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Kenneth J. Bauer
President

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Long Island Rail Road

March 3, 2003

Ms. Champanine Saviengvong
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, 11th Floor
625 Broadway
Albany, New York 12233-7015

MAR 7

RE: Construction Excavation Data
Massapequa Substation, Site No. V00397-1, Index No. W1-0910-02-02

Dear Ms. Saviengvong

The Long Island Rail Road (LIRR) has recently completed the Construction Excavation Investigation field program at the Massapequa substation. Soil sampling and analytical activities were conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Construction Excavation Work Plan dated October 2002. A brief description of the field activities, preliminary analytical results and conclusions are provided below:

Introduction

The LIRR has initiated a long–term capital improvement project to upgrade several electric substations to accommodate the new "M-7" electric train coaches entering into service. Soil excavation activities are planned to support renovation and construction efforts at the Massapequa substation. Soil borings were recently advanced within the future excavation area in support of construction to determine the soil quality beneath the vertical limit of excavation.

Field Activities

Based on the October 2002 Construction Excavation Work Plan, a total of eight soil borings were advanced to a depth of 20 feet below grade and one soil boring was advanced to a depth of eight feet below grade. The soil probes were advanced utilizing Geoprobe tooling and an ATV-mounted Earthprobe. The Geoprobe tooling consisted of drill rods and either a 1.5-inch outside

diameter by 2-foot long or a 2-inch outside diameter by 4-foot long soil probe sampler. A clear polyethylene terephthalate-G (PETG) sample tube liner, dedicated to each soil probe sample, was used to contain the sample within the sampler. Each soil probe was advanced utilizing the Earthprobe to drive the soil probe sampler, sample tube liner and drill rods to the desired depth. The soil probe sampler was retrieved using the Earthprobe.

All soil samples collected were geologically characterized, inspected for staining, discoloration or odors, and screened for volatile organic compounds (VOCs) using a photoionization detector (PID) and mercury vapor using a Jerome mercury vapor analyzer.

It should be noted that soil samples MSSBX-01 (14-16), MSSBX-01 (16-18), MSSBX-01 (18-20), MSSBX-02 (16-18), MSSBX-02 (18-20), MSSBX-07 (14-16), MSSBX-07 (16-18), MSSBX-07 (18-20), MSSBX-09 (18-20), and MSSBX-10 (14-16) could not be collected due to insufficient recovery. Due to site constraints, soil boring MSSBX-06 was limited to a depth of eight feet below grade and was advanced utilizing a hand auger. Similarly, soil boring MSSBX-08 could not be completed due to site limitations.

Soil samples were analyzed for Semivolatile Organic Compounds (SVOCs) by Method 8270, RCRA metals by Methods 6010/7471, and Polychlorinated Biphenyls (PCBs) by Method 8082. In addition, a set of quality control/quality assurance (QA/QC) samples consisting of a matrix spike and matrix spike duplicate were collected for analysis for every 20 environmental samples collected in the field. Mitkem Corporation, a New York State ELAP-approved and CLP-certified laboratory, reported all analytical results following a Category B deliverable format.

Analytical Results

This section presents the preliminary analytical results of the Construction Excavation Investigation conducted at the Massapequa substation. These analytical results are considered preliminary since the data has not been formally validated. Validated data will be provided as part of the Delineation Investigation final report. Soil sample results generated during this investigation were compared to the criteria included in Appendix A of the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) No. 4046 (referred to in this letter report as the "NYSDEC TAGM criteria"). It should be noted that the TAGM 4046 criteria for PCBs of 10,000 ug/kg was utilized for subsurface soil. The results for SVOCs, RCRA metals and PCBs analyses are provided in **Tables 1** through **3**, respectively (see **Attachment 1**). The exceedances of the NYSDEC TAGM criteria are summarized below:

SVOCs

- Soil samples did not exhibit SVOCs concentrations in excess of the NYSDEC TAGM criteria.

RCRA Metals

- Mercury was detected at concentrations of 0.13 mg/kg and 0.3 mg/kg in excess of the NYSDEC TAGM criterion of 0.1 mg/kg in soil samples MSSBX-06 (6-8) and MSSBX-10 (8-10), respectively.

PCBs

- Soil samples did not exhibit PCB concentrations in excess of the NYSDEC TAGM criteria.

Conclusions

Based upon the preliminary Construction Investigation results for the Massapequa substation, the soil beneath the vertical excavation limit for substation construction does not appear to be impacted. As a result, additional investigation or remediation activities below the future construction area are not warranted. Upon Department review and approval of these results, the LIRR intends to proceed with the excavation activities described in the NYSDEC approved Construction Excavation Work Plan dated October 2002.

As explained in previous discussions, the LIRR must commence construction activities at the Massapequa substation as quickly as possible to avoid third party construction delay claims. Therefore, your timely review of this data and issuance of an approval letter is requested. If you have any questions and/or comments, please do not hesitate to contact me at (718) 558-3252.

Sincerely,

Lewis D. Wunderlich

cc. D. D'Ambrosio (NYSDEC)
K. Carpenter (NYSDEC)
T. King (NYSDEC)
B. Mitchell (NYSDOH)
J. Kushwara (USEPA)
B. Mackay (NCDH)
C. Channer (MTA)
A. Postyn (D&B)
P. Manske (LIRR)

ATTACHMENT 1

TABLE 1

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-02	MSSBX-02	MSSBX-02	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	99.0	83.0	84.0	89.0	85.0	99.0	98.0	93.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-02	MSSBX-02	MSSBX-02	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	99.0	83.0	84.0	89.0	85.0	99.0	98.0	93.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	U	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	0	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-02	MSSBX-02	MSSBX-02	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(14-16)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	89.0	86.0	84.0	97.0	98.0	94.0	93.0	85.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-02	MSSBX-02	MSSBX-02	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(14-16)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	89.0	86.0	84.0	97.0	98.0	94.0	93.0	85.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	U	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	0	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	91.0	99.0	91.0	97.0	92.0	88.0	89.0	86.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	91.0	99.0	91.0	97.0	92.0	88.0	89.0	86.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	U	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	0	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	86.0	84.0	82.0	98.0	99.0	97.0	94.0	94.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	86.0	84.0		98.0	99.0	97.0	94.0	94.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	55 J	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	55	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-06	MSSBX-06	MSSBX-07	MSSBX-07	MSSBX-07	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	90.0	92.0	90.0	96.0	97.0	98.0	97.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-06	MSSBX-06	MSSBX-07	MSSBX-07	MSSBX-07	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	90.0	92.0	90.0	96.0	97.0	98.0	97.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	U	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	0	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-07	MSSBX-07	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-10	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)	(10-12)	(16-18)	(4-6)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	87.0	98.0	97.0	98.0	95.0	88.0	98.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U	U	U	330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	330	---
2-Chlorophenol	U	U	U	U	U	U	U	U	330	800
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	330	---
2-Methylphenol	U	U	U	U	U	U	U	U	330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U	U	U	330	---
4-Methylphenol	U	U	U	U	U	U	U	U	330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	U	U	330	---
Hexachloroethane	U	U	U	U	U	U	U	U	330	---
Nitrobenzene	U	U	U	U	U	U	U	U	330	200
Isophorone	U	U	U	U	U	U	U	U	330	4,400
2-Nitrophenol	U	U	U	U	U	U	U	U	330	330
2,4-Dimethylphenol	U	U	U	U	U	U	U	U	330	---
2,4-Dichlorophenol	U	U	U	U	U	U	U	U	330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	330	---
Naphthalene	U	U	U	U	U	U	U	U	330	13,000
4-Chloroaniline	U	U	U	U	U	U	U	U	330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	330	---
Hexachlorobutadiene	U	U	U	U	U	U	U	U	330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U	U	U	330	240
2-Methylnaphthalene	U	U	U	U	U	U	U	U	330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U	U	U	330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U	U	U	330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U	U	U	330	100
2-Chloronaphthalene	U	U	U	U	U	U	U	U	330	---
2-Nitroaniline	U	U	U	U	U	U	U	U	330	430
Dimethylphthalate	U	U	U	U	U	U	U	U	330	2,000
Acenaphthylene	U	U	U	U	U	U	U	U	330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	330	1,000
3-Nitroaniline	U	U	U	U	U	U	U	U	330	500
Acenaphthene	U	U	U	U	U	U	U	U	330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-07	MSSBX-07	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-10	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)	(10-12)	(16-18)	(4-6)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	87.0	98.0	97.0	98.0	95.0	88.0	98.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U	U	U	330	200
4-Nitrophenol	U	U	U	U	U	U	U	U	330	100
Dibenzofuran	U	U	U	U	U	U	U	U	330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	330	---
Diethylphthalate	U	U	U	U	U	U	U	U	330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Fluorene	U	U	U	U	U	U	U	U	330	50,000
4-Nitroaniline	U	U	U	U	U	U	U	U	330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	U	U	330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	330	---
Hexachlorobenzene	U	U	U	U	U	U	U	U	330	410
Pentachlorophenol	U	U	U	U	U	U	U	U	330	1,000
Phenanthrene	U	U	U	U	U	U	U	U	330	50,000
Anthracene	U	U	U	U	U	U	U	U	330	50,000
Carbazole	U	U	U	U	U	U	U	U	330	---
Di-n-butylphthalate	U	U	U	U	U	U	U	U	330	8,100
Fluoranthene	U	U	U	U	U	U	U	U	330	50,000
Pyrene	U	U	U	U	U	U	U	U	330	50,000
Butylbenzylphthalate	U	U	U	U	U	U	U	U	330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	330	---
Benzo(a)anthracene	U	U	U	U	U	U	U	U	330	224
Chrysene	U	U	U	U	U	U	U	U	330	400
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	U	U	U	330	50,000
Di-n-octylphthalate	U	U	U	U	U	U	U	U	330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U	U	U	330	1,100
Benzo(a)pyrene	U	U	U	U	U	U	U	U	330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	U	U	330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U	U	U	330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U	U	U	330	50,000
Total PAHs	0	0	0	0	0	0	0	0	--	100,000
Total CaPAHs	0	0	0	0	0	0	0	0	--	10,000
Total SVOCs	0	0	0	0	0	0	0	0	--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10			LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(6-8)	(8-10)	(10-12)	(12-14)	(16-18)	(18-20)				
DATE OF COLLECTION	2/6/03	2/6/03	2/3/03	2/3/03	2/3/03	2/3/03				
DILUTION FACTOR	1	1	1	1	1	1				
PERCENT SOLIDS	96.0	91.0	80.0	83.0	86.0	88.0				
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)			(ug/kg)	(ug/kg)
Phenol	U	U	U	U	U	U			330	30
bis(2-Chloroethyl)ether	U	U	U	U	U	U			330	---
2-Chlorophenol	U	U	U	U	U	U			330	800
1,3-Dichlorobenzene	U	U	U	U	U	U			330	---
1,4-Dichlorobenzene	U	U	U	U	U	U			330	---
1,2-Dichlorobenzene	U	U	U	U	U	U			330	---
2-Methylphenol	U	U	U	U	U	U			330	100
2,2-oxybis (1-chloropropane)	U	U	U	U	U	U			330	---
4-Methylphenol	U	U	U	U	U	U			330	900
N-Nitroso-di-n-propylamine	U	U	U	U	U	U			330	---
Hexachloroethane	U	U	U	U	U	U			330	---
Nitrobenzene	U	U	U	U	U	U			330	200
Isophorone	U	U	U	U	U	U			330	4,400
2-Nitrophenol	U	U	U	U	U	U			330	330
2,4-Dimethylphenol	U	U	U	U	U	U			330	---
2,4-Dichlorophenol	U	U	U	U	U	U			330	400
1,2,4-Trichlorobenzene	U	U	U	U	U	U			330	---
Naphthalene	U	U	U	U	U	U			330	13,000
4-Chloroaniline	U	U	U	U	U	U			330	220
bis(2-Chloroethoxy)methane	U	U	U	U	U	U			330	---
Hexachlorobutadiene	U	U	U	U	U	U			330	---
4-Chloro-3-methylphenol	U	U	U	U	U	U			330	240
2-Methylnaphthalene	U	U	U	U	U	U			330	36,400
Hexachlorocyclopentadiene	U	U	U	U	U	U			330	---
2,4,6-Trichlorophenol	U	U	U	U	U	U			330	---
2,4,5-Trichlorophenol	U	U	U	U	U	U			330	100
2-Chloronaphthalene	U	U	U	U	U	U			330	---
2-Nitroaniline	U	U	U	U	U	U			330	430
Dimethylphthalate	U	U	U	U	U	U			330	2,000
Acenaphthylene	U	U	U	U	U	U			330	41,000
2,6-Dinitrotoluene	U	U	U	U	U	U			330	1,000
3-Nitroaniline	U	U	U	U	U	U			330	500
Acenaphthene	U	U	U	U	U	U			330	50,000

TABLE 1 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

SAMPLE ID	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10			LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(6-8)	(8-10)	(10-12)	(12-14)	(16-18)	(18-20)				
DATE OF COLLECTION	2/6/03	2/6/03	2/3/03	2/3/03	2/3/03	2/3/03				
DILUTION FACTOR	1	1	1	1	1	1				
PERCENT SOLIDS	96.0	91.0	80.0	83.0	86.0	88.0				
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)			(ug/kg)	(ug/kg)
2,4-Dinitrophenol	U	U	U	U	U	U			330	200
4-Nitrophenol	U	U	U	U	U	U			330	100
Dibenzofuran	U	U	U	U	U	U			330	6,200
2,4-Dinitrotoluene	U	U	U	U	U	U			330	---
Diethylphthalate	U	U	U	U	U	U			330	7,100
4-Chlorophenyl-phenylether	U	U	U	U	U	U			330	---
Fluorene	U	U	U	U	U	U			330	50,000
4-Nitroaniline	U	U	U	U	U	U			330	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U			330	---
N-Nitrosodiphenylamine	U	U	U	U	U	U			330	---
4-Bromophenyl-phenylether	U	U	U	U	U	U			330	---
Hexachlorobenzene	U	U	U	U	U	U			330	410
Pentachlorophenol	U	U	U	U	U	U			330	1,000
Phenanthrene	U	U	U	U	U	U			330	50,000
Anthracene	U	U	U	U	U	U			330	50,000
Carbazole	U	U	U	U	U	U			330	---
Di-n-butylphthalate	U	U	U	U	U	U			330	8,100
Fluoranthene	U	U	U	U	U	U			330	50,000
Pyrene	U	U	U	U	U	U			330	50,000
Butylbenzylphthalate	U	U	U	U	U	U			330	50,000
3,3-Dichlorobenzidine	U	U	U	U	U	U			330	---
Benzo(a)anthracene	U	U	U	U	U	U			330	224
Chrysene	U	U	U	U	U	U			330	400
bis(2-Ethylhexyl)phthalate	38 J	46 J	U	U	U	U			330	50,000
Di-n-octylphthalate	U	U	U	U	U	U			330	50,000
Benzo(b)fluoranthene	U	U	U	U	U	U			330	1,100
Benzo(k)fluoranthene	U	U	U	U	U	U			330	1,100
Benzo(a)pyrene	U	U	U	U	U	U			330	61
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U			330	3,200
Dibenzo(a,h)anthracene	U	U	U	U	U	U			330	14
Benzo(g,h,i)perylene	U	U	U	U	U	U			330	50,000
Total PAHs	0	0	0	0	0	0			--	100,000
Total CaPAHs	0	0	0	0	0	0			--	10,000
Total SVOCs	38	46	0	0	0	0			--	500,000

QUALIFIERS:
U: Compound analyzed for but not detected.
J: Compound found at a concentration below the detection limit.

NOTES:
-- : Not applicable.
[ ] : Concentration exceeds NYSDEC TAGM 4046 Appendix A Criteria.

TABLE 2

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-02	MSSBX-02	MSSBX-02	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
PERCENT SOLIDS	99.0	83.0	84.0	89.0	85.0	99.0	98.0	93.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	0.54 B	0.78 B	3.2	2.3	0.72 B	0.33 B	1.1	0.8 B	3.0	12
Barium	2.1 B	3.3 B	3 B	3.7 B	3.1 B	2.5 B	3.4 B	3.5 B	3.0	600
Cadmium	U	U	U	0.054 B	U	U	U	0.037 B	2.0	10
Chromium	6.4	2.6	10.1	5.4	3.8	1.1	3	3.8	3.0	50
Lead	0.74	1.5	1.5	1.9	0.93	1.1	1.6	5.3	1.0	500
Mercury	U	U	U	U	U	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	U	U	U	U	U	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-02	MSSBX-02	MSSBX-02	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(14-16)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/6/03	2/6/03	2/6/03		
PERCENT SOLIDS	89.0	86.0	84.0	97.0	98.0	94.0	93.0	85.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	0.54 B	0.73 B	1.1	0.61 B	0.8	0.7 B	0.43 B	0.64 B	3.0	12
Barium	11.1	3.6 B	5.1 B	2.3 B	4.4 B	7.9 B	6.8 B	2.9 B	3.0	600
Cadmium	0.13 B	U	U	U	U	0.037 B	U	U	2.0	10
Chromium	2	2.8	3	1.5 B	2.7	2.1	1.4	1.4	3.0	50
Lead	1.2	1.3	1.7	1 B	0.96 B	1.8	1.2	0.99	1.0	500
Mercury	U	U	U	U	U	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	U	U	U	U	U	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
PERCENT SOLIDS	91.0	99.0	91.0	97.0	92.0	88.0	89.0	86.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	0.6 B	0.93	0.62 B	2.2	1.4	U	0.55 B	0.58 B	3.0	12
Barium	3 B	2.9 B	2.6 B	4.2 B	4.5 B	1.6 B	3.7 B	3.4 B	3.0	600
Cadmium	U	U	U	0.073 B	0.31	U	U	U	2.0	10
Chromium	3.7	2.6	2.2	14.3	13.7	2.2	4.2	2.1	3.0	50
Lead	1.1	1	1	2.8	1.8	2.2	1.1	1.1	1.0	500
Mercury	U	U	U	0.025 B	U	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	0.1 B	U	U	U	U	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
PERCENT SOLIDS	86.0	84.0	82.0	98.0	99.0	97.0	94.0	94.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	0.67 B	0.77 B	0.74 B	0.56 B	0.51 B	4.4	0.79 B	0.31 B	3.0	12
Barium	3.7 B	3.5 B	5.6 B	2.2 B	2.9 B	5.4 B	4.8 B	2.2 B	3.0	600
Cadmium	U	U	U	U	U	0.066 B	U	U	2.0	10
Chromium	2.3	2.8	3.9	1.8	2	11.5	5.7	1.7	3.0	50
Lead	1	1.4	1.5	1.1	1.1	3.3	1.4	0.93	1.0	500
Mercury	U	U	U	U	U	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	U	U	U	U	U	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-06	MSSBX-06	MSSBX-07	MSSBX-07	MSSBX-07	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
PERCENT SOLIDS	88.0	90.0	92.0	90.0	96.0	97.0	98.0	97.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	0.8 B	0.53 B	0.58 B	0.84 B	1.2	1.1	0.69 B	1.1	3.0	12
Barium	2.5 B	2.8 B	2.7 B	3 B	10.3	3.7 B	3 B	5.1 B	3.0	600
Cadmium	U	U	U	0.077 B	0.29	0.14 B	0.072 B	0.32	2.0	10
Chromium	1.6	2.6	2	2	6.2	4.3	1.9	10.4	3.0	50
Lead	1	1	1	24.8	71.6	1.3	1.1	38.5	1.0	500
Mercury	U	U	U	U	0.13	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	U	U	U	U	U	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-07	MSSBX-07	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-10	INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)	(10-12)	(16-18)	(4-6)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
PERCENT SOLIDS	88.0	87.0	98.0	97.0	98.0	95.0	88.0	98.0		
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Arsenic	1.9	1.5	0.57 B	0.72 B	1.3	1.8	0.58 B	0.95	3.0	12
Barium	2.8 B	3.7 B	3.6 B	2.7 B	4 B	3 B	2.7 B	2.3 B	3.0	600
Cadmium	0.066 B	0.037 B	U	0.059 B	0.065 B	0.18 B	U	0.035 B	2.0	10
Chromium	4.1	3	1.5	2.3	8.8	5.5	3.8	2	3.0	50
Lead	1.9	1.6	4	2.3	3	2	2.1	1 B	1.0	500
Mercury	U	U	U	U	U	U	U	U	0.1	0.1
Selenium	U	U	U	U	U	U	U	U	8.0	3.9
Silver	U	U	U	U	U	U	U	0.45 B	2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 2 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

RCRA METALS

SAMPLE ID	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10			INSTRUMENT DETECTION LIMITS	NYSDEC TAGM 4046 Appendix A Comparison Criteria
SAMPLE DEPTH (FT)	(6-8)	(8-10)	(10-12)	(12-14)	(16-18)	(18-20)				
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/3/03				
PERCENT SOLIDS	96.0	91.0	80.0	83.0	86.0	88.0				
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			(mg/kg)	(mg/kg)
Arsenic	0.7	3.5	0.83	1	0.67 B	0.73 B			3.0	12
Barium	3.8 B	19.5	5.7 B	2.8 B	3.3 B	2.1 B			3.0	600
Cadmium	U	0.17 B	0.073 B	U	U	U			2.0	10
Chromium	1.8 B	11.8	2.4	2.4	2.4	2.6			3.0	50
Lead	0.87 B	8.3	1.3 B	0.95 B	0.88 B	0.79 B			1.0	500
Mercury	U	0.3	U	U	U	U			0.1	0.1
Selenium	U	U	U	U	U	U			8.0	3.9
Silver	0.3 B	0.39 B	0.26 B	0.14 B	U	U			2.0	--

QUALIFIERS:
U: Constituent analyzed for but not detected
B: Constituent concentration is less than the CRDL, but greater than the IDL

Notes:
[ ] : Result exceeds Comparison Value.
-- : Not established.

TABLE 3

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-01	MSSBX-02	MSSBX-02	MSSBX-02	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	99.0	83.0	84.0	89.0	84.0	99.0	98.0	93.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-02	MSSBX-02	MSSBX-02	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-03	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(14-16)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	89.0	86.0	84.0	97.0	98.0	94.0	93.0	85.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-03	MSSBX-03	MSSBX-03	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-04	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/7/03	2/7/03	2/7/03	2/7/03	2/7/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	91.0	99.0	91.0	97.0	92.0	88.0	89.0	86.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-04	MSSBX-04	MSSBX-04	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-05	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)		
DATE OF COLLECTION	2/7/03	2/7/03	2/7/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	86.0	84.0	82.0	98.0	99.0	97.0	94.0	94.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-05	MSSBX-05	MSSBX-05	MSSBX-06	MSSBX-06	MSSBX-07	MSSBX-07	MSSBX-07	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(14-16)	(16-18)	(18-20)	(4-6)	(6-8)	(4-6)	(6-8)	(8-10)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	90.0	92.0	90.0	96.0	97.0	98.0	97.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-07	MSSBX-07	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-09	MSSBX-10	LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(10-12)	(12-14)	(4-6)	(6-8)	(8-10)	(10-12)	(16-18)	(4-6)		
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03	2/6/03		
DILUTION FACTOR	1	1	1	1	1	1	1	1		
PERCENT SOLIDS	88.0	87.0	98.0	97.0	98.0	95.0	88.0	98.0		
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U	U	U	34	----
Aroclor- 1221	U	U	U	U	U	U	U	U	34	----
Aroclor- 1232	U	U	U	U	U	U	U	U	34	----
Aroclor- 1242	U	U	U	U	U	U	U	U	34	----
Aroclor- 1248	U	U	U	U	U	U	U	U	34	----
Aroclor- 1254	U	U	U	U	U	U	U	U	34	----
Aroclor- 1260	U	U	U	U	U	U	U	U	34	----
TOTAL PCBs	0	0	0	0	0	0	0	0	--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).

TABLE 3 (continued)

LONG ISLAND RAIL ROAD
SUBSTATION DELINEATION PHASE II SITE ASSESSMENT
MASSAPEQUA CONSTRUCTION EXCAVATION INVESTIGATION
SUBSURFACE SAMPLING RESULTS

POLYCHLORINATED BIPHENLYS (PCBs)

SAMPLE ID	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10	MSSBX-10			LABORATORY QUANTITATION LIMITS	NYSDEC TAGM 4046 APPENDIX A CRITERIA
SAMPLE DEPTH (FT)	(6-8)	(8-10)	(10-12)	(12-14)	(16-18)	(18-20)				
DATE OF COLLECTION	2/6/03	2/6/03	2/6/03	2/3/03	2/3/03	2/3/03				
DILUTION FACTOR	1	1	1	1	1	1				
PERCENT SOLIDS	96.0	91.0	80.0	83.0	86.0	88.0				
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)			(ug/kg)	(ug/kg)
Aroclor- 1016	U	U	U	U	U	U			34	----
Aroclor- 1221	U	U	U	U	U	U			34	----
Aroclor- 1232	U	U	U	U	U	U			34	----
Aroclor- 1242	U	U	U	U	U	U			34	----
Aroclor- 1248	U	U	U	U	U	U			34	----
Aroclor- 1254	U	U	U	U	U	U			34	----
Aroclor- 1260	U	U	U	U	U	U			34	----
TOTAL PCBs	0	0	0	0	0	0			--	1,000/10,000*

QUALIFIERS:
U: Compound analyzed for but not detected.

NOTES:
-- : Not applicable.
* : According to NYSDEC TAGM 4046 Appendix A Criteria, 1,000 ug/kg is utilized for surface soil [0'-2' below ground surface (bgs)] and 10,000 ug/kg is utilized for subsurface soil (soil deeper than 2' bgs).