FINAL
SUMMARY REPORT

ROCKAWAY PARK FORMER MANUFACTURED GAS PLANT SITE
BULKHEAD AREA
INTERIM REMEDIAL MEASURE (IRM)

Prepared for

KEYSPAN CORPORATION
1 METROTECH CENTER
BROOKLYN, NEW YORK

Prepared by

TETRA TECH FW, INC.
1000 THE AMERICAN ROAD
MORRIS PLAINS, NEW JERSEY

JUNE 2004

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1.0 INTRODUCTION

This Final Summary Report (Final Report) has been prepared by Tetra Tech FW, Inc. (TtFW), formerly Foster Wheeler Environmental Corporation, on behalf of KeySpan Corporation (KeySpan). KeySpan conducted an Interim Remedial Measure (IRM) within the western portion of a bulkhead area directly across the road from the Rockaway Park former Manufactured Gas Plant (MGP). The purpose of this IRM was to eliminate potential exposure to MGP impacted materials within the bulkhead area through the removal of surface soils and historic metallic piping related to the former MGP.

1.1 Site Description and Background

The former Rockaway Park MGP site is situated on the north-central side of the Rockaway Peninsula in the borough of Queens, New York City (reference **Figure 1** for a location map of the site). The flat 9.8 acre site is bound on the north by Jamaica Bay, on the east by Beach 108th Street, and by the Rockaway Freeway to the west and south. The bulkhead work area is presently owned by the City of New York, and is located on property that was once occupied by the former Rockaway Park MGP. The facility operated for approximately 70 years beginning in the late 1880s. The land on which the bulkhead work area lies was created in the 1920s and 1930s when the northern side of Rockaway Beach was reclaimed from the Jamaica Bay through landfilling.

This IRM took place in the western portion of the bulkhead area directly across the road from the current plant property (reference **Figure 2** for a plan view of the site). The bulkhead, at the time, was comprised of reinforced timbers and wood beams and was severely deteriorated in most sections as a result of long exposure to weather and tides. The tie-back rods associated with the bulkhead wall were corroded, and holes in the walls allowed miscellaneous floating debris to collect within the confines of the bulkhead. Subsequent to the IRM, the City of New York undertook a rehabilitation of the bulkhead structure.

The surface soil in this area is basically quartz beach sand with lenses of silty sand. The surface is sloped downward toward the bay and contains depressions due to tidal erosion.

A sidewalk and road (Beach Channel Drive) are located approximately 30 feet south of the bulkhead wall. The IRM area consists of the soil within the 30-foot area between the sidewalk and the bulkhead.

1.2 Summary of Activities

The IRM field activities were performed in March 2002 by Coastal Environmental, a subcontractor to TtFW. The IRM was performed in accordance with a Work Plan that had been previously approved by the New York State Department of Environmental Conservation (NYSDEC). The Work Plan provided for the removal of tar and purifier waste impacted soils at the surface. However, a significant amount of these soils were removed by erosion prior to the start of field work.

During mobilization, a field walk was conducted to locate exposed pipe sections, most likely associated with the former MGP operations, and to identify soil impacted with weathered tar. In order to determine if potentially impacted soil was present, field screening was performed using real-time air monitoring equipment and visual and olfactory evidence. The IRM field activities included:

- The inspection, saw cutting, containerization, and disposal of 2, 4, 6, and 12-inch diameter sections of pipe;
- Plugging the opening of the 12-inch diameter pipe with Portland Cement to eliminate a potential exposure pathway; and,
- The excavation, containerization, and disposal of approximately 1,500 lbs. of impacted soil.

The field activities described above were completed over a three-day period.

1.3 Organization of the Report

In addition to Section 1.0 – Introduction, this Final Report also includes the following sections and appendices:

Section 2.0 – Construction Support Activities – This section describes each phase of the field activities that took place during the IRM.

Section 3.0 – Project Photo-Documentation – This section provides an overview of the field activities at the site through the use of photographs.

APPENDIX A: DISPOSAL CHARACITERZATION ANALYTICAL SAMPLE RESULTS – Provides the waste characterization analytical data for the sludge removed from the pipes and disposed of during the IRM.

APPENDIX B: WASTE DISPOSAL DOCUMENTATION – Includes the waste disposal documentation for soils removed during excavation activities.

2.0 CONSTRUCTION SUPPORT ACTIVITIES

TtFW provided construction support for the IRM. This section describes each phase of the field activities.

2.1 Pre-mobilization Activities

The IRM, which was originally scheduled for March 2001, was postponed due to access agreement issues with the City of New York. These issues were resolved in March 2002.

The site meeting was conducted on March 4, 2002 and included representatives of the NYSDEC, KeySpan, TtFW and Coastal Environmental. The work area at the bulkhead was visited and inspected and aspects of the field effort were planned and discussed by the participants.

2.2 Mobilization

Coastal Environmental mobilized the labor, equipment, and materials needed to complete the IRM. This included:

- Two OSHA certified employees to perform the field activities;
- Required Personal Protective Equipment (PPE);
- Tools (i.e., shovels, a gas powered saw, buckets, a pump, etc.); and
- DOT approved 55-gallon drums to containerize the soil and debris.

No heavy equipment was used during the field activities.

2.3 Excavation and the Removal of Piping and Piping Appurtenances

On March 13 and 14, 2002, Coastal Environmental, under the direction of TtFW and the NYSDEC, began to manually excavate soil identified as containing potential MGP impacted materials. Four pipes were uncovered during these excavation activities, which were performed at low tide.

A 2-inch diameter metal pipe, traversing perpendicular to the bulkhead, was uncovered between 0.5 and 1-foot below ground surface (bgs). The pipe was approximately 20 feet long.

A 4-inch diameter metal pipe, traversing down gradient from the sidewalk towards the bulkhead, was uncovered just below the surface soil. The pipe was intact; however, severe oxidation and corrosion was noted on the outside of the pipe. The pipe was approximately 30 feet long and was submerged at its northern extent during high tide.

A section of 6-inch diameter metal pipe originated beneath the sidewalk and traveled northeast, for approximately 30 feet, towards the bulkhead. This section of pipe curved east and continued parallel to the bulkhead for an additional 75 feet. The latter section of pipe (parallel to bulkhead) descended sharply to approximately 3 feet bgs and was covered by a large timber broken off from the bulkhead wall. The field crew was unable

to remove this timber; therefore, only the 30-foot section of pipe was removed during the March 13th and 14th field activities. The timber was marked with spray paint indicating the location of the deeper 75-foot section for removal at a later date.

A 12-inch diameter metal pipe, trending north to south from the direction of the sidewalk towards the bay, was also uncovered near the surface. This pipe was approximately 20 feet west of the other piping. Due to time constraints and flooding of the excavation by the incoming tide, the removal of this pipe could not be performed on either March 13th or the 14th.

Coastal Environmental manually excavated the full lengths of the 2 and 4-inch diameter pipes and shallow section (approximately 30 feet long) of the 6-inch diameter pipe. The excavated sections of pipe were cut into manageable pieces using a spark proof circular saw. Weathered tar, that was present in some of the pipes, flowed due to the heat created by the saw. The flowable tar was collected in a 55-gallon drum and disposed of at a later date. Each section of pipe was then screened with a PID and a combustible gas indicator (CGI) and visually inspected for evidence of product. The internal sections of 2-inch and 6-inch diameter pipes were free of debris and residuals. The 4-inch diameter pipe contained a hardened petroleum residue. In addition, the soil surrounding the pipe had a slight petroleum odor. The soil surrounding the 4-inch diameter pipe was screened with a photoionization detector (PID) and inspected for staining and evidence of petroleum odors. Any soil exhibiting odors, staining, or PID readings above background levels were containerized in 55-gallon DOT approved drums.

The internal sections of the pipes were flushed with water and the rinsate was collected in a 55-gallon drum. The cut pipe sections, excavated soil, flowable tar from the saw cutting, tar removed from the 4-inch diameter pipe, and the PPE were placed in 55-gallon drums. All of the drums were relocated to the former Rockaway MGP site pending waste classification and disposal.

The IRM field activities were to be completed on March 22, 2002. However, stormy weather and the high tide prevented the Coastal Environmental personnel from accessing the remaining sections of 6-inch and 12-inch diameter pipes.

Field activities resumed on March 28, 2002 during low tide conditions. The section of 6-inch diameter pipe (approximately 70 feet long) that remained from the previous field activities was relocated and removed by Coastal Environmental. The pipe was screened in the field and determined to be clean. The section of pipe was then saw cut into manageable pieces and placed in a 55-gallonn DOT approved container. The soil in the excavation immediately around the pipe exhibited dark brown to black staining and a slight petroleum odor. Screening with the PID indicated volatile organic concentrations of 0.3 parts per million (ppm), in the breathing zone, and up to 10.8 ppm from the excavated soil. The soil was removed and the excavation was backfilled with neighboring surface sand.

The 12-inch diameter pipe, uncovered during the previous excavation, was relocated by Coastal Environmental. A 3-foot x 3-foot section around the pipe, at approximately 3 feet bgs, was exposed and examined. The soil immediately around the pipe exhibited dark brown to black staining and contained a slight fuel/petroleum odor. This soil was excavated, placed into a 5-gallon bucket, and transferred into a 55-gallon drum. A square opening was cut in the top of the pipe with a gas-powered circular saw and the interior was inspected by representatives of TtFW and the NYSDEC. Seawater and sludge were visually identified in the pipe and approximately 10 gallons of sludge was removed and placed into a 55-gallon drum. The pipe was subsequently plugged with a Portland Cement mix. The material generated from these field activities were relocated to the former Rockaway MGP site staging area.

The soil was excavated and removed from both pipe areas. The soil and sludge was placed in the existing sludge drum at the staging area, and PPE and associated debris was placed in the existing PPE drum at the staging area.

Figure 3 shows the approximate location of the pipes subjected to the IRM and identifies the sections of pipe removed and the pipes left in place with plugs. See **Figure 2** for the location of these pipes in relation to the bulkhead area.

2.4 Site Restoration

This IRM effort was performed and completed on the 13th, 14th and 28th of March 2001. Immediately following the removal of the piping and impacted soils, excavation areas were backfilled with existing surface soil from the area between the bulkhead and the sidewalk. Due to the relatively shallow depths of the excavations and the limited soil removed, sand from the bulkhead area was used to restore the area to pre-remedial activity condition. The area in the bulkhead is covered with unconsolidated beach sand hence, no compaction was required during the restoration effort. The soil used for backfill was screened visually, for odor, and using PID measurements to verify that the material was free of noticeable MGP impacts.

The IRM generated 13 to 55 gallon drums of pipe (including one drum of rinsate); 4 to 55 gallon drums of impacted soils and pipe residue; and 1 drum of PPE. Drums containing waste material were temporarily staged at the former Rockaway MGP site. A locked gate and fence for security enclose this location. Waste classification data are included in **Appendix A**. The drums were removed from the site and transported to a licensed disposal facility. Waste transportation documentation is provided in **Appendix B**.

3.0 PROJECT PHOTO-DOCUMENTATION

The Bulkhead IRM Area is located just behind the Bulkhead along Jamaica Bay. Beach Channel Drive (out of the picture to the left) forms the southern boundary of the area.

Damage to the Bulkhead has resulted in debris washing on the beach during high tide.

Coastal Environmental manually excavated the soil to reach the pipes located beneath the ground surface.

One of the pipes that was uncovered during excavation.

The 12-inch diameter pipe. A section of soil measuring approximately 3 feet X 3 feet was excavated by hand. The pipe was inspected and sealed with Portland Cement to prevent future exposure pathways.

Soil from the excavation was screened with a PID. This was one of the methods used to determine if the soil required disposal.

The Bulkhead IRM Area was restored with soil from the surrounding area.

KeySpan Corporation
Environmental Asset Management
175 East Old Country Road
Hicksville, NY 11801

June 9, 2004

Mr. Douglas MacNeal
Project Manager - MGP Remedial Section
NYSDEC - Division of Environmental Remediation
Bureau of Western Remedial Action, 11th Floor
625 Broadway, Albany
New York 12233-7017

Subject: **Final Summary Report**
Rockaway Park Former Manufactured Gas Plant Site
Bulkhead Area Interim Remedial Measure
Site No. 2-41-029

Dear Mr. MacNeal:

Enclosed please find one (1) copy and one (1) electronic copy on compact disc (CD) of the report entitled:

"Final Summary Report for Rockaway Park Former Manufactured Gas Plant Site, Bulkhead Area Interim Remedial Measure (IRM)"

The Final Summary Report describes the activities and provides supporting documentation for the IRM conducted in the bulkhead area directly across the road from the former Rockaway Park Manufactured Gas Plant Site located in Rockaway Park, Queens County, New York.

If you have any questions or require further information to complete your review, please contact me at 516-545-2555.

Sincerely,

Thomas Campbell
Senior Environmental Engineer

Enclosure

cc: T. Kunkel, NYSDEC – Region 2 (1 copy)
S. Selmer, NYSDOH (1 copy)
L. Liebs, KeySpan (1 CD)
D. L. Riccobono, KeySpan (1 CD)
Repositories (3 copies)

bcc: F. Murphy, KeySpan (1 CD)
T. Leissing, KeySpan (2 copies, 1CD)
S. Ostrow, O & P (1 CD)
D Terry, GEI (1 copy)
D. Elkind, DSM & O (1 CD)
R. Cantagallo, TtFW (1 copy)
B. McClellan (PS&S, 1CD)

APPENDIX A

Disposal Characterization Analytical Sample Results

From: KeySpan To: Tom Campbell Date: 5/23/02 Time: 7:56:50 AM

Cut Metal pipes with oily sludge.

KEYSPAN
287 Maspeth Avenue, Brooklyn, NY 11211
Phone: (718) 963-5421, Fax: (718) 963-3026

Lab Report #: BL0203167
ELAP Number: 11173

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Customer Information

Company Name: Environmental Engineering & Compliance
Customer Contact: Tom Campbell
Address: 185 East Old Country Road
Hicksville, NY 11801

Phone Number: 516-545-2577
Fax Number: 516-545-2583
Customer PO:
Project ID: Site Investigation

Laboratory Information

Receive Date: 5/14/02 12:56:00 PM Approved By: 2832 Report Date: 5/23/02

Sample ID: BL0203167-01 Matrix: Soil Customer Sample #: RSS-01
Collect Date and Time: 3/18/02 12:00 PM Collector: Field Personnel
Location: Far Rockaway Bulkhead Support

Test	Parameters	Result		Qualifier	DF	Comments
Method: EPA 418.1	Analysis Date: 3/29/02 4:08:00 PM					
TPH	TPH	1660	mg/kg		20	By:H2M
Method: SW 846 - 1010	Analysis Date: 3/28/02					
Ignitability	Ignitability	>60	DEG C		1	By:H2M
Method: SW 846 - 8082	Analysis Date: 3/29/02 1:09:00 PM					
PCBs	Aroclor 1016 (PCB-1016)	420	ug/kg	U	5	By:H2M
	Aroclor 1221 (PCB-1221)	850	ug/kg	U	5	By:H2M
	Aroclor 1232 (PCB-1232)	420	ug/kg	U	5	By:H2M
	Aroclor 1242 (PCB-1242)	420	ug/kg	U	5	By:H2M
	Aroclor 1248 (PCB-1248)	420	ug/kg	U	5	By:H2M
	Aroclor 1254 (PCB-1254)	420	ug/kg	U	5	By:H2M
	Aroclor 1260 (PCB-1260)	420	ug/kg	U	5	By:H2M
Method: SW 846 - 8270B	Analysis Date: 4/4/02 3:50:00 PM					
SCDH Semi-Volatile Organics	Acenaphthene	24000	ug/kg		10	By:H2M
	Anthracene	60000	ug/kg		10	By:H2M
	Benzo(a)anthracene	100000	ug/kg		100	By:H2M
	Benzo(a)pyrene	88000	ug/kg		100	By:H2M
	Benzo(b)fluoranthene	41000	ug/kg		10	By:H2M
	Benzo(g,h,i)perylene	42000	ug/kg		10	By:H2M
	Benzo(k)fluoranthene	49000	ug/kg		10	By:H2M
	Chrysene	96000	ug/kg		100	By:H2M
	Dibenzo(a,h)anthracene	16000	ug/kg		10	By:H2M
	Fluoranthene	160000	ug/kg		100	By:H2M
	Fluorene	23000	ug/kg		10	By:H2M
	Indeno(1,2,3-cd)pyrene	34000	ug/kg		10	By:H2M
	Phenanthrene	280000	ug/kg		100	By:H2M
	Pyrene	270000	ug/kg		100	By:H2M
Method: SW 846 - 9020	Analysis Date: 3/29/02 1:10:00 PM					
TOX	Total Organic Halides (TOX)	25.5	mg/kg	U	1	By:H2M

From: KeySpan To: Tom Campbell

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Method:	SW 846 - 9040B	Analysis Date:	4/2/02 10:00:00 AM		
Corrosivity	Corrosivity	6.2	pH units	1	By:H2M

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Method:	SW 846 - 8260B	Analysis Date:	3/28/02 12:06:00 AM			
SCDH Volatile Organics	1,1,1,2-Tetrachloroethane	130	ug/kg	U	5	By:H2M
	1,1,1-Trichloroethane	130	ug/kg	U	5	By:H2M
	1,1,2,2-Tetrachloroethane	130	ug/kg	U	5	By:H2M
	1,1,2-Trichloroethane	130	ug/kg	U	5	By:H2M
	1,1-Dichloroethane	130	ug/kg	U	5	By:H2M
	1,1-Dichloroethene	130	ug/kg	U	5	By:H2M
	1,1-Dichloropropene	130	ug/kg	U	5	By:H2M
	1,2,3-Trichlorobenzene	130	ug/kg	U	5	By:H2M
	1,2,3-Trichloropropane	130	ug/kg	U	5	By:H2M
	1,2,4,5-Tetramethylbenzene	430	ug/kg		5	By:H2M
	1,2,4-Trichlorobenzene	130	ug/kg	U	5	By:H2M
	1,2,4-Trimethylbenzene	1200	ug/kg		5	By:H2M
	1,2-Dibromo-3-chloropropane	130	ug/kg	U	5	By:H2M
	1,2-Dibromoethane (EDB)	130	ug/kg	U	5	By:H2M
	1,2-Dichlorobenzene	40	ug/kg	J	5	By:H2M
	1,2-Dichloroethane	130	ug/kg	U	5	By:H2M
	1,2-Dichloropropane	130	ug/kg	U	5	By:H2M
	1,3,5-Trimethylbenzene / p-Ethyltoluene (co-elute)	720	ug/kg		5	By:H2M
	1,3-Dichlorobenzene	130	ug/kg	U	5	By:H2M
	1,3-Dichloropropane	130	ug/kg	U	5	By:H2M
	1,4-Dichlorobenzene	130	ug/kg	U	5	By:H2M
	2,2-Dichloropropane	130	ug/kg	U	5	By:H2M
	Acetone	1000	ug/kg		5	By:H2M
	Benzene	60	ug/kg	J	5	By:H2M
	Bromobenzene	130	ug/kg	U	5	By:H2M
	Bromochloromethane	130	ug/kg	U	5	By:H2M
	Bromodichloromethane	130	ug/kg	U	5	By:H2M
	Bromoform	130	ug/kg	U	5	By:H2M
	Carbon Tetrachloride	130	ug/kg	U	5	By:H2M
	Chlorobenzene	130	ug/kg	U	5	By:H2M
	Chloroethane	130	ug/kg	U	5	By:H2M
	Chloroform	130	ug/kg	U	5	By:H2M
	cis-1,2-Dichloroethene	130	ug/kg	U	5	By:H2M
	cis-1,3-Dichloropropene	130	ug/kg	U	5	By:H2M
	Dibromochloromethane	130	ug/kg	U	5	By:H2M
	Dibromomethane	130	ug/kg	U	5	By:H2M
	Dichlorodifluoromethane	130	ug/kg	U	5	By:H2M
	Ethylbenzene	910	ug/kg		5	By:H2M
	Freon 113	130	ug/kg	U	5	By:H2M
	Hexachlorobutadiene	130	ug/kg	U	5	By:H2M
	Isopropylbenzene	210	ug/kg		5	By:H2M
	m,p-Xylene	530	ug/kg		5	By:H2M
	MEK (2-Butanone)	220	ug/kg		5	By:H2M
	Methylene chloride	150	ug/kg		5	By:H2M
	Methylisobutylketone	130	ug/kg	U	5	By:H2M
	MTBE	130	ug/kg	U	5	By:H2M

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SCDH Volatile Organics	n-Butylbenzene	70	ug/kg	J	5	By:H2M
	n-Propylbenzene	190	ug/kg		5	By:H2M
	Naphthalene	16000	ug/kg	E	5	By:H2M
	o-Xylene	760	ug/kg		5	By:H2M
	p-Diethylbenzene	260	ug/kg		5	By:H2M
	p-Isopropyltoluene	40	ug/kg	J	5	By:H2M
	sec-Butylbenzene	130	ug/kg	U	5	By:H2M
	Styrene	130	ug/kg	U	5	By:H2M
	tert-Butylbenzene	130	ug/kg	U	5	By:H2M
	Tetrachloroethene	130	ug/kg	U	5	By:H2M
	Toluene	170	ug/kg		5	By:H2M
	trans-1,2-Dichloroethene	130	ug/kg	U	5	By:H2M
	trans-1,3-Dichloropropene	130	ug/kg	U	5	By:H2M
	Trichloroethene	130	ug/kg	U	5	By:H2M
	Trichlorofluoromethane	130	ug/kg	U	5	By:H2M
	Vinyl chloride	130	ug/kg	U	5	By:H2M
Method: 7.3.3.2	Analysis Date: 3/30/02 10:35:00 AM					
Cyanide	Cyanide	100	mg/kg	U	1	By:H2M
Sulfide	Sulfide	100	mg/kg	U	1	By:H2M
Method: SW 846 - 6010B	Analysis Date: 5/21/02 12:34:00 PM					
TCLP Arsenic	Arsenic (As)	0.02	mg/l	U	1	By:H2M
TCLP Lead	Lead (Pb)	0.02	mg/l	U	1	By:H2M
TCLP Barium	Barium (Ba)	0.2	mg/l	U	1	By:H2M
TCLP Cadmium	Cadmium (Cd)	0.005	mg/l	U	1	By:H2M
TCLP Chromium	Chromium (Cr)	0.01	mg/l	U	1	By:H2M
TCLP Selenium	Selenium (Se)	0.02	mg/l	U	1	By:H2M
TCLP Silver	Silver (Ag)	0.02	mg/l	U	1	By:H2M
Method: SW 846 - 7471	Analysis Date: 5/16/02 11:10:03 AM					
TCLP Mercury	Mercury (Hg)	0.2	ug/l	U	1	By:H2M
Method: SW 846 - 6010B	Analysis Date: 4/8/02 7:04:00 PM					
Arsenic	Arsenic (As)	28.0	mg/kg		1	By:H2M
Barium	Barium (Ba)	51	mg/kg	U	1	By:H2M
Cadmium	Cadmium (Cd)	14.5	mg/kg		1	By:H2M
Chromium	Chromium (Cr)	25.5	mg/kg		1	By:H2M
Lead	Lead (Pb)	324	mg/kg		1	By:H2M
Selenium	Selenium (Se)	2.33	mg/kg		1	By:H2M
Silver	Silver (Ag)	2.55	mg/kg	U	1	By:H2M
Method: SW 846 - 7471A	Analysis Date: 3/26/02 12:01:48 PM					
Mercury	Mercury (Hg)	0.87	mg/kg		1	By:H2M

Sample Comment:

TCLP Metals testing added to sample 5/14/02. Due date adjusted and received date reset accordingly.

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SAMPLE CONDITION RECORD

Are samples submitted with a chain of custody?	Yes	Are the number of samples the same as stated on the chain of custody?	Yes
Are bottle caps tight and securely in place?	Yes	Were samples within the holding time for the requested test(s)?	Yes
Were all containers intact when received?	Yes	Is the volume of sample submitted sufficient for the requested test(s)?	Yes
Were samples submitted in an ice chest?	Yes	Are all samples for volatile organic analyses free of headspace?	N/A
Were samples received cold?	Yes		

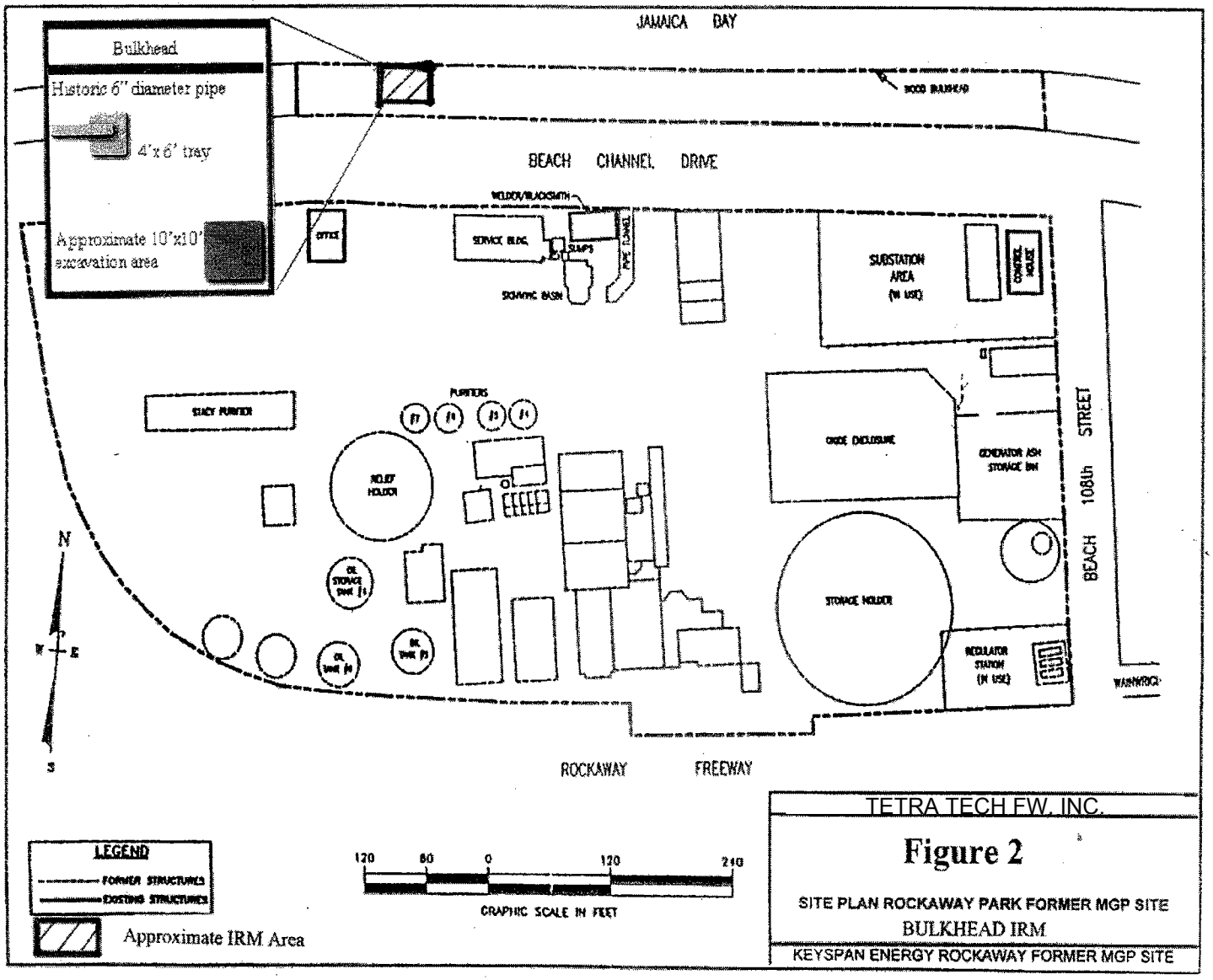
Qualifiers:
- U - Indicates compound was analyzed for but not detected.
- D - Diluted
- B - Indicates that compound was found in associated blank as well as in the sample.
- UD - Indicates diluted compound was analyzed for but not detected.
- J - Indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero (0).
- E - Exceeds calibration range.
- N - QC criteria was not met for matrix spike recovery.

Comments: All solid sample results are reported on a dry weight basis, unless otherwise noted.
H2M for analysis. Copyof report to M.Brucella.FR Bulkhead Support Sample

ND - Not Detected NA - Not Analyzed

Approval Signature

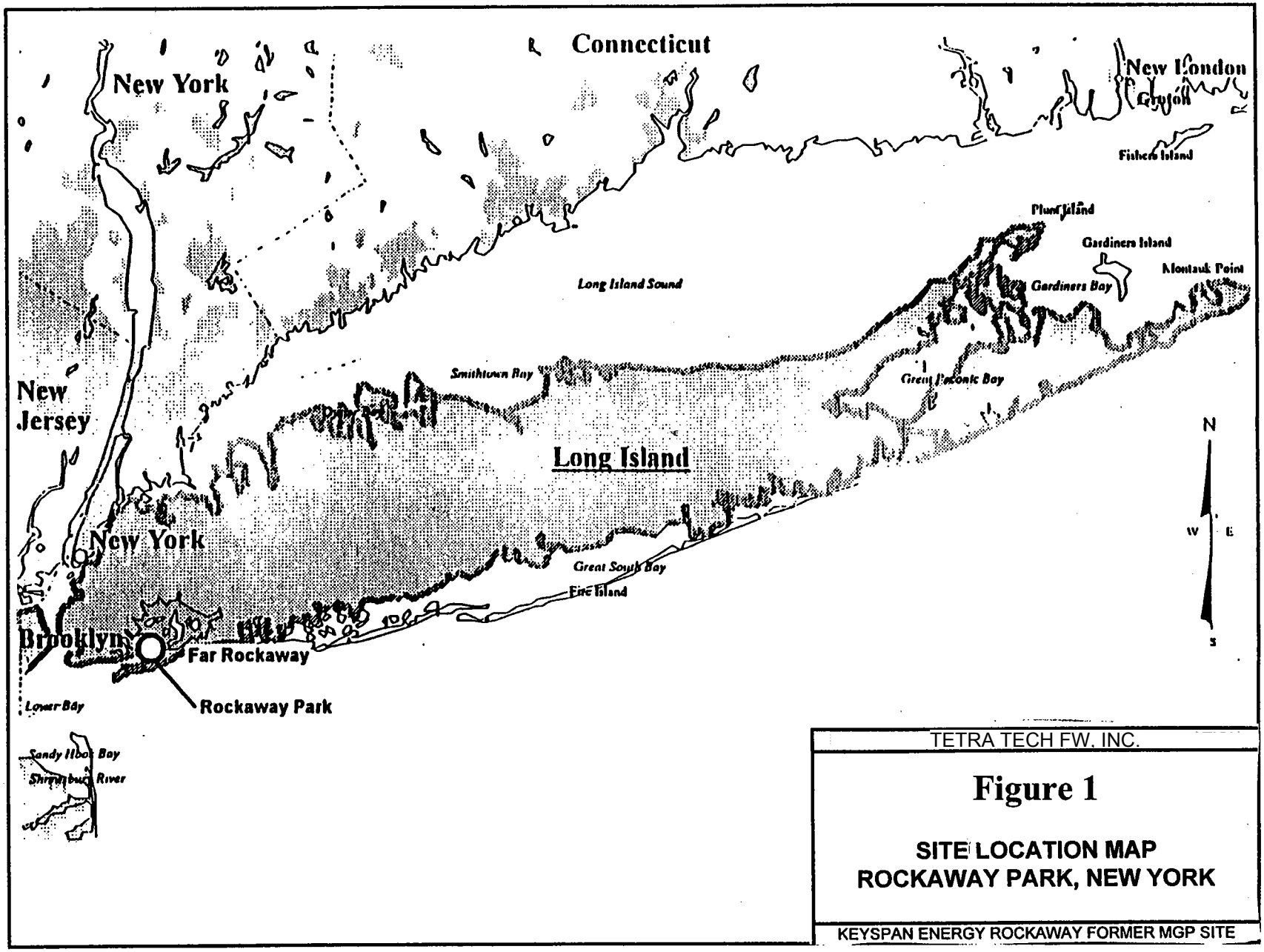
Laboratory results shall not be reproduced except in full, without written approval of the Laboratory.
Results relate only to the sample "As Received" by the laboratory.



TETRA TECH FW, INC.

Figure 2

SITE PLAN ROCKAWAY PARK FORMER MGP SITE
BULKHEAD IRM
KEYSPAN ENERGY ROCKAWAY FORMER MGP SITE



TETRA TECH FW, INC.

Figure 1

SITE LOCATION MAP
ROCKAWAY PARK, NEW YORK

KEYSPAN ENERGY ROCKAWAY FORMER MGP SITE

TO: TOM CAMPBELL

PRIVATE
NON-HAZARDOUS
DOCUMENT OF CARGO

ID 34897

N.Y. State 364 Permit No. 1A-041

#1 MEG ID # 676 — #1 Truck License Number 27566-RA

#2 MEG ID # _____ — #2 Truck License Number _____

IDENTIFICATION

Generator: Key Span, Beach Channel Dr., Rockaway Park — Company name, mailing address and telephone number

Transporter: **Miller Environmental Group, Inc.**
538 Edwards Avenue
Calverton, New York 11933

TSDF Treatment Storage or Disposal Facility: Key Span 175 E. Old Country Rd Hicksville NY

WASTE INFORMATION

NON-HAZARDOUS WASTE SHIPPING DESCRIPTION	Containers No.	Containers Type	Total Quantity Gals./Lbs./Yds./Bgs.	NYSDEC Code	TSDF Code
Oil Filled Pipes	13	MD	2600266.	NOII	
Drill Cuttings Solid	4	MD	2500265	NOH1	
Sample Jars	1	MD	70 LBS.	NOII	
Empty Drums	5				

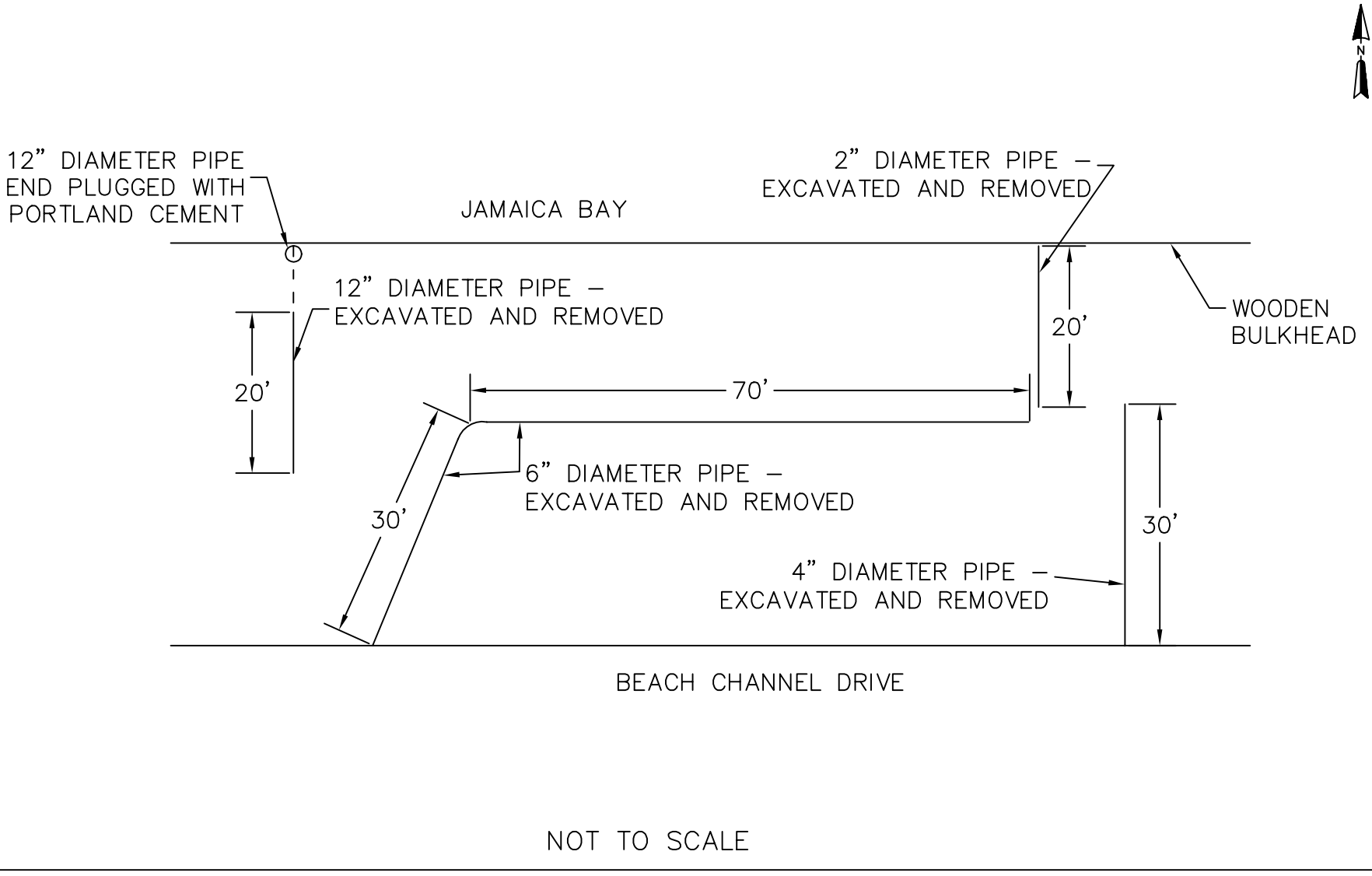
I hereby certify that the above waste description is complete and accurate, and that no component exist in the wastes which render it hazardous as defined by 6 NY CRR Section 371 and 372.

Generator's Signature — Date 6-18-02

Transporter's Signature #1 — Date 6-18-02

Transporter's Signature #2 — Date

TSDF Signature — Date 6-18-02



NOT TO SCALE

TETRA TECH FW, INC.	TITLE: Pipes Subjected to the IRM Rockaway Park Former MGP Site Bulkhead IRM	DWN: CTS	DES.: RO	PROJECT NO.: 1978.0101.0002
		CHKD:	APPD:	FIGURE NO.: 3
		DATE: 03/01/04	REV.: 0	

N:\GIS\KEYSPAN ROCKAWAY PARK\FIGURE 3 030104.DWG