, by GZA GeoEnvironmental, Inc., dated July 10, 2013.
  - July 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated August 23, 2013.
  - August 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated September 16, 2013.
  - September 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated October 24, 2013.
  - October 2013 Progress Report 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated November 8, 2013.
  - Response to Physical Alteration Permit Application Comments, 170 Allens Avenue, by GZA GeoEnvironmental, Inc., dated July 10, 2013.
  - Quarterly Groundwater Monitoring Summary Report #67, Former Northeast Petroleum Bulk Storage Terminal, by GZA GeoEnvironmental, Inc., dated July 16, 2013.
  - Letter to Building Official Building Permit No. B2013-9061, by GZA GeoEnvironmental, Inc., dated November 27, 2013.
  - Letter to Building Official Building Permit No. B2013-9057, by GZA GeoEnvironmental, Inc., dated November 27, 2013.

# Division 1-7, page 3

Please see Attachment DIV 1-7(1 of 8) through DIV1-7 (8 of 8) for copies of the reports, studies, or other documents listed above prepared during the reporting period. Please be advised that due to the voluminous nature of this attachment, the Company is providing Attachment DIV 1-7 (parts 1 through 8) on CD-ROM.

# Division 1-8

# Request:

Re: the "Cost Breakdown by Category" for the 170 Allens Avenue project, please provide full supporting detail for the "Construction/Disposal/ Removal Costs" showing separately costs of each construction, disposal, and removal activity.

# Response:

Please see Attachment DIV 1-8 for supporting detail for the "Construction/Disposal/Removal Costs" showing separately each construction, disposal, and removal activity for the reporting period.

Attachment DIV 1-8 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 1 of 1

# Division Data Request DIV 1-8

Date	Payee	Amount	Description of Service
8/15/2103	Charter Environmental, Inc.	\$100,971.00	Construction of upland remedy primarily preliminary activities
9/6/2013	Charter Environmental, Inc.	\$137,140.20	Construction of upland remedy primarily preliminary activities, demolition and stormwater system installation
10/8/2013	Charter Environmental, Inc.	\$514,362.98	Construction of upland remedy primarily demolition, stormwater system installation, containment wall installation and water disposal
11/1/2013	Charter Environmental, Inc.	\$440,586.01	Construction of upland remedy primarily demolition, stormwater system installation, containment wall installation, cap installation, and soil management/transportation
12/3/2013	Charter Environmental, Inc.	\$295,136.63	Construction of upland remedy primarily demolition, stormwater system installation, cap installation and Allens Ave sidewalk work
1/31/2014	Charter Environmental, Inc.	\$832,642.05	Construction of upland remedy primarily stormwater system installation, cap installation, and Allens Ave sidewalk work
2/28/2014	Charter Environmental, Inc.	\$22,789.80	Construction of upland remedy primarily fencing and demobilization work
7/2/2013	Clean Harbors Environmental Services, Inc.	\$1,806.16	Disposal of dense non-aqueous phase liquid from monitoring well gauging/recovery
10/16/2013	Environmental Soil Management, Inc.	\$82,920.45	Thermal treatment for soil
10/24/2013	Environmental Soil Management, Inc.	\$40,627.48	Thermal treatment for soil
10/31/2013	Environmental Soil Management, Inc.	\$15,399.72	Thermal treatment for soil

Total: \$2,484,382.48

# Division 1-9

# Request:

Re: the PCB Regulated Pipe Abandonment project, please:

- a. Provide full supporting detail for the "Construction/Disposal/Removal Costs" shown in the "Cost Breakdown by Category," including separate itemization of costs of each construction, disposal, and removal activity.
- b. Provide a detailed explanation of the manner in which the Company's accelerated replacement of gas services and mains impacts its incurrence of PCB Regulated Pipe Abandonment costs.

# Response:

- a. The supporting detail for the "Construction/Disposal/Removal Costs" shown in the "Cost Breakdown by Category," including separate itemization of costs of each construction, disposal, and removal activity are included in Attachment DIV 1-9.
- b. The PCB Regulated Pipe Abandonment project tracks costs associated with the removal of gas pipe from throughout the Rhode Island gas system, as well as in-place PCB testing of pipe as required by the U.S. Environmental Protection Agency. As the pipe is removed, the pipe material is brought to a Company facility where the materials are then consolidated, transported off-site and decontaminated. Any associated condensate and drip water are removed and disposed of from the field by a licensed Hazardous Waste Transporter. The costs included in this project relate to the PCB testing, decontamination and transport of these materials.

The PCB Regulated Pipe Abandonment costs are directly related the amount of gas pipe that is removed from the system, and this is impacted by numerous factors including the following:

- The amount of mains and services replaced by the Company. The Company has accelerated its replacement of gas services and mains to improve system reliability;
- The number of leaks repaired. The Company removes some pipe during repair of system leaks; and

## Division 1-9, page 2

• The increased number of state and public works projects. Many towns and the State of Rhode Island have been performing an increased number of infrastructure upgrades and replacements. The Company has been experiencing an increased amount of requests from government agencies to remove gas pipe that had been abandoned in place to allow for the replacement of bridges and installation of new subsurface utilities (i.e., water, sewer and drainage lines) in public right of ways that are becoming increasingly congested below the street level with active and abandoned piping.

Division Data Requ				2 (2 .
Date 01/07/13	Payee CLEAN HARBORS ENVIRONMENTAL SVCS	Invoice Number SB1230311	Amount \$139.97	Description of Services  Transport and decontamination of pipe from Prov-Melrose Service Center
01/07/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1342144		Transport and decontamination of pipe from Prov-Melrose Service Center
01/17/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1342303	\$2,283.18	Transport and decontamination of pipe from Prov-Dexter St. Service Center
01/17/13 01/18/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1342175R		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Allens Ave. Service Center
01/30/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1344000 SB1356202		Transport and decontamination of pipe from Prov-Ailens Ave. Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
01/30/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1356220		Transport and decontamination of pipe from Prov-Allens Ave. Service Center
02/04/13	CLEAN HARBORS ENVIRONMENTAL SVCS	RI1362515		Transport and decontamination of pipe from Prov-Melrose Service Center
02/05/13 02/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1364829 SB1364826		Transport and decontamination of pipe from Middletown Service Center  Transport and decontamination of pipe from North Kingstown Service Center
02/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1364793		Transport and decontamination of pipe from Cumberland Service Center
02/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1364937		Transport and decontamination of pipe from Prov-Dexter St. Service Center
02/05/13 02/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1364826 SB1364829		Transport and decontamination of pipe from North Kingstown Service Center  Transport and decontamination of pipe from Middletown Service Center
02/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1364807		Transport and decontamination of pipe from Prov-Melrose Service Center
02/28/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1390783		Transport and decontamination of pipe from Prov-Melrose Service Center
02/28/13 02/28/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1390780 SB1390793		Transport and decontamination of pipe from Prov-Melrose Service Center Transport and decontamination of pipe from Prov-Dexter St. Service Center
02/28/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1390790		Transport and decontamination of pipe from Prov-Dexter St. Service Center
03/04/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1307979		Transport and decontamination of pipe from Prov-Melrose Service Center
03/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1396029		Transport and decontamination of pipe from Prov-Melrose Service Center
03/14/13 03/14/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1307982 SB1307943		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
03/26/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1320315		Transport and decontamination of pipe from Prov-Melrose Service Center
03/26/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1320322		Transport and decontamination of pipe from Prov-Allens Ave. Service Center
03/26/13 04/03/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1320355 SB1331542		Transport and decontamination of pipe from Prov-Dexter St. Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
04/10/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1341270		Transport and decontamination of pipe from Prov-Melrose Service Center
04/10/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1341277	\$2,834.76	Transport and decontamination of pipe from Prov-Melrose Service Center
04/10/13 04/10/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1341275 SB1341273		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
04/17/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1347923		Transport and decontamination of pipe from Prov-Allens Ave. Service Center
04/17/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1347917		Transport and decontamination of pipe from Prov-Dexter St. Service Center
05/06/13 05/08/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1370743 SB1374813		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov Melrose Service Center
05/08/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1374816		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
05/08/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1374806		Transport and decontamination of pipe from Prov-Melrose Service Center
05/08/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1374811		Transport and decontamination of pipe from Prov-Melrose Service Center
05/13/13 05/16/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	SB1382840 SB1382841		Transport and decontamination of pipe from Prov-Dexter St. Service Center Transport and decontamination of pipe from Prov-Allens Ave. Service Center
06/06/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000021601		Transport and decontamination of pipe from Prov-Melrose Service Center
06/06/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000021444		Transport and decontamination of pipe from Prov-Melrose Service Center
06/06/13 06/06/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000020947 1000021569		Transport and decontamination of pipe from Prov-Melrose Service Center Transport and decontamination of pipe from Prov-Melrose Service Center
06/12/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000026912		Transport and decontamination of pipe from Prov-Dexter St. Service Center
07/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000050639		Transport and decontamination of pipe from Prov-Melrose Service Center
07/02/13 07/08/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000050641 1000054242		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
07/18/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000068262		Transport and decontamination of pipe from Prov-Melrose Service Center
07/18/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000068221		Transport and decontamination of pipe from Prov-Melrose Service Center
07/18/13 07/23/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000068139 1000073570		Transport and decontamination of pipe from Prov-Allens Ave. Service Center Transport and decontamination of pipe from Prov-Melrose Service Center
07/31/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000073370		Transport and decontamination of pipe from Prov-Melrose Service Center
07/31/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000082065	\$2,765.95	Transport and decontamination of pipe from Lincoln Service Center
07/31/13 08/01/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000082152 1000085646		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from Prov-Melrose Service Center
08/01/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000083646		Transport and decontamination of pipe from Prov-Interose Service Center  Transport and decontamination of pipe from Prov-Dexter St. Service Center
08/15/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000102962	\$1,847.36	Transport and decontamination of pipe from Prov-Randall Service Center
08/15/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000103132		Transport and decontamination of pipe from Prov-Dexter St. Service Center
09/05/13 09/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000128002 1000127992		Transport and decontamination of pipe from Prov-Melrose Service Center  Transport and decontamination of pipe from North Kingstown Service Center
09/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000127885	\$2,537.24	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
09/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000127984		Transport and decontamination of pipe from Lincoln Service Center
09/05/13 09/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000128032 1000128017		Transport and decontamination of pipe from Prov-Dexter St. Service Center Transport and decontamination of pipe from Prov-Melrose Service Center
10/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000123017		Transport and decontamination of pipe from North Kingstown Service Center
10/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000163156		Transport and decontamination of pipe from Lincoln Service Center
10/02/13 10/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000163158 1000163161		Transport and decontamination of pipe from Prov-Allens Ave. Service Center Transport and decontamination of pipe from Prov-Melrose Service Center
10/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000165161		Transport and decontamination of pipe from Prov-Metrose Service Center  Transport and decontamination of pipe from Prov-Dexter St. Service Center
10/16/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000180274	\$1,688.46	Transport and decontamination of pipe from Prov-Melrose Service Center
11/04/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000203114		Transport and decontamination of pipe from North Kingstown Service Center
11/04/13 11/04/13	CLEAN HARBORS ENVIRONMENTAL SVCS CLEAN HARBORS ENVIRONMENTAL SVCS	1000203121 1000203120		Transport and decontamination of pipe from Prov-Dexter St. Service Center  Transport and decontamination of pipe from Lincoln Service Center
11/04/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000203117		Transport and decontamination of pipe from Prov-Allens Ave. Service Center
11/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000205608		Transport and decontamination of pipe from Middletown Service Center
11/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000205620	\$1,166.03	Transport and decontamination of pipe from Prov-Melrose Service Center

Attachment DIV 1-9 R.I.P.U.C. Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 2 of 2

#### Division Data Request DIV 1-9

Date	Payee	Invoice Number	Amount	Description of Services
11/05/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000203239	\$2,446.82	Transport and decontamination of pipe from Prov-Melrose Service Center
11/28/13	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1278380	\$622.74	Transport and decontamination of pipe from Kingston Service Center
12/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000236283	\$2,425.42	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
12/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000236266	\$2,601.97	Transport and decontamination of pipe from Lincoln Service Center
12/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000236291	\$2,686.50	Transport and decontamination of pipe from Prov-Dexter St. Service Center
12/02/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000236297	\$3,316.20	Transport and decontamination of pipe from Prov-Melrose Service Center
12/03/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000239143	\$439.77	Transport and decontamination of pipe from Middletown Service Center
12/03/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000239142	\$482.04	Transport and decontamination of pipe from North Kingstown Service Center
12/12/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000252940	\$689.08	Transport and decontamination of pipe from North Kingstown Service Center
12/20/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000261548	\$1,944.46	Transport and decontamination of pipe from Lincoln Service Center
12/20/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000261506	\$3,553.20	Transport and decontamination of pipe from Prov-Melrose Service Center
12/24/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000264751	\$2,302.37	Transport and decontamination of pipe from Prov-Dexter St. Service Center
12/24/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000264504	\$2,543.66	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
01/09/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000284399	\$653.40	Transport and decontamination of pipe from Middletown Service Center
01/09/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000284396	\$717.20	Transport and decontamination of pipe from North Kingstown Service Center
01/16/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000290535	\$3,139.68	Transport and decontamination of pipe from Prov-Melrose Service Center
01/16/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000290537	\$3,705.08	Transport and decontamination of pipe from Lincoln Service Center
01/22/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000296132	\$463.10	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
01/23/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000296531	\$3,963.58	Transport and decontamination of pipe from Prov-Dexter St. Service Center
02/19/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000331987	\$1,957.73	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
02/19/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000331982	\$2,749.18	Transport and decontamination of pipe from Prov-Dexter St. Service Center
03/10/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000362303	\$717.20	Transport and decontamination of pipe from North Kingstown Service Center
03/10/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000362300	\$957.55	Transport and decontamination of pipe from Middletown Service Center
03/10/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000362297	\$2,942.23	Transport and decontamination of pipe from Prov-Melrose Service Center
03/12/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000365117	\$3,169.38	Transport and decontamination of pipe from Lincoln Service Center
03/17/14	CLEAN HARBORS ENVIRONMENTAL SVCS	1000369543	\$4,028.48	Transport and decontamination of pipe from Prov-Allens Ave. Service Center
03/28/14	CLEAN HARBORS ENVIRONMENTAL SVCS	SB1322597	\$2,150.84	Transport and decontamination of pipe from Prov-Melrose Service Center
06/10/13	CLEAN HARBORS ENVIRONMENTAL SVCS	1000040210	\$3,640.94	Transport and decontamination of pipe from Prov-Melrose Service Center
· · · · · · · · · · · · · · · · · · ·	CLEAN HARBORS ENVIRONMENTAL SVCS		\$606.40	NOTE: This mischarged was corrected in early fiscal year 15 (FY15)

TOTAL: \$215,804

# Division 1-10

# Request:

Re: the "Cost Breakdown by Category" for the PCB Regulated Pipe Abandonment project, please provide full supporting detail for the "Construction/Disposal/ Removal Costs" shown including separate itemization of costs of each construction, disposal, and removal activity.

# Response:

Please see the Company's response to Division 1-9(a).

## Division 1-11

# Request:

Re: the Thames & Wellington project, please:

- a. Describe the purpose of each referenced facility and/or utility upgrade and provide a detailed breakdown of the costs associated with those referenced upgrades;
- b. Provide copies of the referenced "monthly status reports" provided to RIDEM and detail the costs incurred for preparation of those reports;
- c. Provide full supporting detail for the "Consulting Costs" shown in the "Cost Breakdown by Category," including separate itemization of costs of each consulting activity;
- d. Provide full supporting detail for the "Construction/Disposal/ Removal Costs" shown in the "Cost Breakdown by Category," including separate itemization of costs of each construction, disposal, and removal activity;
- e. Provide supporting detail for the "Property Purchases/Settlements/Legal costs for associated with the Thames & Wellington project for the reporting period.

## Response:

- a. Two facility/utility projects were performed at the Thames and Wellington Site during the reporting period: (1) upgrade to the National Grid subsurface regulator station and (2) construction of an addition to the Retail Building A (by others). All costs within this reporting period related to the above projects were for only environmental support during the project implementation. The environmental support costs are considered an environmental remediation expense due to the presence of manufactured gas plant (MGP) impacted soil and groundwater within the areas of the projects.
  - Regulator Station Upgrade: National Grid installed new vent poles to the gas regulator station located within the south eastern corner of the Site. GZA GeoEnvironmental, Inc. (GZA) provided oversight for soil management activities and Clean Harbors Environmental Services (Clean Harbors) managed and transported the excess soil off-site for treatment/disposal. Coneco Engineers and Scientists (Coneco) provided health and safety monitoring for the workers performing the excavation

# Division 1-11, page 2

activities. Soil was treated and/or disposed of at Environmental Soil Management, Inc. (ESMI) and Clean Harbors. The total cost for environmental support of the regulator station upgrade was \$21,074 (GZA oversight: \$5,996; Clean Harbors: \$4,689; ESMI: \$777; and Coneco: \$9,612).

- Retail Building A Addition: The owner of Retail Building A built an addition to the building which involved disturbance of the RIDEM-approved engineered cap immediately west of the building. GZA provided oversight for soil management activities and documented the installation of a vapor barrier under the building addition and an engineered cap around the building consistent with other capped areas of the Site. In addition, GZA re-installed the soil gas monitoring points that were disturbed during the construction of the addition. The total cost for environmental support of the addition to Retail Building A was \$44,867 (GZA: \$17,944; Clean Harbors: \$22,806; and ESMI:\$4,117).
- b. Copies of the monthly status reports are included as Attachment DIV 1-11 and include status reports numbers 29 through 41. Please note that report number 40 should be dated January 10, 2014, however it is incorrectly dated January 10, 2013.
- c. For the reporting period "Consulting Costs" totaled \$152,367. GZA costs totaled \$142,755 for the reporting period and included: \$14,624 for meetings/conference calls; \$51,704 for routine Site monitoring, including NAPL gauging and recovery and annual groundwater monitoring; \$1,063 for the inspection of the engineered cap; \$5,813 for gas holder area oxygen release compound pilot testing; \$5,267 for monthly reporting to RIDEM; \$17,944 for environmental support for Retail Building A addition; \$5,996 for environmental support for the upgrade for the gas regulator station upgrade and \$40,343 for consulting services related to legal support. In addition, Coneco costs totaled \$9,612 for health and safety monitoring in support of the gas regulator station upgrade.
- d. For the reporting period "Construction/Disposal/ Removal Costs" totaled \$35,009. Clean Harbors costs totaled \$22,806 for environmental support for the expansion of retail building A, including stockpile management and loading soil for disposal; \$1,079 for pick up and disposal of drums related to quarterly non-aqueouls phase liquid (NAPL) gauging and recovery; \$479 related to pick up and disposal of a drum related to oxygen release compound exchange event; \$4,689

# Division 1-11, page 3

for environmental support of the regulator station upgrade including soil management and transportation of soil for off-site treatment/disposal; \$1,062for transportation and disposal of drums from the annual groundwater sampling event. ESMI costs totaled \$777 for excess soil disposal for the gas regulator station upgrade and \$4,117 for excess soil disposal from the Retail Building A addition.

e. No property purchases or settlements were made during the twelve months ended March 31, 2014. Legal fees in the amount of \$41,595 were paid to Hinckley Allen LLP during the twelve months ended March 31, 2014.

In Re: 2014 Distribution Adjustment Charge Filing

Page 1 of 24



# **MEMO**

530 Broadway Providence, Rhode Island 02903 Phone - (401) 421-4140 Fax - (401) 751-8613

**TO:** Joseph Martella- RIDEM

**FROM:** Todd Greene – GZA

**CC:** Amy McKinnon – NGRID (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** February 8, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – January 1 through January 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

## Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period January 1, 2013 through January 31, 2013.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 2 of 24

# SITE ACTIVITIES PERFORMED

No on-site activities were performed by GZA during the period January 1, 2013 to January 31, 2013.

# FUTURE WORK/SCHEDULE

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second quarter of 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2714 or Amy McKinnon at 781-907-3644 if you have any questions.



# **MEMO**

530 Broadway Providence, Rhode Island 02903 Phone - (401) 421-4140 Fax - (401) 751-8613

**TO:** Joseph Martella- RIDEM

**FROM:** Todd Greene – GZA

**CC:** Amy Willoughby – NGRID (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** March 7, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – February 1 through February 28, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

## Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period February 1, 2013 through February 28, 2013.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 4 of 24

# SITE ACTIVITIES PERFORMED

No on-site activities were performed by GZA during the period February 1, 2013 to February 28, 2013.

# FUTURE WORK/SCHEDULE

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second quarter of 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2714 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 5 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** April 16, 2013

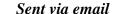
**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – March 1 through March 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 



The following summarizes response actions completed at the above-referenced property (Site) for the period March 1, 2013 through March 31, 2013.

#### SITE ACTIVITIES PERFORMED

On March 29, 2013 GZA responded to a reported cap disturbance at the Site; this cap disturbance consisted of an excavation required as part of an addition to Retail Building A. This cap disturbance and associated response actions performed by National Grid and GZA are described in a memo submitted to RIDEM on April 4, 2013 (via email). No other on-site activities were performed by GZA during the period March 1, 2013 to March 31, 2013.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as needed services related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates on the cap disturbance. GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second quarter of 2013. We also anticipate removing and replacing the oxygen releasing compound (ORC) socks in the five ORC pilot test wells in April/May 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 6 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** May 7, 2013

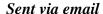
**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – April 1 through April 30, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 



The following summarizes response actions completed at the above-referenced property (Site) for the period April 1, 2013 through April 30, 2013.

#### SITE ACTIVITIES PERFORMED

On March 29, 2013 GZA responded to a reported cap disturbance at the Site. This cap disturbance was related to an excavation being performed as part of an addition to the west side of Retail Building A. National Grid was unaware of this planned excavation prior to March 29, 2013. This cap disturbance and associated response actions performed by National Grid and GZA were described in a memorandum submitted to RIDEM on April 4, 2013 (via email).

GZA continued to provide as-needed support activities to National Grid, related to the cap disturbance in April 2013. Construction activities were performed by RCL Construction, on behalf of the developer, the Landings Real Estate Group. Between April 15 and April 22, GZA observed backfilling around the foundation walls with onsite material previously removed from the excavation, installation of the vapor barrier described in our April 4, 2013 memorandum, and installation of the concrete building slab (which functions as the new cap within the building addition footprint). At the contractor's request, a layer of filter fabric and three inches of 3/8-inch pea stone were substituted for the three inch sand layer (which was to be installed above the 15 millimeter polyethylene sheet) shown on the vapor barrier detail provided as part of our April 4, 2013 memorandum. Between April 22 and April 26, 2013, approximately 100 tons of displaced soil was disposed offsite at the Environmental Services Soil Management Companies (ESMI) facility in Loudon, New Hampshire by National Grid. All soil displaced by construction of the building addition foundation was either reused as on-Site backfill placed under the building slab or disposed of off-Site at ESMI by National Grid.

No other on-Site activities were performed by GZA during the period April 1, 2013 to April 30, 2013. It is our understanding that the landscape cap restoration will be completed this spring/summer, depending on the contractor's schedule.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 7 of 24



#### **FUTURE WORK/SCHEDULE**

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second quarter of 2013. We also anticipate removing and replacing the oxygen releasing compound (ORC) socks in the five ORC pilot test wells in May/June 2013 and performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging and Site outfall evaluations in May 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 8 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** June 13, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – May 1 through May 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 



The following summarizes response actions completed at the above-referenced property (Site) for the period May 1, 2013 through May 31, 2013.

#### SITE ACTIVITIES PERFORMED

GZA continued to provide as-needed support activities to National Grid related to the cap disturbance described in our Monthly Status Report dated April 16, 2013. Construction activities were performed by RCL Construction, on behalf of the developer, the Landings Real Estate Group (Landings). On May 24, GZA observed restoration of disturbed areas west of the building addition. An approximately 3-foot wide area was backfilled with one-foot of clean soil placed over an orange snow fence warning barrier, consistent with the existing onsite landscaped caps. According to RCL, this area will be landscaped in the future. On May 24, GZA also observed restoration of the disturbed brick walkway south of Retail Building A. observations, the following was noted: disturbed portions of the walkway were restored by placement of a filter fabric, 10 inches of clean soil and placement of landscape pavers, all consistent with other capped walkway areas; and approximately 10 cubic yards of clean soil (loam) were used as part of these cap restorations. According to Landings, the material was obtained from the Old Simpson Gravel Pit in Tiverton, Rhode Island. Prior to delivery, the Landings Real Estate Group provided GZA and National Grid with laboratory results for VOCs, Total Metals (PP-13), SVOCs and TPH; results were below RIDEM's Residential Direct Exposure Criteria (RDEC).

According to RCL, a retaining wall will be constructed north of the Retail Building A addition that will directly abut the building addition and an existing retaining wall along Harrington Avenue. It is our understanding that the landscape cap restoration will be completed this summer, depending on the contractor's schedule.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 9 of 24



The following routine Site monitoring activities were performed on May 3, 2013

- Piezometric groundwater measurements at all groundwater monitoring wells;
- Non-aqueous phase liquid (NAPL) gauging and recovery: Consistent with previous events, measurable NAPL was present in MW-202 (0.7 ft DNAPL) and MW-307 (1.0 ft- DNAPL), which are located along the seawall on the western side of the Site. Approximately 0.4 gallons and 0.3 gallons of DNAPL were recovered from MW-202 and MW-307, respectively and 0.1 gallons of LNAPL was recovered from the PetroPore unit installed at MW-324.

In addition, 0.4 feet of DNAPL was observed in well MW-403 which was installed in 2012 as a product gauging and recovery well in the vicinity of MW-202. Approximately 0.4 gallons of DNAPL was recovered from this well on May 3, 2013. The well was gauged again on May 22, 2013 and approximately 0.2 feet of DNAPL was present and approximately 0.2 gallons of DNAPL were recovered. NAPL gauging/recovery at this well will continue on a quarterly basis, in accordance with the existing Site monitoring activities. Recovered NAPL was containerized within a drum and subsequently transported off-Site for disposal by Clean Harbors;

- Stormwater outfall monitoring for sheen discharges: no sheens were observed at either outfall during this monitoring event; and
- On May 22, GZA replaced the oxygen releasing compound (ORC) socks in the five ORC pilot test wells (MW-340, MW-343, MW-344, MW-345 and MW-346). The used ORC socks were placed in a drum and properly disposed off-Site by Clean Harbors.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following RCL's completion of the landscape restoration, a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second quarter of 2013. We also anticipate performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging, Site outfall evaluations and groundwater sampling of eight (8) wells located immediately downgradient of the ORC treatment area in August/September 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** July 11, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – June 1 through June 30, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

#### Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period June 1, 2013 through June 30, 2013.

#### **SITE ACTIVITIES PERFORMED**

No on-site activities were performed by GZA during the period June 1, 2013 to June 30, 2013.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following completion of the landscape restoration by RCL Construction (the Retail Building A addition contractor), a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.

National Grid currently plans to install vent poles and a new valve to the gas regulator station located immediately west of Retail Building E in the fall of 2013, however the work may be performed earlier if necessary. This work will include a shallow excavation (approximately 3 to 4 feet) to facilitate installation of new piping, fittings and vent poles on the southeastern portion of the Site. A health and safety plan will be developed for this work and excess soils will be managed and disposed off-Site consistent with applicable regulatory requirements. Activities related to this work will be documented in future Monthly Status Reports.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 11 of 24



GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second half of 2013. We also anticipate performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging, Site outfall evaluations and groundwater sampling of eight (8) wells located immediately downgradient of the ORC treatment area in August/September 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11
RIPUC Docket No. 4514
In Re: 2014 Distribution Adjustment Charge Filing
Page 12 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** August 19, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – July 1 through July 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island RIDEM Case No. 2006-055

Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period July 1, 2013 through July 31, 2013.

#### SITE ACTIVITIES PERFORMED

No on-site activities were performed by GZA during the period July 1, 2013 to July 31, 2013.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following completion of the landscape restoration by RCL Construction (the Retail Building A addition contractor), a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.

As previously described in the monthly status report dated July 11, 2013, National Grid currently plans to install vent poles and a new valve to the gas regulator station located immediately west of Retail Building E in the fall of 2013, however the work may be performed earlier if necessary. This work will include a shallow excavation (approximately 3 to 4 feet) to facilitate installation of new piping, fittings and vent poles on the southeastern portion of the Site. A health and safety plan will be developed for this work and excess soils will be managed and disposed off-Site consistent with applicable regulatory requirements. Activities related to this work will be documented in future Monthly Status Reports.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 13 of 24



GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second half of 2013. We also anticipate performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging, Site outfall evaluations and groundwater sampling of eight (8) wells located immediately downgradient of the ORC treatment area in August/September 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 14 of 24

# **MEMO**

TO: Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (sent via email)

Kathy Anderson – Wellington (sent via email)

**DATE:** September 17, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – August 1 through August 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 



The following summarizes response actions completed at the above-referenced property (Site) for the period August 1, 2013 through August 31, 2013.

#### SITE ACTIVITIES PERFORMED

The following routine Site monitoring activities were performed between August 7 and August 9, 2013.

- Piezometric groundwater measurements at all available groundwater monitoring wells.
- Non-aqueous phase liquid (NAPL) gauging and recovery: consistent with previous events, measurable NAPL was observed in MW-202 (0.5 ft DNAPL) and MW-307 (0.7 ft- DNAPL), which are located along the seawall on the western side of the Site. Approximately 0.3 gallons of DNAPL were recovered from both MW-202 and MW-307 and 0.1 gallons of LNAPL was recovered from the PetroPore unit installed at MW-324. In addition, 0.1 feet of DNAPL was observed in well MW-403 which was installed in 2012 as a product gauging and recovery well in the vicinity of MW-202. Approximately 0.1 gallons of DNAPL was recovered from MW-403. Recovered NAPL was containerized within a drum and subsequently transported off-Site for disposal by Clean Harbors.
- Stormwater outfall monitoring for sheen discharges: no sheens were observed at either outfall during this monitoring event.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 15 of 24



• Groundwater sampling of eight (8) wells (MW-301, MW-302, MW-303, MW-308, MW-309, MW-310, MW-330 and MW-334) located immediately downgradient of the ORC treatment area. Samples were submitted for the following laboratory analyses: volatile organic compounds (VOCs) via EPA Method 8260B and polycyclic aromatic hydrocarbons (PAHs) via EPA Method 8270. Results of this testing will be summarized in our 2013 Annual Monitoring Report.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following completion of the landscape restoration by RCL Construction (the Retail Building A addition contractor), a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.

As described in previous monthly reports, National Grid currently plans to install vent poles and a new valve to the gas regulator station located immediately west of Retail Building E in the fall of 2013. This work is anticipated to include a shallow excavation (approximately 3 to 4 feet) to facilitate installation of new piping, fittings and vent poles on the southeastern portion of the Site. A health and safety plan will be developed for this work and excess soils will be managed and disposed off-Site consistent with applicable regulatory and National Grid requirements. Activities related to this work will be documented in future Monthly Status Reports.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second half of 2013. We also anticipate performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging, Site outfall evaluations, Site-wide groundwater sampling and soil gas monitoring in November/December 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 16 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** October 9, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – September 1 through September 30, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 



The following summarizes response actions completed at the above-referenced property (Site) for the period September 1, 2013 through September 30, 2013.

#### SITE ACTIVITIES PERFORMED

On September 18, 2013, GZA was onsite to observe progress of the Retail Building A building addition construction. GZA observed that surrounding landscape/hardscape cap had been restored, except for areas along the western side of the building addition. According to RCL Construction (the Retail Building A addition contractor), landscape/hardscape cap restoration will be completed in October/November, depending on the contractor's schedule.

No other on-Site activities were performed by GZA during the period September 1, 2013 to September 30, 2013.

## **FUTURE WORK/SCHEDULE**

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following completion of the landscape restoration by RCL Construction, a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 17 of 24



As described in previous monthly reports, National Grid currently plans to install vent poles and a new valve to the gas regulator station located immediately west of Retail Building E in the fall of 2013. This work is anticipated to include a shallow excavation (approximately 3 to 4 feet) to facilitate installation of new piping, fittings and vent poles on the southeastern portion of the Site. A health and safety plan will be developed for this work and excess soils will be managed and disposed off-Site consistent with applicable regulatory and National Grid requirements. Activities related to this work will be documented in future Monthly Status Reports.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM during the second half of 2013. We also anticipate performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging, Site outfall evaluations, Site-wide groundwater sampling and soil gas monitoring in November/December 2013.

We trust that this information meets your needs. Please feel free call me at 401-421-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** November 19, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – October 1 through October 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period October 1, 2013 through October 31, 2013.

#### SITE ACTIVITIES PERFORMED

On October 3, 2013, GZA was on-Site to perform limited maintenance of the armor flex mat walkway installed along Newport Harbor. This maintenance involved the removal of ties from the matting to mitigate a potential tripping hazard.

Between October 30 and 31, 2013, GZA was on-Site to manage excavated soils generated during National Grid's gas regulator station work which was located immediately west of Retail Building E. An approximately 10-foot by 16-foot by 2-foot excavation was performed in the sidewalk and within Thames Street adjacent to the Site by National Grid Gas Operations to facilitate installation of new piping and fittings associated with the gas regulator station.

All excavated soil (approximately 12 cubic yards) was placed in a roll -off container and subsequently transported to a National Grid owned facility for staging pending disposal at a National Grid approved facility. Soils encountered during the excavation activities generally consisted of sand and gravel fill. No visual or olfactory evidence of MGP impacts were observed. Periodically, GZA collected soil samples during excavation activities for total volatile organic compound (TVOC) field screening with a handheld Thermo 580B photoionization detector (PID), equipped with a 10.6ev lamp. Results of the TVOC field screening were below the instrument's detection limit of approximately 1 parts per million (ppm). GZA collected one composite sample of the excavated material placed in the roll-off for waste characterization purposes. The sample was submitted for analytical testing to ESS Laboratory, in Cranston, Rhode Island for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH),



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 19 of 24



semi-volatile organic compounds (SVOCs), RCRA 8 metals and reactivity. Once laboratory results are received, the excavated soil will be transported off-Site to a National Grid approved facility.

Soil excavation work associated with the gas regulator station is substantially complete and any further excavation will be limited to hand excavation. It is anticipated that work on the gas regulator station will be completed in November 2013. Any additional excess soils generated during the gas regulator upgrades will be placed in 55-gallon steel drums and transported off-site to a National Grid approved facility. Once the gas regulator upgrades are complete, the excavation will be backfilled with bedding sand

No other on-Site activities were performed by GZA during the period October 1, 2013 to October 31, 2013.

#### FUTURE WORK/SCHEDULE

GZA will continue to provide as-needed services to National Grid related to the Retail Building A addition cap disturbance and will continue to provide RIDEM with periodic updates. Following completion of the landscape restoration by RCL Construction, a Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM by the end of 2013 or early in 2014. Annual Site-wide groundwater elevation monitoring, non-aqueous phase liquid (NAPL) gauging, outfall evaluations, groundwater sampling and soil gas monitoring was completed between November 4 and 15, 2013. As part of the monitoring round, the two soil gas probes (SG-9 and SG-10) destroyed during construction of the Retail Building A addition were replaced and sampled.

We trust that this information meets your needs. Please feel free call me at 401-427-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** December 12, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – November 1 through November 30, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period November 1, 2013 through November 30, 2013.

#### SITE ACTIVITIES PERFORMED

GZA performed the Site wide annual environmental monitoring program from November 4<sup>th</sup> through November 15, 2013 consistent with the *Remedial Alternative Evaluation Report* submitted to RIDEM on April 17, 2012. The annual environmental monitoring program included the following activities:

- Groundwater sampling of select monitoring wells, which included the semi-annual
  groundwater monitoring round associated with the ORC treatment area. A total of 50
  groundwater samples were collected and submitted for analytical testing for VOCs, TPH,
  cyanide and phenols;
- Piezometric groundwater measurements at all groundwater monitoring wells;
- Non-aqueous phase liquid (NAPL) gauging and recovery. Consistent with previous events, measurable NAPL was limited to MW-202 (0.5 ft DNAPL), MW-307 (0.8 ft-DNAPL), and MW-403 (0.3 feet DNAPL) which are located along the seawall on the western side of the Site. A total of approximately 1 gallon of DNAPL was recovered from these three wells. In addition, 0.3 gallons of LNAPL was recovered from the PetroPore unit installed at MW-324. Recovered NAPL was containerized within a drum and subsequently transported off-Site for disposal by Clean Harbors.



Attachment DIV 1-11
RIPUC Docket No. 4514
In Re: 2014 Distribution Adjustment Charge Filing
Page 21 of 24



- Stormwater outfall monitoring for sheen discharges. No sheens were observed at either outfall during this monitoring event;
- Performance of a soil gas survey around existing building perimeters, A through E, the Club House and pile supported condominium building entrances constructed with slab-on-grade foundations. As part of the soil gas survey, the two soil gas probes (SG-9 and SG-10) destroyed during construction of the Retail Building A addition were replaced and sampled. The new probes were designated SG-9A and SG-10A and were installed by hand in approximately the same location as the previous probes. The probes consist of stainless steel points connected to flexible polyethylene tubing, set in a flush mounted monitoring well road box for protection. A total of 22 soil gas samples were collected and submitted for low level TO-15 analysis plus naphthalene; and
- Annual soil cap inspection. The soil cap appeared to be in good condition. During
  the cap evaluation, GZA observed that the landscaped areas around the Retail
  Building A addition were fully restored with mulch and planted flower boxes. In
  addition, during this inspection, GZA observed that the excavation associated with
  the gas regulator station upgrade which was performed in October 2013 had been
  backfilled and disturbed portions of the sidewalk adjacent to Retail Building E had
  been restored.

No other on-Site activities were performed by GZA during the period November 1, 2013 to November 30, 2013.

#### FUTURE WORK/SCHEDULE

As described above, restoration of cap disturbance associated with construction of the Retail Building A addition has been completed. A Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM in early 2014.

Soil excavation work associated with the gas regulator station upgrade is substantially complete and any further excavation will be limited to hand excavation. It is anticipated that work on the gas regulator station will be completed in December 2013. Any additional excess soils generated during the gas regulator upgrades will be placed in 55-gallon steel drums and transported off-site to a National Grid approved facility.

GZA is currently preparing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM by the end of 2013 or early in 2014.

We trust that this information meets your needs. Please feel free call me at 401-427-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** January 10, 2013

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – December 1 through December 31, 2013

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period December 1, 2013 through December 31, 2013.

## **SITE ACTIVITIES PERFORMED**

On December 4, 2013, GZA was on-Site to provide soil management oversight related to the excavated soils generated during National Grid's gas regulator station work which was located immediately west of Retail Building E. Limited excavation was performed by National Grid to facilitate installation of a vent pole associated with the gas regulator station; this limited excavation resulted in generation of one 55-gallon drum of soil, which was transported off-Site by Clean Harbors Environmental Services and disposed at a licensed receiving facility.

No other on-Site activities were performed by GZA during the period December 1, 2013 to December 31, 2013.

## FUTURE WORK/SCHEDULE

As described in previous status reports, restoration of the cap disturbance associated with construction of the Retail Building A addition has been completed. A Closure Report documenting the cap repair activities will be prepared by GZA and submitted to RIDEM in early 2014.

Soil excavation work associated with the gas regulator station upgrade is substantially complete and any further excavation will be limited to hand excavation. It is anticipated that work on the gas regulator station will be completed in early 2014. Any additional excess soils generated during the gas regulator upgrades will be placed in 55-gallon steel drums and transported off-Site to a National Grid approved facility.



Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 23 of 24



GZA is currently finalizing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM early in 2014.

We trust that this information meets your needs. Please feel free call me at 401-427-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

Attachment DIV 1-11 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 24 of 24

# **MEMO**

**TO:** Joseph Martella- RIDEM

**FROM:** Meg Kilpatrick – GZA

Jim Clark - GZA

**CC:** Amy Willoughby – National Grid (*sent via email*)

Kathy Anderson – Wellington (sent via email)

**DATE:** February 06, 2014

**FILE NO.:** 03.0033327.00-C

**RE:** Monthly Status Report – January 1 through January 31, 2014

Former Providence Gas Co. Manufactured Gas Plant

Wellington Avenue and Thames Street

Newport, Rhode Island *RIDEM Case No. 2006-055* 

Sent via email

The following summarizes response actions completed at the above-referenced property (Site) for the period January 1, 2013 through January 31, 2014.

#### SITE ACTIVITIES PERFORMED

No on-Site activities were performed by GZA during the period January 1, 2014 to January 31, 2014.

## FUTURE WORK/SCHEDULE

Soil excavation work associated with the gas regulator station upgrade is substantially complete and any further excavation will be limited to hand excavation. It is anticipated that work on the gas regulator station will be completed in early 2014. Note that this work is weather dependent and may not be conducted during cold weather. Any additional excess soils generated during the gas regulator upgrades will be transported off-Site to a National Grid approved facility.

GZA anticipates performing Site-wide groundwater elevation monitoring, Site-wide non-aqueous phase liquid (NAPL) gauging and Site outfall evaluations in March 2014.

GZA is currently finalizing an *Annual Monitoring Report* which summarizes the results of remediation and monitoring activities performed in 2012. We currently anticipate this report will be submitted to RIDEM within the next 60 days.

We trust that this information meets your needs. Please feel free call me at 401-427-2719 or Amy Willoughby at 781-907-3644 if you have any questions.

J:\ENV\33327.msk\Task-22 - Soil Cap Construction Services\RIDEM Monthly Status Reports\33327 RIDEM-StatRep-41 2-06-14-FINAL.doc



530 Broadway Providence Rhode Island 02909 401-421-4140 Fax: 401-751-8613

http://www.gza.com

#### Division 1-12

## Request:

Re: Miscellaneous MGP Program Costs, please provide supporting detail for the dollar amounts shown for Miscellaneous MGP Program Costs, and describe the purpose of each activity for which those costs were incurred.

# Response:

The detail for the \$63,769 in costs included in Miscellaneous MGP Program Costs, Rhode Island, including detail by month the Company labor charged to the project, the specific tasks performed each month, and the specifics of the material and expense costs incurred each month are included in Attachment DIV 1-12.

The labor charges included on this Project are for the following activities:

- Program management: Tasks include the preparation of the Annual Environmental Report for Gas Services, preparation of responses to data requests, reporting and updates to management, program/project management activities related to the overall RI-Gas MGP program and attendance at staff meetings, training and other MGP-related meetings.
- Financial management: Tasks include analyst review of invoices, processing and tracking of invoices, filing of invoices, review and management of consultant and contractor proposal and change notices, annual budgeting, monthly budget review and quarterly budget forecasting.
- Training: Tasks include attendance at coursework required for working at MGP sites.
- RI MGP Site Research: The Company worked with several firms to research information on certain RI-Gas holder and MGP sites.
- Contract program management and financial management: National Grid contracts with EECS, Inc. to provide contract services to support the program and financial management tasks described above to assist the Company's staff.

Attachment DIV 1-12 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 1 of 3

# Division Data Request 1-12 EMPLOYEE LABOR

Month	Activities Performed <sup>1, 2</sup>	Total Labor
April 2013	Program management and financial management	\$2,051
May 2013	Program management and financial management	\$2,456
June 2013	Program management, financial management and preparation of the annual environmental report	\$3,079
July 2013	Program management, financial management and preparation of the annual environmental report	\$6,265
August 2013	Program management and financial management	\$3,042
September 2013	Program management, financial management and response to Division Requests	\$2,092
October 2013	Program management and financial management	\$5,482
November 2013	Program management and financial management	\$2,563
December 2013	Program management and financial management	\$2,315
January 2014	Program management and financial management	\$2,696
February 2014	Program management and financial management	\$3,104
March 2014	Program management and financial management	\$2,135

TOTAL: \$37,279

#### Notes:

- 1. <u>Program management</u>: Tasks include the preparation of the Annual Environmental Report for Gas Services, preparation of Responses to the Division Requests, reporting and updates to management, program/project management activities related to the overall RI-Gas MGP program, and attendance staff meetings, training and other MGP-related meetings.
- 2. <u>Financial management</u>: Tasks include analyst review of invoices, processing and tracking of invoices, filing of invoices, review and management of consultant and contractor proposal and change notices, annual budgeting, monthly budget review and quarterly budget forecasting.

# Division Data Request 1-12 EMPLOYEE EXPENSES

Month	Employee Expenses	Vehicle Charge	Total Expenses
April 2013		\$335.98	\$335.98
May 2013		\$371.29	\$371.29
June 2013		\$288.30	\$288.30
July 2013		\$425.09	\$425.09
August 2013		\$528.29	\$528.29
September 2013		\$426.16	\$426.16
October 2013		\$639.16	\$639.16
November 2013		\$630.61	\$630.61
January 2014		\$677.68	\$677.68
February 2014		\$390.65	\$390.65
February 2014	\$510.57		\$510.57
March 2014		\$649.76	\$649.76
TOTALS	\$510.57	\$5,362.97	\$5,873.54

#### Notes:

- 1. Employee expenses. The expenses in February 2014 are for management travel to RI for a Newport MGP meeting, including tolls, parking and vehicle rental.
- 2. Vehicle charges. These charges are associated with employee use of their personal vehicles to drive to the MGP sites (or other related locations such as the RI Department of Environmental Management offices) associated with RI-Gas. All vehicle charges associated with RI-Gas MGP sites are carried under this general work order.

Attachment DIV 1-12 RIPUC Docket No. 4514 In Re: 2014 Distribution Adjustment Charge Filing Page 3 of 3

# Division Data Request 1-12

# **OUTSIDE SERVICES**

Month	Payee	Invoice No.	Amount	Description
May 2013	EECS	313	\$1,146.00	Contract project and financial management activities
June 2013	Woodard & Curran	99620C	\$195.92	Training (NEG share)
June 2013	GZA GeoEnvironmental, Inc.	0670373	\$6,206.08	RI Gas Holder/MGP Site Research
August 2013	GZA GeoEnvironmental, Inc.	0673363	\$560.84	RI Gas Holder/MGP Site Research
September 2013	EECS, Inc.	316	\$4,692.00	Contract project and financial management activities
January 2014	EECS, Inc.	320	\$1,636.00	Contract project and financial management activities
February 2014	EECS, Inc.	318	\$568.47	Contract project and financial management activities
February 2014	Hinckely Allen	942586	\$511.22	RI Gas Holder/MGP Site Research
March 2014	EECS, Inc.	325	\$1,023.80	Contract project and financial management activities
March 2014	History Associates	3913.010-01	\$4,040.00	RI Gas Holder/MGP Site Research
March 2014	CHWMEG	Various	\$35.70	Disposal facility audits (NEG share)

TOTAL: \$20,616.03

## Division 1-13

## Request:

Re: the "Insurance Recovery Activities" addressed on page 14 of 18 of the Environmental Report, please provide a detailed itemization of costs included in the \$150,980 of "Property Purchases/Settlements/Legal costs as well as the reasons for the Company's incurrence of those costs."

## Response:

A detailed itemization of the Property Purchase/Settlements/Legal costs incurred in support of the Company's insurance recovery activities is included in Attachment DIV 1-13.

The costs were incurred by the Company for the environmental insurance and third party recovery activities, and include legal fees and expenses related to *OneBeacon America Insurance Company v. The Narragansett Electric Company*, Commonwealth of Massachusetts, County of Suffolk, Superior Court, Civil Docket No. SUCV2005-03086, and *The Narragansett Electric Company v. American Home Assurance, et al.*, Case No. 11 CIV 8299 (SDNY) 2011, in which the Company is pursuing insurance coverage for liabilities or potential liabilities associated with the environmental remediation of numerous sites

# **Division Request 1-13**

Vendor	Invoice Date	Invoice Number	Invoice Amount
COVINGTON & BURLING	4/23/2013	60603831	\$419.50
COVINGTON & BURLING	4/30/2013	60603832	\$10,077.94
COVINGTON & BURLING	5/24/2013	60606844	\$494.88
COVINGTON & BURLING	5/30/2013	60607193	\$8,139.13
COVINGTON & BURLING	6/28/2013	60610104	\$247.47
COVINGTON & BURLING	7/30/2013	60613001	\$26,386.60
COVINGTON & BURLING	8/23/2013	60615731	\$52.31
COVINGTON & BURLING	8/23/2013	60615732	\$136.62
COVINGTON & BURLING	7/26/2013	60612880	\$145.08
COVINGTON & BURLING	6/28/2013	60610105	\$146.11
COVINGTON & BURLING	7/26/2013	60612879	\$456.31
COVINGTON & BURLING	9/12/2013	60618467	\$1,063.80
COVINGTON & BURLING	9/24/2013	60618844	\$6,542.84
COVINGTON & BURLING	9/24/2013	60618845	\$9,390.67
COVINGTON & BURLING	6/28/2013	60610106	\$14,772.63
COVINGTON & BURLING	8/31/2013	60616059	\$20,078.81
COVINGTON & BURLING	11/15/2013	60622824	\$2,157.42
COVINGTON & BURLING	10/25/2013	60621361	\$4,294.85
COVINGTON & BURLING	10/29/2013	60621482	\$11,565.94
COVINGTON & BURLING	11/15/2013	60623016	\$22,732.71
COVINGTON & BURLING	12/23/2013	60627062	\$52.65
COVINGTON & BURLING	12/23/2013	60627063	\$239.80
COVINGTON & BURLING	12/23/2013	60627064-D1	\$281.91
COVINGTON & BURLING	1/31/2014	60629865	\$102.24
COVINGTON & BURLING	1/31/2014	60629866	\$1,222.22
COVINGTON & BURLING	1/31/2014	60629867	\$2,774.19
COVINGTON & BURLING	2/28/2014	60632274	\$459.22
COVINGTON & BURLING	2/27/2014	60632011	\$1,461.36
SALLY & FITCH LLP	4/16/2013	20675	\$10.50
SALLY & FITCH LLP	5/13/2013	20936	\$10.50
SALLY & FITCH LLP	6/11/2013	21225	\$64.60
SALLY & FITCH LLP	8/22/2013	21818	\$13.00
SALLY & FITCH LLP	7/12/2013	21404	\$32.36
SALLY & FITCH LLP	9/19/2013	22080	\$227.60
SALLY & FITCH LLP	10/16/2013	22447	\$28.20
SALLY & FITCH LLP	12/13/2013	22892	\$89.49
SALLY & FITCH LLP	11/19/2013	22700	\$3,803.47
SALLY & FITCH LLP	1/17/2014	23183	\$61.80
SALLY & FITCH LLP	2/19/2014	23471	\$465.40
SALLY & FITCH LLP	3/17/2014	23705	\$277.38
<u>-</u>		Total	\$1E0 090

Total: \$150,980

# Division 1-14

# Request:

Re: the East Providence (First Ave) Holder project, please provide full copies of the Site Investigation Report that was submitted to RIDEM and the referenced March 2014 Remedial Decision Letter from RIDEM.

# Response:

The Site Investigation Report and March 2014 Remedial Decision Letter from RIDEM are included as Attachment DIV 1-14. Due to the voluminous nature of this attachment, the Company will provide a copy of Attachment DIV 1-14 on CD-ROM.

## Division 1-15

# Request:

Re: The August 1, 2014 Direct Testimony of Yi-An Chen

Re: witness Chen's Direct Testimony page 21 of 21, please provide monthly forecasted and actual throughput for each of the previous five years, since the 2008 base rate case.

# Response:

As discussed with the Division on August 20, the request has been revised to state "Re: witness Chen's Direct Testimony page 21 of 21, please provide monthly forecasted and actual throughput for each of most recent five years."

Attachment DIV 1-15provides the actual and forecasted throughput per rate class for each of most recent five years.

Line No.

Source: GCR Deferred Filed Oct 12 - Docket No. 4283

The Narragansett Electric Company

2014 Distribution Adjustment Charge Filing Responses to Division's First Set of Data Requests

d/b/a National Grid RIPUC Docket No. 4514

Attachment 1-15

40 Total THROUGHPUT	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Total Nov-Oct
41 Residential Non-Heating	45,986	78,983	706'86	109,290	100,574	85,531	54,040	36,130	28,862	27101.5	27610.2	30903.9	723,920
42 Residential Non-Heating Low Income	1,703	3,229	4,277	4,875	3,978	2,925	1,352	914	865	851.2	903.3	1087.6	26,961
43 Residential Heating	902,551	1,903,463	2,537,878	2,912,936	2,519,777	1,994,126	1,004,359	517,766	368,525	351754.2	355842.8	413994.1	15,782,971
44 Residential Heating Low Income	94,997	190,048	248,229	279,036	237,030	188,891	94,414	52,160	41,890	40616.8	40489.1	45534.6	1,553,337
45 Small C&I	106,317	269,726	399,055	480,777	383,824	278,735	128,656	49,170	40,658	44578.6	35651.1	49094.1	2,266,242
46 Medium C&I	290,265	651,514	762,706	903,074	782,902	588,764	325,217	187,113	158,376	162880.9	161806.7	196052.9	5,170,670
47 Large LLF	165,962	443,134	393,008	524,921	397,466	366,696	121,469	39,332	25,608	38823.8	45302.6	78374.5	2,640,097
48 Large HLF	79,960	115,555	121,058	134,042	113,580	113,111	69,178	68,502	71,204	63883.2	84826.5	84959.5	1,119,859
49 Extra Large LLF	95,882	201,014	187,246	316,328	97,718	300,780	(64,639)	(226)	(10,571)	12440.6	39524.5	40905.4	1,216,404
50 Extra Large HLF	437,237	550,319	518,236	633,997	460,632	561,744	351,363	281,695	477,302	397396.1	400826.2	365361.6	5,436,109
51 Default	1,820	8,109	7,008	9,834	5,832	6,429	1,890	(1,714)	1,457	1242	946.3	1264.5	44,117
52 Total Throughput	2,222,680	2,222,680 4,415,092 5,2	5,277,609	6,309,110	5,103,315	4,487,733	2,087,298	1,230,842	1,204,176	1,141,569	1,193,729	1,307,533	5,277,609 6,309,110 5,103,315 4,487,733 2,087,298 1,230,842 1,204,176 1,141,569 1,193,729 1,307,533 35,980,686

Source: GCR Deferred Filed Oct 13 for Nov 12 through Mar 13, GCR Anmual Reconcilitation Filing Filed July 14 for Apr through Oct 13- Docket No. 4346

53 Total THROUGHPUT	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Total Nov-Oct	
4 Residential Non-Heating	52,939	103,262	141,802	141,832	138,940	103,094	65,116	37,167	29,077				813,229	
55 Residential Non-Heating Low Income	2,401	5,198	6,878		6,217	4,678	3,213	1,508	1,202				37,823	
56 Residential Heating	969,814	2,219,000	3,163,797		3,050,687	2,122,865	1,108,093	513,737	372,360				16,666,104	
57 Residential Heating Low Income	99,566	219,809	302,587		283,752	210,481	123,623	57,730	44,605				1,631,526	
58 Small C&I	115,595	324,268	517,511		496,004	313,467	141,840	58,923	44,241				2,533,810	
59 Medium C&I	339,084	715,690	978,145		945,350	673,391	379,559	177,424	163,633				5,358,223	
60 Large LLF	196,886	428,144	556,305		504,099	398,954	144,352	31,578	26,751				2,879,633	
1 Large HLF	101,997	101,893	109,799		120,561	88,497	87,495	78,183	70,014				970,407	
62 Extra Large LLF	106,115	238,139	242,187		181,749	191,500	37,882	1,542	(14,385)				1,235,444	
63 Extra Large HLF	436,198	535,096	614,901		507,630	575,138	321,206	401,607	367,134				4,402,609	
64 Default	2,475	7,881	7,468	49,428	3,273	65,503	(12,974)	71,604	(37,929)				156,730	
65 Total Throughput	2,423,071	2,423,071 4,898,381 6,6	6,641,379	6,839,764	6,238,261	4,747,568	2,399,405	1,431,004	1,066,704				36,685,536	

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 2014 Distribution Adjustment Charge Filing Responses to Division's First Set of Data Requests Attachment 1-15 Page 2 of 4

# Forecasted Throughput

Line No.													
1 Total THROUGHPUT	Nov-09	Dec-06	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Total Nov-Oct
2 Residential Non-Heating	46,350	60,595	74,986	74,836	909'59	62,697	59,731	49,819	41,240	37,916	37,067	39,674	650,517
3 Residential Heating	1,039,084	1,973,922	2,916,336	3,018,749	2,542,355	1,926,568	1,205,748	697,238	460,692	374,569	407,299	558,900	17,121,459
4 Small C&I	147,903	297,612	460,582	481,750	413,015	298,434	162,103	689'66	77,031	67,983	75,604	90,438	2,672,144
5 Medium C&I	395,678	654,350	916,290	949,435	886,185	563,556	388,203	260,711	184,607	174,705	188,841	260,845	5,823,405
6 Large LLF	227,001	377,970	503,601	494,466	445,219	327,708	175,075	102,746	66,399	52,596	63,335	108,342	2,947,458
7 Large HLF	92,131	112,565	127,363	124,629	122,203	99,635	86,190	78,097	65,848	81,556	79,808	74,511	1,144,535
8 Extra Large LLF	74,630	114,316	124,814	119,271	111,303	79,128	38,897	36,736	34,015	29,602	29,260	40,527	832,500
9 Extra Large HLF	385,937	358,521	421,606	372,201	388,649	456,719	315,865	288,018	262,033	270,396	319,180	327,791	4,166,917
10 Total Throughput	2,408,713	3,949,851	5,545,579	5,635,335	4,974,536	3,814,446	2,431,812	1,613,054	1,194,866	1,089,323	1,200,393	1,501,028	35,358,936
Source: GCR Filing Docket No. 4097	5. 4097												
11 Total THROUGHPUT	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Mav-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Total Nov-Oct
12 Residential Non-Heating	54,674	70,653	82,003	87,827	78,867	70,493	60,870	46,251	39,370	33,934	33,888	39,380	698,210
13 Residential Heating	1,104,878	2,046,100	2,750,982	2,917,818	2,636,773	1,990,787	1,114,772	639,475	404,535	324,025	378,664	506,454	16,815,263
14 Small C&I	117,722	232,014	356,367	380,345	326,862	224,723	116,333	61,244	58,320	40,721	20,031	51,998	1,986,681
15 Medium C&I	360,318	470,932	716,407	756,775	662,446	445,309	294,061	202,007	149,943	139,727	129,491	186,498	4,513,915
16 Large LLF	174,826	311,925	394,697	409,350	378,527	288,000	136,863	72,453	36,018	37,131	30,799	77,599	2,348,189
17 Large HLF	78,177	96,473	108,659	99,221	103,174	98,094	69,605	66,704	48,898	58,178	66,847	73,523	967,552
18 Extra Large LLF	64,465	102,715	174,056	145,431	118,617	84,095	34,091	47,628	660'6	16,197	(1,106)	30,327	825,615
19 Extra Large HLF	313,556	354,899	390,788	385,607	382,070	389,009	287,285	282,978	263,168	272,408	311,008	295,370	3,928,147
20 Total Throughput	2,268,616	3,685,711	4,973,960	5,182,373	4,687,337	3,590,511	2,113,880	1,418,739	1,009,352	922,322	969,622	1,261,149	32,083,572
Source: GCR Filing Docket No. 4199	0. 4199												
21 Total THROUGHPUT	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Total Nov-Oct
22 Residential Non-Heating	48,787	57,359	74,908	72,427	62,047	52,923	43,928	35,764	31,804	28,744	28,529	35,143	572,364
23 Residential Heating	1,028,594	2,284,131	3,445,597	3,365,922	2,511,707	1,705,118	1,081,596	473,491	422,847	362,367	345,116	409,966	17,436,451
24 Small C&I	154,145	306,277	491,295	478,896	407,036	252,709	122,112	47,649	42,243	34,558	49,280	80,503	2,466,704
25 Medium C&I	384,835	683,624	1,039,674	972,492	798,012	420,268	243,494	106,097	128,572	80,628	134,162	213,538	5,205,395
26 Large LLF	226,330	411,067	548,439	496,664	444,434	326,807	120,419	62,590	20,845	19,091	34,149	94,057	2,804,893
27 Large HLF	98,847	95,115	162,692	126,073	121,975	101,638	83,115	79,512	65,664	70,556	57,951	94,502	1,157,639
28 Extra Large LLF	87,436	161,401	189,233	161,912	141,003	80,652	32,713	23,350	12,130	8,024	16,500	37,324	921,676
29 Extra Large HLF	442,612	481,256	649,419	550,308	541,380	501,282	396,175	426,407	385,094	353,465	381,374	451,689	5,560,462
30 Total Throughput	2,471,585	4,480,229	6,601,257	6,224,693	5,027,594	3,441,397	2,123,550	1,254,861	1,109,199	957,434	1,047,061	1,416,722	36,155,583
Source: GCR Filing Docket No. 4283	5. 4283												

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 2014 Distribution Adjustment Charge Filing Responses to Division's First Set of Data Requests Attachment 1-15 Page 3 of 4

Total Nov-Oct 568,413	17,653,549	2,353,415	5,330,780	2,725,521	931,731	1,060,314	4,763,990	35,387,711		Total Nov-Oct	722,127	18,331,149	2,370,683	5,301,406	2,895,821	1,176,561	1,605,030	6,097,877	38,500,653
Oct-13 28,447	515,751	48,988	212,996	98,791	58,297	50,092	371,180	1,384,542		Oct-14	35,495	517,838	67,154	212,386	106,920	75,653	80,389	458,867	1,554,701
Sep-13 27,901	399,794	48,259	188,419	54,797	62,527	23,719	396,990	1,202,406		Sep-14	28,939	433,919	67,751	165,423	47,110	81,772	21,219	412,107	1,258,241
Aug-13 27,280	388,331	47,990	172,711	46,769	59,555	18,206	379,890	1,140,732		Aug-14	28,396	393,560	57,753	146,809	33,853	67,975	13,105	423,083	1,164,534
<u>Jul-13</u> 29,995	443,392	53,665	183,310	53,607	55,624	18,513	371,195	1,209,300		Jul-14	31,123	437,527	60,020	153,309	38,435	64,726	13,411	419,902	1,218,453
Jun-13 34,178	674,166	71,605	226,708	88,793	60,247	23,709	372,971	1,552,377		Jun-14	40,932	688,829	84,920	198,292	73,578	82,589	19,075	423,981	1,612,196
$\frac{\text{May-}13}{46,325}$	1,232,855	142,278	358,911	143,544	74,577	47,910	390,126	2,436,526		May-14	56,216	1,275,453	159,950	377,672	185,732	93,374	72,001	446,243	2,666,640
<u>Apr-13</u> 52,095	1,998,463	264,475	540,515	308,325	81,907	99,241	340,930	3,685,951		Apr-14	64,567	2,054,509	270,238	529,439	303,505	104,717	132,298	490,774	3,950,046
<u>Mar-13</u> 66,696	2,680,218	396,614	766,750	415,605	103,826	149,486	388,437	4,967,631		Mar-14	79,602	2,949,996	377,264	735,106	450,991	130,253	281,556	631,002	5,635,770
Feb-13 77,377	3,108,191	442,493	891,201	467,179	103,872	176,119	425,484	5,691,916		Feb-14	119,337	3,227,172	416,921	881,766	488,890	127,574	273,641	580,527	6,115,828
<u>Jan-13</u> 78,573	3,053,892	460,531	838,975	475,113	296,66	182,320	441,981	5,631,350		Jan-14	111,021	3,227,307	446,056	896,477	545,109	137,449	283,538	666,342	6,313,298
Dec-12 59,594	2,058,633	254,777	585,632	350,835	92,901	161,825	490,008	4,054,205		Dec-13	78,202	2,069,091	235,525	643,182	394,669	115,687	247,809	621,329	4,405,494
Nov-12 39,952	1,099,863	121,739	364,651	222,164	78,431	109,175	394,798	2,430,775	. 4346	Nov-13	48,298	1,055,948	127,131	361,547	227,029	94,792	166,990	523,718	2,605,454
31 Total THROUGHPUT 32 Residential Non-Heating	33 Residential Heating	34 Small C&I	35 Medium C&I	36 Large LLF	37 Large HLF	38 Extra Large LLF	39 Extra Large HLF	40 Total Throughput	Source: GCR Filing Docket No. 4346	41 Total THROUGHPUT	42 Residential Non-Heating	43 Residential Heating	44 Small C&I	45 Medium C&I	46 Large LLF	47 Large HLF	48 Extra Large LLF	49 Extra Large HLF	50 Total Throughput 2,

# **Redacted**Division 1-16

# Request:

Re: witness Chen's Direct Testimony at page 6 of 21, please provide a list of each proposed AGT project the Company has identified for the 2014-2015 period, and for each project indicate:

- a. The name of the customer (may be provided subject to confidentiality restrictions);
- b. The projected annual gas use volumes for the proposed facility;
- c. Description of the advanced technology to be utilized;
- d. The estimated amount of the rebate the Company would offer for the project and the basis for computing the estimated rebate;
- e. The estimated in-service date for the proposed facility;
- f. The anticipated schedule for payment of rebates.

#### Response:

- a. The name of the customer is
- b. The projected annual gas usage is 100,000 therms.
- c. The advanced technology to be utilized is Combined Heat and Power System.
- d. The estimated amount of the rebate the Company would offer is \$300,000. This amount is based on 75% of the net present value of the Company's estimated margin using the AGT screening tool.
- e. The estimated in-service date for the proposed facility is January 2016.
- f. The anticipated schedule for payment of rebates is a one-time payment in December 2015.

## Division 1-17

# Request:

Re: witness Chen's Direct Testimony at pages 6 and 7 of 21, please provide a list of each project during the last three years that have applied for but been denied rebates under the AGT program including:

- a. The name of the customer (may be provided subject to confidentiality restrictions);
- b. The projected annual gas use volumes for the proposed facility;
- c. Description of the advanced technology proposed;
- d. Reason for project denial;
- e. Requested Rebate amount.

## Response:

There were no projects which applied for but were denied rebates under the AGT program during the last three years.

# Division 1-18

# Request:

Re: witness Chen's Direct Testimony page 11 of 21 please provide:

a. The monthly throughput data used for the 12-month period to derive the PBOP Factor.

# Response:

The table below contains the monthly throughput data used for the 12-month period to derive the PBOP Factor.

	Monthly throughput (dekatherm)
Nov-14	2,280,698
Dec-14	4,321,303
Jan-15	5,990,384
Feb-15	6,386,798
Mar-15	5,449,161
Apr-15	4,195,580
May-15	2,632,704
Jun-15	1,478,960
Jul-15	1,272,113
Aug-15	1,316,865
Sep-15	1,295,789
Oct-15	1,490,163
Total	38,110,517

## Division 1-19

# Request:

Re: witness Chen's Direct Testimony page 16 of 21, at lines 1-3, please provide the referenced "rate base allocation" factors from Docket No. 4323, and the amount of actual capital investment, and the allocated dollar amounts by rate class.

## Response:

The Rate Base Allocation percentages approved in the 2012 Rate Case in Docket No. 4323 and used for the allocation of the revenue requirement on actual capital investment to the Company's rate classes is shown below.

Rate Class	Rate Base Amount	Rate Base %
Res-NH	\$13,905,382	3.73%
Res-H	\$229,406,864	61.56%
Small	\$30,510,711	8.19%
Medium	\$50,617,650	13.58%
Large LL	\$22,496,078	6.04%
Large HL	\$8,773,089	2.35%
XL-LL	\$2,865,290	0.77%
XL-HL	\$14,086,538	3.78%
Total	\$372,661,602	100.00%

Source: Docket No. 4323, Compliance Filing, Attachment 8A, Schedule PMN-2, pages 3 and 4.

Provided as Attachment DIV-1-19 is Attachment WRR-1, page 9 of 13 (column (c), lines 1+4) from the Company's August 1, 2014 FY 2014 Gas Infrastructure, Safety, and Reliability Plan Reconciliation Filing in Docket No. 4380. As shown, the actual capital investment was \$73.11 million. The allocation of the actual FY 2014 revenue requirement of \$1,633,930 to rate classes is shown in Schedule YC-9, column (d), lines 3-10.

The Narragansett Electric Company
d/b/a National Grid
R.I.P.U.C. Docket No. 4380
FY 2014 Gas Infrastrucutre, Safety,
and Reliability Plan Reconciliation Filing
Attachment WRR-1
Page 9 of 13

#### The Narragansett Electric Company d/b/a National Grid FY 2014 Gas ISR Revenue Requirement Reconciliation FY 2012 - FY 2014 Incremental Capital Investment Summary

Line <u>No.</u>			Actual Fiscal Year 2012 (a)	Actual Fiscal Year 2013 (b)	Actual Fiscal Year 2014 (c)
	Capital Investment		,	,	
1	ISR-eligible Capital Investment	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation Filing; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation Filing; Col (c) Actual FY2014 ISR Gas Capital Investment per Company's Books	\$54,681,347	\$56,460,955	\$70,404,045
2	ISR-eligible Capital Additions included in Rate Base per R.I.P.U.C. Docket No. 4323	Docket No. 4323 Schedule MDL-3-Gas Page 51, Line Notes 1(a), 2(b) and 3(e)	\$47,660,716	\$57,184,191	\$47,653,493
3	Incremental ISR Capital Investment	Line 1 - Line 2	\$7,020,631	(\$723,236)	\$22,750,553
	Cost of Removal				
4	ISR-eligible Cost of Removal	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation Filing; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation Filing; Col (c) Actual FY 2014 ISR Gas Cost of Removal per Company's Books	\$2,583,612	\$3,152,565	\$2,707,824
5	ISR-eligible Cost of Removal in Rate Base per R.I.P.U.C. Docket No. 4323	Docket No. 4323, Workpaper MDL-19-GAS, Page 3	\$5,755,088	\$4,701,396	\$3,917,830
6	Incremental Cost of Removal	Line 4 - Line 5	(\$3,171,476)	(\$1,548,831)	(\$1,210,006)
	Retirements				
7	ISR-eligible Retirements	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation filing; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation filing; Col (c) Actual FY 2014 ISR Gas Retirements	\$5,366,562	5,775,791	\$5,274,944
8	ISR-eligible Retirements per R.I.P.U.C. Docket No. 4323	Col (a) Docket No. 4219 Supplemental Testimony 2-17-2011; Col (b) Docket No. 4306 FY 2013 ISR Proposal Filing; Col (c)= Line 2(c) * 7.68% Retirement rate per Docket No. 4323 (Workpaper MDL-19- GAS p 4)	\$3,074,116	\$2,498,949	\$3,659,788
9	Incremental Retirements	Line 7- Line 8	\$2,292,446	\$3,276,842	\$1,615,155

# Division 1-20

# Request:

Re: witness Chen's Attachment YC-6, please provide electronic spreadsheet file which fully documents the derivation of the detail on pages 4 through 7.

# Response:

The electronic spreadsheet file of Schedule YC-6 which fully documents the derivation of the detail on pages 4 through 7 as well as the other schedules of Ms. Chen was provided to the Division on a CD-ROM on August 1, 2014.

## Division 1-21

# Request:

Re: witness Chen's Attachment YC-6, please:

- a. Document all curtailment and interruptions of service for individual non-firm customers during period April 1, 2013 through March 31, 2014 and for each curtailment:
  - i. Provide the start and stop dates and times for the curtailment or service interruption;
  - ii. Detail the methods and calculations used to computed curtailed therms of gas use;
  - iii. Provide the computation of any and all penalties or excess use charges for unauthorized gas use for each customer during each period of service curtailment or interruption.
  - iv. Provide the reasons for each curtailment or interruption of service;
  - v. Identify the dollar amounts by customer by month of any and all charges for unauthorized or excess gas use that were waived or forgiven by the Company, as well as the reasons for the Company's waiver or forgiveness of the subject charges.
- b. Document all billing adjustments for individual customers in excess of \$10,000 and provide all workpapers, data, and assumptions relied upon to support those adjustments, as well as the Company's reasons and rationales for those adjustments.

# Response:

a.

i. During the period April 1, 2013 through March 31, 2014, the start and stop dates and times for the curtailment or service interruption were:

November 24, 2013 10:00 A.M. to November 25, 2013 10:00 A.M.;

December 12, 2013 10:00 A.M. to December 19, 2013 10:00 A.M.;

December 31, 2013 10:00 A.M. to January 5, 2014 10:00 A.M.;

January 6, 2014 10:00 A.M. to January 10, 2014 10:00 A.M.; January 18, 2014 10:00 A.M. to January 18, 2014 10:58 A.M.; January 21, 2014 10:00 A.M. to January 30, 2014 10:00 A.M.; February 6, 2014 10:00 A.M. to February 13, 2014 10:00 A.M.; February 16, 2014 10:00 A.M. to February 17, 2014 10:00 A.M.; February 25, 2014 10:00 A.M. to March 6, 2014 10:00 A.M.; March 13, 2014 10:00 A.M. to March 14, 2014 10:00 A.M.; March 17, 2014 10:00 A.M. to March 18, 2014 10:00 A.M.

- ii. Rhode Island Non-Firm customers are required to have phone lines that transmit gas usage via telemetered devices. During the winter curtailment season, the devices must call in every day and technicians are dispatched to collect the usage if a device does not call in. The Meter Data Services Department collects gas usage in an hourly format in the MV90 system and provides a query for the daily usage for each curtailment period to the Special Billing Department. Special Billing then multiplies the ccfs by the therm conversion factor and adjusts for the fuel allowance to come up with the therms to bill the customer.
- iii. Attachment DIV-1-21-a contains the computation of all penalties or excess use charges that have been billed for unauthorized gas use for each customer during service curtailment or interruption in November and December 2013. The Company will supplement the details for January through March 2014 once the billing is completed. For purposes of confidentiality, the customer names have been replaced with their assigned customer number.
- iv. All the curtailment or interruptions of service were due to the forecasted cold weather and LNG use.
- v. There were no charges waived for unauthorized or excess gas use during this period.
- b. Attachment DIV-1-21-b contains the details on all billing adjustments for individual customers in excess of \$10,000.

# **Curtailment Period November 24, 2013**

Assigne	d Customer#	Curtailment Date	Curtailment Use Billed (therm)	Pipeline	Daily Index (per Dth)	Penalty Multiplier	Curtailment Rate (per therm)	Curtailment Amount
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (e) x (f) / 10	(h) = (c) x (g)
	6	11/24/2013	474	AGT	\$14.89	5	\$7.45	\$3,533.56
	17	11/24/2013	152	AGT	\$14.89	5	\$7.45	\$1,135.22
	17	11/24/2013	132	AGI	\$14.09	3	\$7.43	\$1,133.22
	19	11/24/2013	406	TGP	\$12.10	5	\$6.05	\$2,454.04

# Curtailment Period December 12-19, 2013

Assigned Customer #	Curtailment Date	Curtailment Use Billed (therm)	Pipeline	Daily Index (per Dth)	Penalty Multiplier	Curtailment Rate (per therm)	Curtailment Amount
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (e) x (f) / 10	$(h) = (c) \times (g)$
36	12/13/2013	317	AGT	\$26.53	5	\$13.27	\$4,200.75
55	12/16/2013	306	TGP	\$32.22	5	\$16.11	\$4,926.91
55	12/17/2013	1,542	TGP	\$22.43	5	\$11.21	\$17,286.08
55	12/18/2013	663	TGP	\$20.36	5	\$10.18	\$6,751.04
55 TOTAL		2,511					\$28,964.03
8	12/13/2013	21	AGT	\$26.53	5	\$13.27	\$284.80
17	12/13/2013	80	AGT	\$26.53	5	\$13.27	\$1,067.99
17	12/14/2013	88	AGT	\$32.97	5	\$16.48	\$1,450.12
17	12/15/2013	79	AGT	\$32.97	5	\$16.48	\$1,308.65
17	12/16/2013	72	AGT	\$32.97	5	\$16.48	\$1,184.86
17	12/17/2013	80	AGT	\$22.71	5	\$11.36	\$914.27
17	12/18/2013	65	AGT	\$19.93	5	\$9.96	\$651.96
17	12/19/2013	70	AGT	\$11.60	5	\$5.80	\$404.55
17 TOTAL		535					\$6,982.40

		Adjustment details	(v)	This reflects the canceled gas charges for December 31, 2013 - lanuary 30, 2014.	This was for a cuttailment on November 24, 2013 which was later cancelled and rebilled in June-July 2014. The original labled amount was \$6,476,69 and the rebilled amount was \$2,45,04.	This reflects the canceled gas charges for November 30, 2013 - December 31, 2013.	This was for a curtailment on December 12-19, 2013 which was later cancelled and rebilled in June-July 2014. The original laterd amount was \$548.64 and the rebilled amount was \$284.80.	This was for a cutailment on December 12-19, 2013 which was later cancelled and rebilled in June-July 2014. The original billed amount was \$13,698.28 and the rebilled amount was \$6,982.40.	This reflects the canceled gas charges for November 30, 2013 - December 31, 2013.	This was for a curtailment on December 12-19, 2013 which was later cancelled and rebilled in June-July 2014. The original labiled amount was \$8,092.45 and the rebilled amount was \$4,200.75.	This was for a cuttailment on December 12-19, 2013 which was later cancelled and rebilled in June-July 2014. The original billed amount was \$56,465.39 and the rebilled amount was \$28,964.03.
		Comment	(n)	(\$7,469) adj for Mar'13 Thi	\$6,528 Curtailment of 391 therms bill \$2,	(\$38,656) adj for Dec'13 Thi	S38,654 Curtailment of 21 therms bill 828,858	\$1,822 Curtailment of 516 therms bill 86,	(\$6,661) adj for Dec'13 Thi	\$6,638 Curtailment of 305 therms bill 84,	Thi late S2,330 Curtailment of 2420 therms bill S28
	E	lotal Margin	(t)	(\$7,469)	\$6,528	(\$38,656)	\$38,654	\$1,822	(\$6,661)	\$6,638	\$2,330
	Ē	Total Gas Cost	(s)	80	\$6,477	) 0\$	\$549	\$13,698	80	\$8,092	\$56,465
		Gas Cost per Dth	(r)	\$5.4590		\$5.8338	\$261.2571	\$265.4705 \$13,698	\$5.8338	\$265.3262	\$233.3281 \$56,465
Revenue		Margin Sharing	(b)	(\$7,469)	\$13,004 \$165,6442	(\$38,656)	\$39,203 \$	\$15,520 \$	(\$6,661)	\$14,731 \$	\$ 962'85\$
		Total	(d)	(\$11,329)	\$16,312	(\$62,104)	\$62,744	\$16,281	(\$10,355)	\$18,661	\$59,888
	3		(0)	(\$1)	\$1	(\$1)	\$77	\$1	(\$1)	\$1	\$82
		Paperless Other credit charges	(u)	0\$							
		Efficiency Surcharge	(m)	(\$3,842)	\$3,307	(\$21,584)	\$21,583	\$760	(\$3,383)	\$3,370	8919
		GET	(1)	(\$17)		(\$1,863)	\$1,880		(\$311)	\$560	\$92
	-	Sales	(k)								
		Charge rate	(j)	\$0.0733	\$0.0733	\$0.0733	\$0.0733	\$0.0733	\$0.0733	\$0.0733	\$0.0733
		Distribution	(i)	(\$6,754)	\$5,813	(\$37,941)	\$37,939	\$1,337	(\$5,946)	\$5,923	\$1,615
:	Commodity	rate (per therm)	(h)		\$16.5644		\$26.1257	\$26.5471		\$26.5326	\$23.3328
		Commodity	(g)	N/A	\$6,477	N/A	\$549	\$13,698	N/A	\$8,092	\$56,465
			(f)	(92,141)	79,692	(517,610)	517,590	18,752	(81,115)	80,810	24,455
	,	Bill Date Sales or Customer Usage mo/yr Trans Charge (therms)	(e)	(\$715)	\$715	(\$715)	\$715	\$485	(\$715)	\$715	\$715
		Sales or Trans	(p)	Trans	Trans	Trans	Trans	Trans	Trans	Trans	Trans
	Banner	mo/yr	(c)	May-13	Dec-13	Jan-14	Jan-14	Jan-14	Jan-14	Jan-14	Jan-14
_		Apply B	(q)	Mar-13	Nov-13	Dec-13	Dec-13	Dec-13	Dec-13	Dec-13	Dec-13
		Assigned #	(a)	20	19	8	∞	17	36	36	55

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4514 2014 Distribution Adjustment Charge Filing Responses to Division's First Set of Data Requests Attachment DIV 1-21-b Page 1 of 1