ISLIP RESOURCE RECOVERY AGENCY 401 MAIN STREET, ISLIP, NEW YORK 11751 (631) 224-5644

May 22, 2012

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, 12th Floor
625 Broadway
Albany, New York 12233-7013

Attn: Jeffrey E. Trad, P.E.
Environmental Engineer II

Re: **Sonia Road Landfill**
NYSDEC Site Number 152013
Post Closure Groundwater Monitoring Program
Fifteen Month Interval Groundwater Monitoring Report 2011 Sampling Results

Dear Mr. Trad:

Transmitted herewith for your review and consideration is two copies of the Post Closure Groundwater Monitoring Program Fifteen Month Interval Groundwater Sampling Results for the Sonia Road Landfill.

Sincerely,

Anthony J. Varrichio, P.E.
Chief Engineer

AJV:wc

Enclosure

cc: Eric M. Hofmeister, IRRA President
A. Sanchez, IRRA Vice President Operations **w/encl.**
K. Wenz, Jr. CPG - H2M
E. Lenio, NYSDEC, Stony Brook
File

2011 MONITORING REPORT
(BASELINE SAMPLING EVENT)

POST CLOSURE GROUNDWATER MONITORING PROGRAM

SONIA ROAD LANDFILL
BRENTWOOD, NEW YORK

April 2012

Prepared for:

Islip Resource Recovery Agency
401 Main Street
Islip, New York 11751

H2M architects + engineers

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2011 MONITORING REPORT
Sonia Road Landfill
Brentwood, NY

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1.0 INTRODUCTION

This report presents the results of the May-June 2011 groundwater monitoring event conducted as part of the Post Closure Groundwater Monitoring Program for the Sonia Road Landfill. The sampling program was conducted for the Town of Islip, as administered by the Islip Resource Recovery Agency (IRRA), in conformance with the December 2001 Sampling and Analysis Plan (SAP) prepared by others. The SAP is a part of the Sonia Road Post Closure Monitoring and Maintenance Plan (Volume 3 of 4), which was approved by the New York State Department of Environmental Conservation (NYSDEC) in a letter dated January 18, 2006.

1.1 Purpose

The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater quality and flow direction following capping and closure of the Sonia Road Landfill.

This Post Closure Groundwater Monitoring Program report includes discussions of the sample locations, sampling procedures, laboratory analyses, field and analytical results, data validation, groundwater level measurements and groundwater flow direction. In addition, the report includes a comparison of the analytical results from the May-June 2011 sampling event to applicable New York State groundwater quality standards and guidance values.

1.2 Site Location and Description

The Sonia Road Landfill is a capped and closed inactive municipal solid waste landfill owned by the Town of Islip. The landfill is located at 1355 Howells Road in the hamlet of Brentwood in the western portion of the Town and is in close proximity to the western town boundary with the Town of Babylon. The location of the Sonia Road Landfill is shown on Figure 1.

The landfill property is 42.2 acres in area and is approximately rectangular in shape. The landfill is bounded to the north by industrial properties, to the east by residential properties, to the south by Deer Park Street with residential properties beyond, and to the west by Howell's Road, Secatogue Road, and Corbin Avenue with industrial properties beyond. In the southwest corner of the property is one residential parcel (Tax Map No. 221-2-1), which is not part of landfill property described above. At the northwest corner of the property is a 0.5-acre parcel owned by the Town of Islip (Tax Map No. 198-5-7.3), which is identified as a paper street. Given that the waste mass extends onto this parcel, it is considered as part of the landfill property, and as a result, the overall landfill property is considered to be 42.7 acres. At and abutting the northeast corner of the landfill property is the western extension of Sonia Road for which the facility is named.

The landfill property itself is zoned Industrial I and Industrial II with a small portion along the southeastern boundary zoned as residential.

To the southwest of the landfill property is the West Brentwood Middle School, which is located on the west side of Howell's Road. Beyond the school property to the south and west is the headwater of Sampawams Creek. Sampawams Creek is fed by groundwater discharge as well as storm water management systems for the surrounding areas. Sampawams Creek runs from north to south and empties into the Guggenheim Lakes, which are located north of the Southern State Parkway. Sampawams Creek generally describes the western boundary of the Town of Islip and the eastern boundary of the Town of Babylon.

The Sonia Road Landfill site has been owned by the Town of Islip since 1965. Prior to 1965, the site was privately owned and used as a source of mined sand and gravel. As a result of this mining operation, virtually the entire site was disturbed, including the removal of vegetation, topsoil and underlying minerals. The mining operation was extensive with the removal of minerals progressing to and below the water table. Removal of minerals below the water table was accomplished through the use of dredging equipment. This activity resulted in the formation of a groundwater lake over a significant portion of the site (40% to 50%). It is reported that this

dredging operation may have removed materials to a depth of 50 feet below the water table. Soil borings constructed as part of the remedial investigation at the landfill confirmed that waste lies at least 36 feet below the water table.

In 1965, the Town of Islip took title to the Sonia Road property and began a landfilling operation for the disposal of municipal solid waste. Landfilling at the site occurred between 1965 and 1977, with the most active period of landfilling occurring between 1965 and 1974. It has been estimated that between 1.5 and 2.0 million cubic yards of waste were disposed at the site. There are no weight records to substantiate this estimate.

The landfill reportedly accepted all municipal solid waste delivered to the site. This waste is reported to include wood, concrete, metal, plastic, glass, household waste in the form of refuse, rubbish, demolition materials and yard wastes (particularly leaves). It is also reported that junk automobiles were routinely disposed at the facility and that underground fires were common.

The Sonia Road Landfill was capped in the fall of 2000. The landfill capping system covers an area of approximately 40 acres. The capping system includes an active landfill gas management system, an on-site storm water management system and a perimeter road constructed around the entire site using recycled concrete aggregate. The storm water management system consists of a series of drainage swales, catch basins, buried storm water piping, dry wells and two recharge basins. Storm water from the northeastern corner of the property is discharged to a series of dry wells (leaching rings) in the area of Sonia Road. The remainder of the site storm water is directed to Recharge Basins 1 and 2 located on the west side of the property. Recharge Basin 1 is located adjacent to the main entrance gate located on Corbin Avenue, and Recharge Basin 2 is located in the southwest corner of the property. For the majority of the site, drainage swales are located on the in-board side of the perimeter road.

2.0 MONITORING WELL NETWORK AND GROUNDWATER SAMPLE LOCATIONS

The monitoring well network for the Sonia Road Landfill consists of 35 wells. Well locations are shown on Figure 2. The monitoring wells were constructed as 12 well clusters, with each cluster comprised of a shallow (S) well, intermediate (I) well and deep (D) well, with the exception of the MW-02 cluster. Shallow well MW-02S was abandoned in August 2005 and has been eliminated from the Post-closure Monitoring Program. All 35 wells were utilized for water level measurements. Well construction information for all wells is summarized in Table 1.

Twenty-two (22) wells are included as part of the Post Closure Monitoring Program. The sampled wells are listed in Table 2. All 22 monitoring wells were sampled during the May-June 2011 sampling event.

3.0 SAMPLING AND ANALYTICAL PROCEDURES

Sampling procedures for the Sonia Road Landfill site are described in the SAP. Dedicated and disposable sampling equipment was used whenever possible in accordance with the SAP. All non-disposable equipment was decontaminated before first use on-site and between uses in accordance with the procedures described in the SAP. The following sections provide brief discussions of the procedures used during groundwater level measurement activities, organic vapor and combustible gas monitoring, groundwater sampling and sample analysis.

3.1 Groundwater Level Measurement

Prior to collecting the groundwater samples, synoptic water level measurements were obtained from all 35 monitoring wells for determination of groundwater elevations and groundwater flow direction. Groundwater level measurements were obtained from a surveyed measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. A discussion of the groundwater level measurement results and groundwater flow direction is provided in Section 6.0.

3.2 Groundwater Sampling

Prior to collection of each groundwater sample, 3 to 5 well volumes were purged from the well. Well purging was accomplished by first measuring the static water level in the well and calculating the standing water volume. A decontaminated submersible pump was used to purge each well.

During the purging process, field parameters (pH, specific conductance, temperature, oxidation-reduction potential (ORP), dissolved oxygen and turbidity) were monitored and recorded. When the values of the field parameters, except turbidity, equilibrated within 10% based on the last two readings, the turbidity of the groundwater was less than 50 Nephelometric Turbidity Units (NTUs) and at least three well volumes had been removed, well purging was considered complete.

Groundwater samples were collected using new, dedicated, disposable polyethylene bailers and polypropylene rope. Samples were collected immediately after purging. Filled sample bottles were stored in ice-filled coolers with the chain of custody forms and delivered on the day of collection to H2M Laboratories, Inc. for analysis. H2M Laboratories, Inc. is approved by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for the analyses performed.

Appropriate quality assurance/quality control (QA/QC) samples, including field blanks, matrix spike and matrix spike duplicate (MS/MSD) sets and blind duplicates, were collected in accordance with the SAP. For the baseline sampling event, trip blanks accompanied all sample shipments.

In accordance with the SAP, purge water from all on-site wells and all wells immediately adjacent to the landfill property was disposed directly into the nearest landfill capping system drainage swale. Purge water generated from off-site well clusters 11 and 12 was pumped into a

tank truck, transported to the landfill and discharged into the landfill's on-site Recharge Basin 1 in accordance with the SAP.

3.3 Organic Vapor and Combustible Gas Monitoring

Total organic vapor and combustible gas measurements were collected in all 35 monitoring wells throughout the reporting period. Organic vapors were measured using a photoionization detector (PID). Combustible gas was measured using a portable multi-gas meter. Gas monitoring results represent headspace measurements collected during the synoptic groundwater level measurements. The organic vapor and combustible gas monitoring results for the reporting period are provided in Table 3.

3.4 Analytical Parameters

Groundwater samples collected during the May-June 2011 sampling event were analyzed for 6 NYCRR Part 360 Baseline Parameters, in accordance with SW-846 methods as specified in the 6 NYCRR Part 360 regulations. The analytical results are discussed in Section 4.2.

4.0 ANALYTICAL RESULTS

4.1 Field Parameters

As described in Section 3.2, field parameters monitored during the purging of the monitoring wells included pH, specific conductance, temperature, ORP, dissolved oxygen and turbidity. A summary of the final field parameter values measured at the time of sample collection and additional field data collected during May-June 2011 sampling event is provided in Table 4.

4.2 Groundwater Samples

The analytical results for the groundwater samples collected during the May-June 2011 sampling event, compared to NYSDEC Class GA groundwater standards and guidance values, are provided in Appendix A-1 (leachate indicator parameters), Appendix A-2 (inorganic parameters) and Appendix A-3 (volatile organic compounds). Historic sample results are also included in these tables.

4.2.1 Leachate Indicators

As shown in Appendix B-1, the leachate indicator ammonia was detected in five wells at concentrations exceeding NYSDEC Class GA groundwater standards. The leachate indicator phenols was detected in one well at a concentration exceeding NYSDEC Class GA groundwater standards. These parameters are discussed below.

Ammonia

The groundwater standard for ammonia of 2 milligrams per liter (mg/l) was exceeded in wells MW-02I [2.95 mg/l], MW-03S [2.27 mg/l], MW-04S [5.73 mg/l], MW-05S [5.26 mg/l] and MW-06S [5.90 mg/l].

Phenols

The groundwater standard for phenols of 0.001 mg/l was exceeded in well MW-11D. The concentration of phenols detected in well MW-11D was 0.0254 mg/l.

4.2.2 Historic Leachate Indicators

A comparison of the current leachate indicator results for the 22 sampled wells to the previous results (First Quarter 2010 sampling event) is provided below. Concentration trends

and exceedances of groundwater standards/guidance values for each well and parameter are summarized in Table 5.

Alkalinity

Ten (10) wells (MW-02I, MW-02D, MW-05S, MW-05I, MW-06S, MW-06D, MW-06I, MW-07I, MW-12I and MW-12D) showed increasing alkalinity concentrations (defined as a change of at least 20% compared to the previous results). Four (4) wells (MW-01I, MW-04I, MW-11S and MW-11I) showed decreasing alkalinity concentrations (defined as a change of at least 20% compared to the previous results). The remaining eight (8) wells were consistent (defined as within 20% of the previous results).

Ammonia

Twelve (12) wells (MW-01S, MW-01D, MW-03S, MW-04S, MW-05S, MW-05I, MW-O5D, MW-06S, MW-061, MW-07I, MW-11D and MW-12I) showed increasing ammonia concentrations. The remaining ten (10) wells were consistent.

Biochemical Oxygen Demand

Four (4) wells (MW-04S, MW-06S, MW-11D and MW-12I) showed increasing biochemical oxygen demand (BOD). Three (3) wells (MW-03S, MW-05S and MW-07I) showed decreasing concentrations. The remaining fifteen (15) wells were consistent.

Bromide

All 22 wells were consistent.

Chemical Oxygen Demand

Five (5) wells (MW-01D, MW-11D, MW-12D, MW-12I and MW-12S) showed increasing chemical oxygen demand (COD). Three (3) wells (MW-04S, MW-05I and MW-05S) showed decreasing COD. The remaining fourteen (14) wells were consistent.

Chloride

Seven (7) wells (MW-01I, MW-01S, MW-04D, MW-05S, MW-06I, MW-06S and MW-07I) showed increasing chloride concentrations. Seven (7) wells (MW-01D, MW-04I, MW-05D, MW-11D, MW-11S, MW-12D and MW-12I) showed decreasing chloride concentrations. The remaining eight (8) wells were consistent.

Hardness

Eight (8) wells (MW-01S, MW-02D, MW-05I, MW-06I, MW-06S, MW-07I, MW-11D and MW-12S) showed increasing hardness concentrations. Five (5) wells (MW-01D, MW-04I, MW-11I, MW-11S and MW-12D) showed decreasing hardness concentrations. The remaining nine (9) wells were consistent.

Nitrate

Two (2) wells (MW-02D and MW-12D) showed increasing nitrate concentrations. Fifteen (15) wells (MW-01D, MW-01I, MW-01S, MW-02I, MW-03S, MW-04I, MW-05D, MW-05I, MW-06D, MW-06I, MW-06S, MW-07I, MW-11D, MW-11I and MW-11S) showed decreasing nitrate concentrations. The remaining five (5) wells were consistent.

Phenols

One (1) well (MW-11D) showed increasing total phenols concentrations. Five (5) wells (MW-01D, MW-02I, MW-04D, MW-05I and MW-05S) showed a decreasing concentration. The remaining sixteen (16) wells were consistent.

Sulfate

Nine (9) wells (MW-01S, MW-02I, MW-04D, MW-05D, MW-05I, MW-06D, MW-06I, MW-07I and MW-12S) showed increasing sulfate concentrations. Six (6) wells (MW-01I, MW-04I, MW-05S, MW-11S, MW-12I and MW-12D) showed decreasing sulfate concentrations. The remaining seven (7) wells were consistent.

Total Organic Carbon

Seven (7) wells (MW-02I, MW-04S, MW-05S, MW-06S, MW-11D, MW-12I and MW-12S) showed increasing total organic carbon (TOC) concentrations. Two (2) wells (MW-04I and MW-11S) showed decreasing TOC concentrations. The remaining thirteen (13) wells were consistent.

Total Dissolved Solids

Nine (9) wells (MW-01I, MW-01S, MW-04D, MW-04S, MW-05I, MW-06I, MW-06S, MW-07I and MW-12S) showed increasing total dissolved solids (TDS) concentrations. Six (6) wells (MW-01D, MW-04I, MW-11D, MW-11I, MW-11S and MW-12D) showed decreasing TDS concentrations. The remaining 7 wells were consistent.

Total Kjeldahl Nitrogen

Seven (7) wells (MW-01D, MW-02I, MW-04S, MW-06I, MW-06S, MW-12D and MW-12I) showed increasing total Kjeldahl nitrogen (TKN) concentrations. Nine (9) wells (MW-01I, MW-02D, MW-03S, MW-04D, MW-05D, MW-05I, MW-07I, MW-11D and MW-11S) showed decreasing TKN concentrations. The remaining six (6) wells were consistent.

4.2.3 Inorganic Parameters

As shown in Appendix B-2, seven metals (antimony, total chromium, iron, lead, manganese, sodium, and thallium) were detected in one or more wells at concentrations exceeding NYSDEC Class GA groundwater standards or guidance values. These parameters are each discussed below.

Antimony

The groundwater guidance value for antimony of 3 µg/l was exceeded in two (2) wells (MW-2D and MW-11D). Well MW-2D had a concentration of 6.0 µg/l and well MW-11D had a concentration of 3.1 µg/l.

Total Chromium

The groundwater standard for total chromium of 50 µg/l was exceeded in two (2) wells (MW-11D and MW-12S). Well MW-11D had a concentration of 73.1 µg/l and well MW-12S had a concentration of 1,350 µg/l.

Iron

The groundwater standard for iron of 300 µg/l was exceeded in fourteen (14) wells (MW-1D, MW-1S, MW-3S, MW-4D, MW-4I, MW-4S, MW-5I, MW-5S, MW-6S, MW-11D, MW-11S, MW-12D, MW-12I and MW-12S). Iron concentrations detected in these wells ranged from 454 µg/l in MW-11S to 39,000 µg/l in MW-04S.

Lead

The groundwater standard for lead of 25 µg/l was exceeded in one (1) well. Well MW-11D had a lead concentration of 174 µg/l.

Manganese

The groundwater standard for manganese of 300 µg/l was exceeded in 15 wells (MW-1S, MW-3S, MW-4S, MW-4I, MW-5S, MW-5I, MW-5D, MW-6I, MW-6S, MW-6D, MW-7I, MW-11S, MW-11D, MW-12I and MW-12S). Manganese concentrations detected in these wells ranged from 494 µg/l in MW-6S to 5,070 µg/l in MW-5I.

Sodium

The groundwater standard for sodium of 20,000 µg/l was exceeded in 10 wells (MW-1S, MW-3S, MW-4S, MW-5D, MW-5S, MW-6I, MW-6S, MW-7I, MW-11S and MW-12S). Sodium concentrations detected in these wells ranged from 21,700 µg/l in MW-6S to 90,200 µg/l in MW-1S.

Thallium

The groundwater guidance value for thallium of 0.5 µg/l was exceeded in four (4) wells (MW-04I, MW-06I , MW-11D and MW-12I). Thallium concentrations detected in these wells ranged from 3.4 µg/l in MW-4I to 5.1 µg/l in MW-11D.

4.2.4 Historic Inorganic Parameters

A comparison of the current inorganic indicator results for the 22 sampled wells to the previous results (First Quarter 2010 sampling event or previous baseline monitoring event, whichever is most recent) is provided below. Concentration trends and exceedances or groundwater standards/guidance values for each well and parameter are summarized in Table 6.

Aluminum

Six (6) wells (MW-01D, MW-11D, MW-11S, MW-12S, MW-12I and MW-12D) showed increasing aluminum concentrations. Fifteen (15) wells (MW-01I, MW-01S, MW-02D, MW-03S, MS-04D, MW-04I, MW-04S, MW-05D, MW-05I, MW-05S, MW-06D, MW-06I, MW-06S, MW-07I and MW-11I) showed decreasing aluminum concentrations. The remaining one (1) well was consistent.

Antimony

Two (2) wells (MW-02D and MW-11D) showed increasing antimony concentrations. Monitoring well MW-01D showed a decreasing antimony concentration. The remaining nineteen (19) wells were consistent.

Arsenic

Two (2) wells (MW-04I and MW-11D) showed increasing arsenic concentrations. Five (5) wells (MW-01S, MW-04D, MW-04S, MW-05I and MW-06S) showed decreasing arsenic concentrations. The remaining 15 (fifteen) wells were consistent.

Barium

Eight (8) wells (MW-02D, MW-02I, MW-05S, MW-06D, MW-06I, MW-06S, MW-11D and MW-12S) showed increasing barium concentrations. Eight (8) wells (MW-01D, MW-01I, MW-03S, MW-04I, MW-05I, MW-11I, MW-11S and MW-12I) showed decreasing barium concentrations. The remaining six (6) wells were consistent.

Beryllium

All 22 wells were consistent.

Boron

Five (5) wells (MW-02D, MW-04I, MW-05S, MW-06S and MW-07I) showed increasing boron concentrations. Fifteen (15) wells (MW-01D, MW-01I, MW-01S, MW-02I, MW-03S, MW-04D, MW-05D, MW-06D, MW-06I, MW-11D, MW-11I, MW-11S, MW-12D, MW-12I

and MW-12S) showed decreasing boron concentrations. The remaining two (2) wells were consistent.

Cadmium

Two (2) wells (MW-11D and MW-12I) showed increasing cadmium concentrations. Four (4) wells (MW-05D, MW-05I, MW-05S and MW-11I) showed decreasing cadmium concentrations. The remaining 16 wells were consistent.

Calcium

Six (6 wells (MW-02D, MW-05S, MW-06I, MW-06S, MW-07I, and MW-11D) showed increasing calcium concentrations. Eight (8) wells (MW-01I, MW-01D, MW-03S, MW-04I, MW-06D, MW-11I, MW-11S, and MW-12D) showed decreasing calcium concentrations. The remaining eight (8) wells were consistent.

Hexavalent Chromium

All 22 wells were consistent.

Total Chromium

Thirteen (13) wells (MW-01D, MW-02I, MW-04D, MW-04I, MW-06S, MW-06I, MW-06D, MW-07I, MW-11I, MW-11D, MW-12S, MW-12I and MW-12D) showed increasing total chromium concentrations. Four (4) wells (MW-04S, MW-05D, MW-05I and MW-11S) showed decreasing total chromium concentrations. The remaining 5 wells were consistent.

Cobalt

Four (4) wells (MW-01D, MW-06D, MW-11D and MW-12S,) showed increasing cobalt concentrations. Six (6) wells (MW-04S, MW-05I, MW-05S, MW-06I, MW-06S and MW-11I) showed decreasing cobalt concentrations. The remaining 12 wells were consistent.

Copper

Four (4) wells (MW-11D, MW-12S, MW-12I and MW-12D) showed increasing copper concentrations. Ten (10) wells (MW-01I, MW-02D, MW-02I, MW-04D, MW-04I, MW-05D, MW-05I, MW-06D, MW-06I and MW-07I) showed a decreasing copper concentration. The remaining eight (8) wells were consistent.

Iron

Eleven (11) wells (MW-01D, MW-01S, MW-02I, MW-04I, MW-05I, MW-05S, MW-11S, MW-11D, MW-12S, MW-12I and MW-12D) showed increasing iron concentrations. Eleven (11) wells (MW-01I, MW-02D, MW-03S, MW-04D, MW-04S, MW-05D, MW-06S, MW-06I, MW-06D, MW-07I and MW-11I) showed decreasing iron concentrations.

Lead

Ten (10) wells (MW-01D, MW-03S, MW-04I, MW-04S, MW-05S, MW-06S, MW-11D, MW-12D, MW-12I and MW-12S) showed increasing lead concentrations. Six (6) wells (MW-01S, MW-01I, MW-02I, MW-05D, MW-05I and MW-07I) showed decreasing lead concentrations. The remaining 6 (six) wells were consistent.

Magnesium

Nine (9) wells (MW-02D, MW-04D, MW-05S, MW-06I, MW-06S, MW-07I, MW-11D, MW-12I and MW-12S) showed increasing magnesium concentrations. Four (4) wells (MW-03S, MW-04I, MW-11I and MW-12D) showed decreasing magnesium concentrations. The remaining 9 wells were consistent.

Manganese

Twelve (12) wells (MW-01D, MW-01S, MW-04I, MW-05I, MW-05S, MW-06D, MW-06I, MW-07I, MW-11D, MW-12D, MW-12I and MW-12S) showed increasing manganese concentrations. Five (5) wells (MW-01I, MW-02D, MW-04D, MW-11I and MW-11S) showed decreasing manganese concentrations. The remaining five (5) wells were consistent.

Mercury

Four (4) wells (MW-02I, MW-04S, MW-05I and MW-11D) showed an increasing mercury concentration. Well MW-03S showed a decreasing mercury concentration. The remaining seventeen (17) wells were consistent.

Nickel

Eight (8) wells (MW-01D, MW-02D, MW-02I, MW-04D, MW-05D, MW-06D, MW-11D and MW-12S) showed increasing nickel concentrations. Seven (7) wells (MW-01I, MW-04S, MW-05I, MW-06S, MW-11I, MW-11S and MW-12I) showed decreasing nickel concentrations. The remaining seven (7) wells were consistent.

Potassium

Five (5) wells (MW-01S, MW-02D, MW-04D, MW-05S and MW-06S) showed increasing potassium concentrations. Six (6) wells (MW-01D, MW-01I, MW-04I, MW-07I, MW-11I and MW-11S) showed decreasing potassium concentrations. The remaining 11 wells were consistent.

Selenium

Two (2) wells (MW-06I and MW-11D) showed decreasing selenium concentrations. The remaining 20 wells were consistent.

Silver

All 22 wells were consistent.

Sodium

Nine (9) wells (MW-01S, MW-02D, MW-02I, MW-04D, MW-05S, MW-06I, MW-06S, MW-11I and MW-12S) showed increasing sodium concentrations. Four (4) wells (MW-01D, MW-04I, MW-11D and MW-11S) showed decreasing sodium concentrations. The remaining nine (9) wells were consistent.

Thallium

Well MW-11D showed an increasing thallium concentration. The remaining 21 wells were consistent.

Vanadium

Four (4) wells (MW-01D, MW-11D, MW-12I and MW-12S) showed increasing vanadium concentrations. Four (4) wells (MW-03S, MW-05I, MW-05S and MW-06S) showed decreasing vanadium concentrations. The remaining 14 wells were consistent.

Zinc

Nine (9) wells (MW-01D, MW-02I, MW-04D, MW-06D, MW-06S, MW-11D, MW-11S, MW-12D and MW-12S) showed increasing zinc concentrations. Ten (10) wells (MW-01I, MW-01S, MW-03S, MW-04S, MW-05D, MW-05I, MW-05S, MW-06I, MW-07I and MW-11I) showed decreasing zinc concentrations. The remaining three (3) wells were consistent.

Cyanide

All 22 wells were consistent.

4.2.5 Volatile Organic Compounds

Volatile organic compounds (VOCs) were analyzed and evaluated against the NYSDEC Class GA groundwater standards or guidance values for all of the 22 wells sampled during the May-June 2011 sampling event. Eighteen (18) of the wells contained no detectable concentrations of VOCs. None of the 22 sampled wells contained concentrations of VOCs in exceedance of the NYSDEC Class GA groundwater standards or guidance values. However, the remaining four (4) wells contained trace concentrations of one or more VOCs. These VOCs included chlorobenzene, 1,4-dichlorobenzene and tetrachloroethene. All VOCs in the eighteen (18) wells were detected at concentrations below the contract required detection limit, and as such, are considered estimated values.

In order to evaluate changes in groundwater quality, historic results for alkalinity, iron plus manganese and total dissolved solids were graphed for the shallow, intermediate and deep zones for upgradient well clusters 1 and 11, and downgradient well clusters 4 and 5. These parameters were selected as possible indicators of landfill impacts to groundwater. These graphs are included in Appendix A-4.

4.3 Organic Vapor and Combustible Gas Monitoring

The results of the organic vapor and combustible gas monitoring are presented in Table 3. VOCs were measured by the photoionization detector (PID) during the May-June 2011 sampling event.

5.0 DATA VALIDATION

The data packages were validated in accordance with the SAP. The data validation report is included in Appendix B.

Twenty-two (22) groundwater samples, two blind duplicate samples, two matrix spike/matrix spike duplicate (MS/MSD) sample sets and two field blanks were collected as part of the June-May 2011 monitoring event at the Sonia Road Landfill. Sample analysis was performed by H2M Laboratories, a contractor to the IRRA, in accordance with SW-846 laboratory methods as specified in the 6 NYCRR Part 360 regulations. H2M Laboratories is approved by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for the analyses performed.

The data packages submitted by H2M Laboratories were reviewed for completeness and compliance with the analytical methods. All of the quality assurance/quality control (QA/QC) samples (calibrations, spikes, duplicates and blanks), as well as 10% of the analytical results, were reviewed yielding a "10% validation". The samples that were reviewed included MW-1S, MW-5I, and MW-12I, field and trip blanks, and matrix spikes. The findings of the review process are summarized below.

All samples were analyzed within the method-specified holding times. All QA/QC requirements were met.

Due to the presence of grass clippings in and on three wet chemistry bottles for MW-12D, MW-12I, and MW-12S, the "results for nitrogen related and other" parameters "should be used with caution" because the results may be affected by the presence of the cuttings, which may have resulted in false positive detections or elevated values.

All acetone results in the samples collected during this (May-June 2011) sampling event were qualified as non-detect because of detected acetone in the associated trip blanks. The following constituents in the noted samples were "qualified as estimates" "with possible low bias" "due to outlying low responses": bromomethane in all samples; 1,2-dibromo-3-chloropropane, carbon disulfide, 4-methyl-2-pentanone, trans-1,3-dichloropropene, cis-1,3-dichloropropene, 2-hexanone, trans-1,4-dichlro-2-butene in MW-5I and MW-12I; and 1,2-

dibromo-3-chloropropane, carbon disulfide, trans-1,3-dichloropropene, and trans-1,4-dichloro-2-butene in MW-1S.

Due to low recoveries of selenium in samples from MW-4S and MW-7I, selenium results in all samples were qualified as estimated "with a possible low bias." "Marginally low recoveries of mercury and silver" in association with the matrix spike of MW-4S were shown, resulting in mercury and silver in the following samples being "qualified as estimated" with a possible low biases"; MW-1D, MW-11, MW-1S, MW-4D, MW-4I, MW-6D, MW-6I, MW-6S, MW-7I, MW-11D, MW-11I, MW-11S, MW-12D, MW-12I, MW-12S, MW-X, FB-05/26/2011, FB—05/27/11, and TB -05/27. In addition, "blind field duplicate correlations of MW-5D and MW-6S were acceptable, with the exception of" mercury in well MW-5D. The detected mercury concentration in well MW-5D was "qualified as estimated," and the detected mercury concentration in the duplicate should be "qualified as estimated."

Mercury was detected in the associated field blank, and therefore the results for that parameter in MW-2I, MW-4S, and MW-5I were qualified as undetected at the originally reported concentrations because it was considered to be external contamination or due to interference.

"Duplicate correlations for biological oxygen demand 5 (BOD5) and the recovery for nitrite in MW-4S" were outside of validation guidelines. The results in the parent sample for BOD5 were "qualified as estimated," and nitrite in the parent sample should be "qualified as estimated."

Blind duplicate samples were collected from MW-05D and MW-06S. Biological oxygen demand 5 and total organic carbon (TOC) in MW-6S in association with the blind field duplicate corrections were not acceptable. BOD5 and TOC were qualified as estimated in the parent sample, and should be qualified as such in the duplicate.

The detection of TKN in MW-01S, MW-04I, MW-06I, MW-06D, and MW-7I was considered external contamination and were qualified as non-detect.

Other than as described above, qualification of the data was not necessary. All data are deemed valid and usable for environmental assessment purposes.

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

Groundwater level measurements were obtained in May 2011, from the 22 monitoring wells included in the Post-Closure Groundwater Monitoring Program and the 13 additional site-related wells not sampled as part of the program. The depth to groundwater measurements, measuring point elevations, and calculated groundwater elevations for the 35 monitoring wells are shown in Table 7.

The May water level data were used to construct groundwater elevation contour maps for the shallow (water table), intermediate and deep Upper Glacial aquifer wells at and in the immediate vicinity of the Sonia Road Landfill. Water table and potentiometric surface (for the intermediate and deep wells) elevation contour maps are presented on Figures 3, 4 and 5, respectively. Groundwater flow in the vicinity of the landfill is toward the southeast for the zones of the Upper Glacial aquifer screened by the shallow, intermediate and deep wells. This flow direction is consistent with historic data for the site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Groundwater Flow

Based on groundwater level measurements collected during the May 2011 sampling event and the water table/potentiometric surface elevation contour maps prepared for the site,

groundwater flow in the vicinity of the Sonia Road Landfill is toward the southeast for the zones of the Upper Glacial aquifer screened by the shallow, intermediate and deep wells. This flow direction is consistent with historic data for the site.

Groundwater Quality

Based on a comparison of the May-June 2011 sample results to those from the February 2010 sampling event, as well as review of the historical trend graphs in Appendix A-4, groundwater quality in the vicinity of the Sonia Road Landfill has not changed substantially.

Total phenols were detected at a concentration above the standard in one monitoring well during this sampling event. Ammonia was detected above the standard in five wells during this sampling event. Antimony and total chromium were detected above the standard in two wells. The following inorganic parameters were detected at concentrations above their standard or guidance value during this sampling event: Iron in fourteen wells, lead in one well, manganese in fifteen wells, sodium in ten wells, and thallium in four wells. Elevated ammonia concentrations have historically been detected in monitoring wells located upgradient of the landfill. As a result, it appears unlikely that the source of the detected ammonia is the Sonia Road Landfill. Similarly, the detected concentrations of iron, manganese and sodium are likely not indicative of landfill-influenced groundwater, since concentrations of these parameters exceeding groundwater standards were detected in monitoring wells located upgradient and downgradient of the landfill.

7.2 Recommendations

Based on the results from the May-June 2011 sampling event and comparison of these results to historic data for the Sonia Road Landfill, it is recommended to continue to sample the groundwater monitoring wells on a 15-month schedule, as approved by the NYSDEC, and in accordance with the SAP.

TABLES

Table 1
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Screen Setting		Measuring Point Elevation (feet above mean sea level)
					Depth (feet below measuring point)	Elevation (feet above mean sea level)	
MW-01D[1]	10/14/97	4	SS	106	96-106	(-32) - (-42)	64.53
MW-01I[1]	10/6/97	4	SS	78	68 - 78	(-2) - (-12)	65.36
MW-01S[1]	1/5/95	4	PVC	29	19 - 29	47 - 37	66.01
MW-02D[4]	10/13/97	4	SS	116	106 - 116	(-27) - (-37)	78.43
MW-02I[4]	10/1/97	4	SS	72	62 - 72	16 - 7	78.24
MW-02S	*Abandoned in August 2005*						
MW-03D[1]	9/30/97	4	SS	107	97 - 107	(-26) - (-36)	70.50
MW-03I[1]	1/9/95	4	PVC	84	79 - 84	(-8) - (-13)	70.77
MW-03S[1]	1/6/95	4	PVC	32	22 - 32	49 - 39	70.76
MW-04D[1]	10/6/97	4	SS	114	104 - 114	(-35) - (-45)	69.03
MW-04I[1]	9/29/97	4	SS	71	61 - 71	8 - (-2)	69.31
MW-04S[1]	1/6/95	4	PVC	34	24 - 34	48 - 38	71.10
MW-05D[1]	10/10/97	4	SS	116	106 - 116	(-35) - (-45)	70.96
MW-05I[1]	10/2/97	4	SS	70	60 - 70	11 - 1	70.26
MW-05S[1]	10/4/97	4	SS	34	19 - 34	52 - 37	70.28
MW-06D[5]	10/1/97	4	SS	117	107 - 117	(-32) - (-42)	75.02
MW-06I[4]	9/25/97	4	SS	76	66 - 76	9 - (-1)	74.52
MW-06S[5]	9/24/97	4	SS	37	22 - 37	53 - 38	74.45
MW-07D[1]	10/8/97	4	SS	122	112 - 122	(-37) - (-47)	75.04
MW-07I[4]	9/26/97	4	SS	74	64 - 74	9 - (-1)	73.43
MW-07S[1]	9/28/97	4	SS	34	19 - 34	54 - 39	72.83
MW-10D[2]	10/15/97	4	SS	96	86 - 96	(-29) - (-39)	56.34
MW-10I[2]	10/7/97	4	SS	69	59 - 69	(-3) - (-13)	56.16
MW-10S[2]	10/8/97	4	SS	19	4 - 19	53 - 38	56.65

Table 1 (continued)
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below grade)	Screen Setting		Measuring Point Elevation (feet above mean sea level)
					Depth (feet below measuring point)	Elevation (feet above mean sea level)	
MW-11D[1]	10/16/97	4	SS	94	84 - 94	(-24) - (-34)	60.19
MW-11I[1]	10/11/97	4	SS	71	61 - 71	(-1) - (-11)	60.38
MW-11S[1]	10/13/97	4	SS	19	4 - 19	56 - 41	59.87
MW-12D[1]	10/15/97	4	SS	98	88 - 98	(-29) - (-39)	58.61
MW-12I[1]	10/10/97	4	SS	70	60 - 70	(-1) - (-11)	58.92
MW-12S[1]	10/13/97	4	SS	19	4 - 19	55 - 40	58.79
MW-13D[3]	10/16/97	4	SS	119	109 - 119	(-38) - (-48)	70.37
MW-13I[3]	10/7/97	4	SS	71	61 - 71	9 - (-1)	70.30
MW-13S[3]	10/8/97	4	SS	37	22 - 37	49 - 34	70.51
MW-14D[3]	10/17/97	4	SS	105	95 - 105	(-30) - (-40)	64.58
MW-14I[3]	10/9/97	4	SS	71	61 - 71	4 - (-6)	64.57
MW-14S[3]	10/14/97	4	SS	30	15 - 30	50 - 35	64.55

Notes:
PVC Polyvinyl chloride
SS Stainless steel

[1]Monitoring wells surveyed by Municipal Land Survey, P.C., August 2001.
[2]Monitoring wells surveyed by YEC, Inc., November 1997.
[3]Monitoring wells surveyed by YEC, Inc., September 2000.
[4]Monitoring wells surveyed by Municipal Land Survey, P.C., August 11, 2005.
[5]Monitoring wells surveyed by Municipal Land Survey, P.C., August 2006.

SOURCE: Remedial Investigation/Feasibility Study (RI/FS) dated April 1998 and surveys noted above.

Table 2
WELLS SAMPLED AS PART OF THE POST CLOSURE GROUNDWATER MONITORING PROGRAM
Sonia Road Landfill Post Closure Groundwater Monitoring Program

MW-01D	MW-04D	MW-06D	MW-11S
MW-01I	MW-04I	MW-06I	MW-12D
MW-01S	MW-04S	MW-06S	MW-12I
MW-02D	MW-05D	MW-07I	MW-12S
MW-02I	MW-05I	MW-11D	
MW-03S	MW-05S	MW-11I	

Table 3
TOTAL VOLATILE ORGANIC COMPOUND AND COMBUSTIBLE GAS READINGS MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Total VOCs [1]	Combustible Gas [2]	Well	Total VOCs [1]	Combustible Gas [2]
MW-01D	0.0	0	MW-05S	0.0	0
MW-01I	0.0	0	MW-06D	0.0	0
MW-01S	0.0	0	MW-06I	0.0	0
MW-02D	0.0	0	MW-06S	0.0	0
MW-02I	0.0	0	MW-07I	0.0	0
MW-03S	0.0	0	MW-11D	-	-
MW-04D	0.0	0	MW-11I	-	-
MW-04I	0.0	0	MW-11S	-	-
MW-04S	0.0	0	MW-12D	0.0	0
MW-05D	0.0	0	MW-12I	0.0	0
MW-05I	0.0	0	MW-12S	0.0	0

[1] Parts per million, calibration gas equivalents.
[2] Percent lower explosive limit for methane.
-: Reading obtained, but record not available.

Table 4
FINAL FIELD MEASUREMENTS
MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Monitoring Well	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temperature (°C)	ORP (mV)
MW-01S	-	0.774	0.0	0.54	11.59	7
MW-01I	5.40	0.073	0.0	10.39	14.38	198
MW-01D	6.74	0.494	10.2	1.53	14.34	-89
MW-02I	6.11	0.343	0.0	1.39	15.11	184
MW02D	6.12	0.137	0.0	9.31	14.69	105
MW-03S	6.48	1.09	0.0	1.24	15.41	-90
MW-04S	6.61	0.780	0.0	5.61	14.54	-71
MW-04I	6.81	0.789	0.0	1.39	15.18	-81
MW-04D	6.83	0.214	0.0	1.45	14.71	-141
MW-05S	6.60	0.614	0.0	0.0	17.25	-67
MW-05I	7.49	0.250	22.5	0.28	15.86	-66
MW-05D	6.11	0.610	0.0	0.25	14.39	89
MW-06S	7.89	0.577	0.0	0.36	18.39	-97
MW-06I	6.10	0.215	0.0	0.09	17.02	196
MW-06D	4.67	0.146	0.0	0.71	17.46	242
MW-07I	5.74	0.331	0.0	0.0	13.85	206
MW-11S	6.88	0.422	0.0	5.53	14.72	107
MW-11I	6.11	0.114	0.0	10.39	13.96	215
MW-11D	5.89	0.241	15.0	9.89	14.14	211
MW-12S	6.39	0.514	0.0	5.12	14.89	150
MW-12I	5.57	0.087	0.0	5.22	16.60	198
MW-12D	6.12	0.088	0.0	7.20	16.20	221

mS/cm: Millisiemens per centimeter.
NTUs: Nephelometric turbidity units
mg/l Milligrams per liter.
°C: Degrees Centigrade.
mV: Millivolts
-: Reading illegible in field book.

Table 5
SUMMARY OF CONCENTRATION TRENDS FOR LEACHATE INDICATOR PARAMETERS
MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Location	Alkalinity	Ammonia	BOD	Bromide	COD	Chloride	Hardness	Nitrate	Total Phenols	Sulfate	TOC	TDS	TKN
MW-01S	Upgradient	C	I	C	C	C	I	I	D	C	I	C	I	C
MW-01I	Upgradient	D	C	C	C	C	I	C	D	C	D	C	I	D
MW-01D	Upgradient	C	I	C	C	I	D	D	D	D	C	C	D	I
MW-02I	Upgradient	I		C	C	C	C	C	D	D	I	I	C	I
MW-02D	Upgradient	I	C	C	C	C	C	I	I	C	C	C	C	D
MW-03S	Downgradient	C		D	C	C	C	C	D	C	C	C	C	D
MW-04S	Downgradient	C		I	C	D	C	C	C	C	C	I	I	I
MW-04I	Downgradient	D	C	C	C	C	D	D	D	C	D	D	D	C
MW-04D	Downgradient	C	C	C	C	C	I	C	C	D	I	C	I	D
MW-05S	Downgradient	I		D	C	D	I	C	C	D	D	I	C	C
MW-05I	Downgradient	I	I	C	C	D	C	I	D	D	I	C	I	D
MW-05D	Downgradient	C	I	C	C	C	D	C	D	C	I	C	C	D
MW-06S	Sidegradient	I		I	C	C	I	I	D	C	C	I	I	I
MW-06I	Sidegradient	I	I	C	C	C	I	I	D	C	I	C	I	I
MW-06D	Sidegradient	I	C	C	C	C	C	C	D	C	I	C	C	C
MW-07I	Upgradient	I	I	D	C	C	I	I	D	C	I	C	I	D
MW-11S	Upgradient	D	C	C	C	C	D	D	D	C	D	D	D	D
MW-11I	Upgradient	D	C	C	C	C	C	D	D	C	C	C	D	C
MW-11D	Upgradient	C	I	I	C	I	D	I	D		C	I	D	D
MW-12S	Upgradient	C	C	C	C	I	C	I	C	C	I	I	I	C
MW-12I	Upgradient	I	I	I	C	I	D	C	C	C	D	I	C	I
MW-12D	Upgradient	I	C	C	C	I	D	D	I	C	D	C	D	I

I: Increasing trend (change greater than 20%)
D: Decreasing trend (change greater than 20%)
C: Consistent trend (within 20%)
Parameter exceeds standard/guidance value during the current sampling event.

BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
TOC: Total Organic Carbon
TKN: Total Kjeldahl Nitrogen

Table 6
SUMMARY OF CONCENTRATION TRENDS FOR INORGANIC PARAMETERS
MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Location	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Hexavalent Chromium
MW-01S	Upgradient	D	C	D	C	C	D	C	C	C
MW-01I	Upgradient	D	C	C	D	C	D	C	D	C
MW-01D	Upgradient	I	D	C	D	C	D	C	D	C
MW-02I	Upgradient	C	C	C	I	C	D	C	C	C
MW-02D	Upgradient	D		C	I	C	I	C	I	C
MW-03S	Downgradient	D	C	C	D	C	D	C	D	C
MW-04S	Downgradient	D	C	D	C	C	C	C	C	C
MW-04I	Downgradient	D	C	I	D	C	I	C	D	C
MW-04D	Downgradient	D	C	D	C	C	D	C	C	C
MW-05S	Downgradient	D	C	C	I	C	I	D	I	C
MW-05I	Downgradient	D	C	D	D	C	C	D	C	C
MW-05D	Downgradient	D	C	C	C	C	D	D	C	C
MW-06S	Sidegradient	D	C	D	I	C	I	C	I	C
MW-06I	Sidegradient	D	C	C	I	C	D	C	I	C
MW-06D	Sidegradient	D	C	C	I	C	D	C	D	C
MW-07I	Upgradient	D	C	C	C	C	I	C	I	C
MW-11S	Upgradient	I	C	C	D	C	D	C	D	C
MW-11I	Upgradient	D	C	C	D	C	D	D	D	C
MW-11D	Upgradient	I		I	I	C	D	I	I	C
MW-12S	Upgradient	I	C	C	I	C	D	C	C	C
MW-12I	Upgradient	I	C	C	D	C	D	I	C	C
MW-12D	Upgradient	I	C	C	C	C	D	C	D	C

I: Increasing trend (change greater than 20%)
D: Decreasing trend (change greater than 20%)
C: Consistent trend (within 20%)
Parameter exceeds standard/guidance value during the current sampling event.

Table 6 (continued)
SUMMARY OF CONCENTRATION TRENDS FOR INORGANIC PARAMETERS
MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Location	Total Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
MW-01S	Upgradient	C	C	C		D	C		C	C
MW-01I	Upgradient	C	C	D	D	D	C	D	C	D
MW-01D	Upgradient	I	I	C		I	C	I	C	I
MW-02I	Upgradient	I	C	D	I	D	C	C	I	I
MW-02D	Upgradient	C	C	D	D	C	I	D	C	I
MW-03S	Downgradient	C	C	C		I	D		D	C
MW-04S	Downgradient	D	D	C		I	C		I	D
MW-04I	Downgradient	I	C	D		I	D		C	C
MW-04D	Downgradient	I	C	D		C	I	D	C	I
MW-05S	Downgradient	C	D	C		I	I		C	C
MW-05I	Downgradient	D	D	D		D	C		I	D
MW-05D	Downgradient	D	C	D	D	D	C		C	I
MW-06S	Sidegradient	I	D	C		I	I		C	D
MW-06I	Sidegradient	I	D	D	D	C	I		C	C
MW-06D	Sidegradient	I	I	D	D	C	C		C	I
MW-07I	Upgradient	I	C	D	D	D	I		C	C
MW-11S	Upgradient	D	C	C		C	C		C	D
MW-11I	Upgradient	I	D	C	D	C	D	D	C	D
MW-11D	Upgradient		I	I			I		I	I
MW-12S	Upgradient		I	I		I	I		C	I
MW-12I	Upgradient	I	C	I		I	I		C	D
MW-12D	Upgradient	I	C	I		I	D	I	C	C

I: Increasing trend (change greater than 20%)
D: Decreasing trend (change greater than 20%)
C: Consistent trend (within 20%)
Parameter exceeds standard/guidance value during the current sampling event.

Table 6 (continued)
SUMMARY OF CONCENTRATION TRENDS FOR INORGANIC PARAMETERS
MAY-JUNE 2011 SAMPLING EVENT
Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Location	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide	Iron plus Manganese
MW-01S	Upgradient	I	C	C		C	C	D	C	
MW-01I	Upgradient	D	C	C	C	C	C	D	C	D
MW-01D	Upgradient	D	C	C	D	C	I	I	C	
MW-02I	Upgradient	C	C	C	I	C	C	I	C	I
MW-02D	Upgradient	I	C	C	I	C	C	C	C	D
MW-03S	Downgradient	C	C	C		C	D	D	C	
MW-04S	Downgradient	C	C	C		C	C	D	C	
MW-04I	Downgradient	D	C	C	D		C	C	C	
MW-04D	Downgradient	I	C	C	I	C	C	I	C	
MW-05S	Downgradient	I	C	C		C	D	D	C	
MW-05I	Downgradient	C	C	C	C	C	D	D	C	
MW-05D	Downgradient	C	C	C		C	C	D	C	
MW-06S	Sidegradient	I	C	C		C	D	I	C	
MW-06I	Sidegradient	C	D	C			C	D	C	
MW-06D	Sidegradient	C	C	C	C	C	C	I	C	
MW-07I	Upgradient	D	C	C		C	C	D	C	
MW-11S	Upgradient	D	C	C		C	C	I	C	
MW-11I	Upgradient	D	C	C	I	C	C	D	C	D
MW-11D	Upgradient	C	D	C	D		I	I	C	
MW-12S	Upgradient	C	C	C		C	I	I	C	
MW-12I	Upgradient	C	C	C	C		I	C	C	
MW-12D	Upgradient	C	C	C	C	C	C	I	C	

I: Increasing trend (change greater than 20%)
D: Decreasing trend (change greater than 20%)
C: Consistent trend (within 20%)
Parameter exceeds standard/guidance value during the current sampling event.

Table 7

DEPTH TO WATER AND GROUNDWATER ELEVATION MEASUREMENTS

MAY-JUNE 2011 SAMPLING EVENT

Sonia Road Landfill Post Closure Groundwater Monitoring Program

Well	Measuring Point Elevation [1]	Depth to Water [2] (May 2011)	Groundwater Elevation [1]
MW-01S	66.01	15.11	50.9
MW-01I	65.36	14.04	51.32
MW-01D	64.53	13.05	51.48
MW-02I	78.24	27.65	50.59
MW-02D	78.43	27.94	50.49
MW-03S	70.76	20.95	49.81
MW-03I	70.77	20.95	49.82
MW-03D	70.5	20.91	49.59
MW-04S	71.1	22.92	48.18
MW-04I	69.31	20.99	48.32
MW-04D	69.03	21.65	47.38
MW-05S	70.28	21.33	48.95
MW-05I	70.26	21.29	48.97
MW-05D	70.96	21.76	49.2
MW-06S	74.45	25.64	48.81
MW-06I	74.52	25.49	49.03
MW-06D	75.02	26.12	48.9
MW-07S	72.83	23.00	49.83
MW-07I	73.43	23.57	49.86
MW-07D	75.04	25.16	49.88
MW-10S	56.65	4.88	51.77
MW-10I	56.16	4.68	51.48
MW-10D	56.34	4.88	51.46
MW-11S[4]	--	6.65	--
MW-11I	60.38	6.66	53.72
MW-11D	60.19	6.84	53.35
MW-12S	58.79	6.98	51.81
MW-12I	58.92	7.10	51.82
MW-12D	58.61	6.78	51.83
MW-13S	70.51	24.99	45.52
MW-13I	70.3	24.72	45.58
MW-13D	70.37	24.75	45.62
MW-14S	64.55	17.69	46.86
MW-14I[5]	64.57	17.81	46.76
MW-14D[5]	64.58	17.77	46.81

[1] Feet above mean sea level.

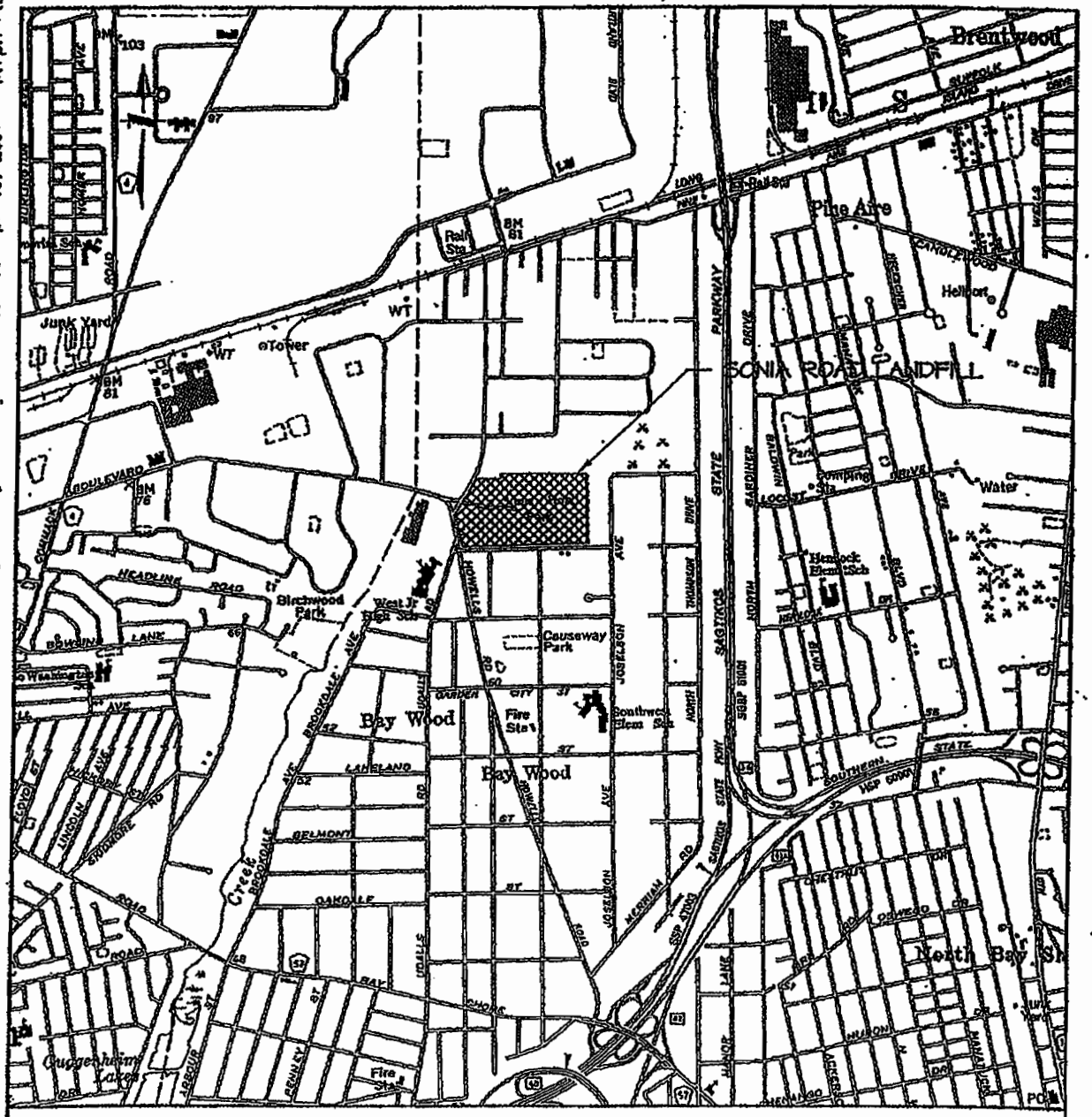
[2] Feet below measuring point.

[3] Well to be resurveyed.

[4] Well needs to be resurveyed. The well casing was observed to be cut during the February 2010 sampling event.

[5] 5 Well needs to be resurveyed. The well casing was observed to be apparently cut during the May 2011 sampling event.

FIGURES



SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

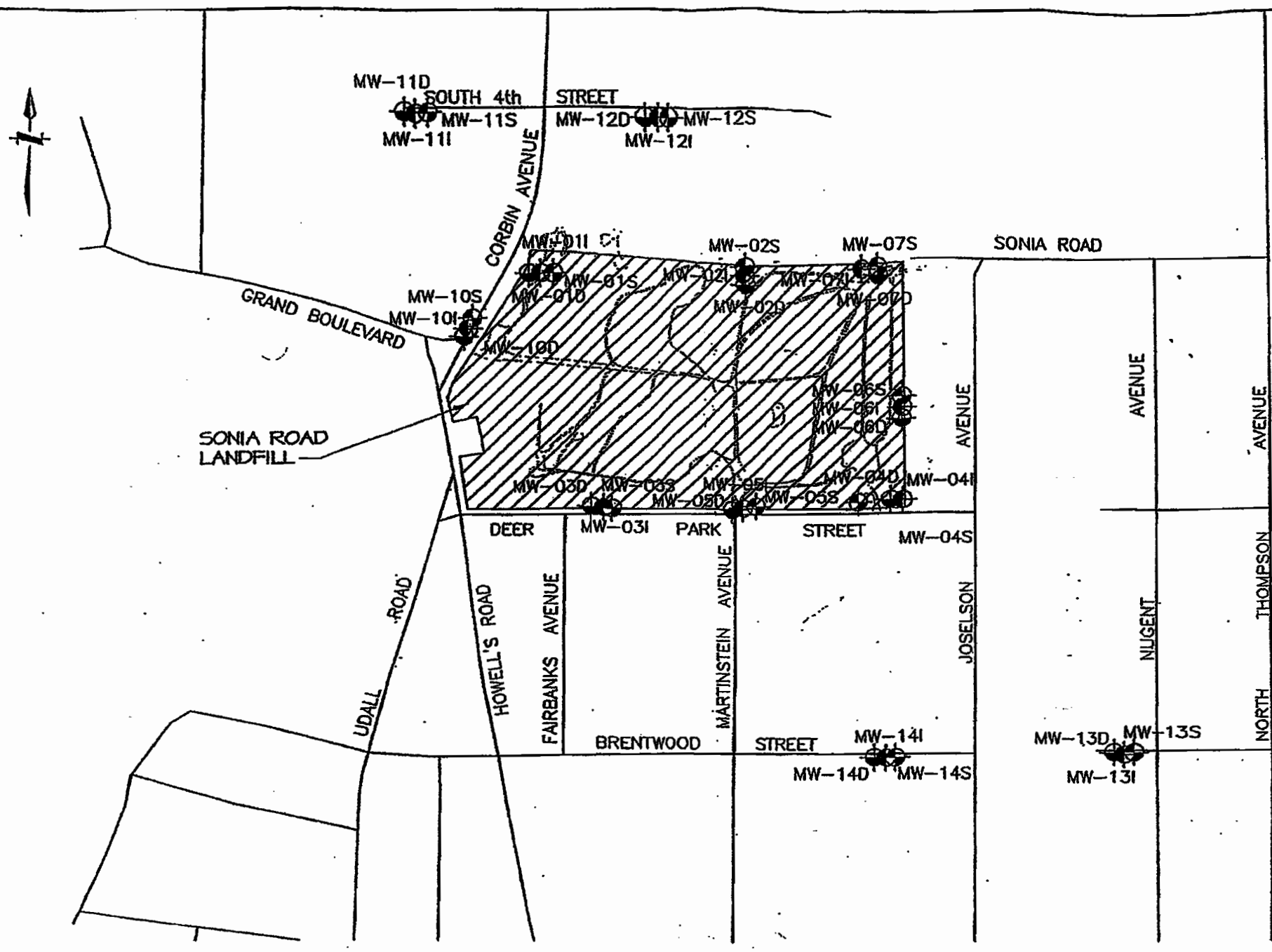
SITE LOCATION MAP

SCALE: 1"= 2000'

FIGURE 1

H2MGROUP ENGINEERS • ARCHITECTS PLANNERS • SCIENTISTS • SURVEYORS
MELVILLE, N.Y. TOTOWA, N.J.

X:\ISLIP\Town of Islip - 1256\ISLP0701 (Sonia Rd Landfill)\01-DRAFT REPORT\Site Figures\Figure 1.dwg Last Modified Apr 18, 2007 - 1:17pm Plot



LEGEND:

MW-14S — GROUNDWATER MONITORING WELL AND DESIGNATION

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

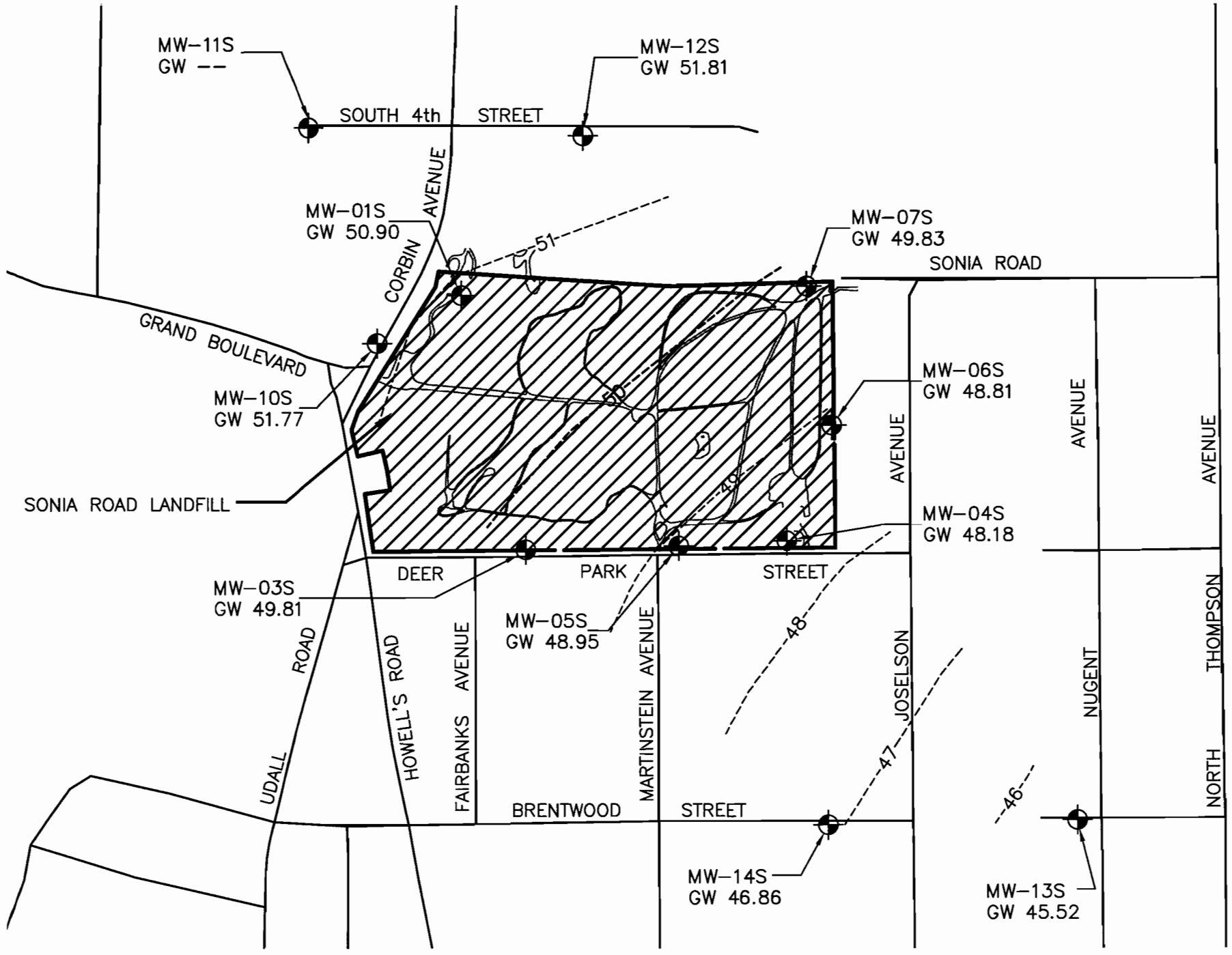
GROUNDWATER MONITORING WELL LOCATIONS

SCALE: 1"= 2000'

0 500
SCALE IN FEET

FIGURE 2

H2MGROUP ENGINEERS · ARCHITECTS · PLANNERS · SCIENTISTS · SURVEYORS
MELVILLE, N.Y. TOTOWA, N.J.



LEGEND

MW-11S — MONITORING WELL LOCATION AND DESIGNATION

GW 51.73 — GROUNDWATER ELEVATION, IN FEET MSL

----- 50 ----- GROUNDWATER ELEVATION CONTOUR, IN FEET MSL

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)

1 inch = 500 ft.

FIGURE 3
SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM

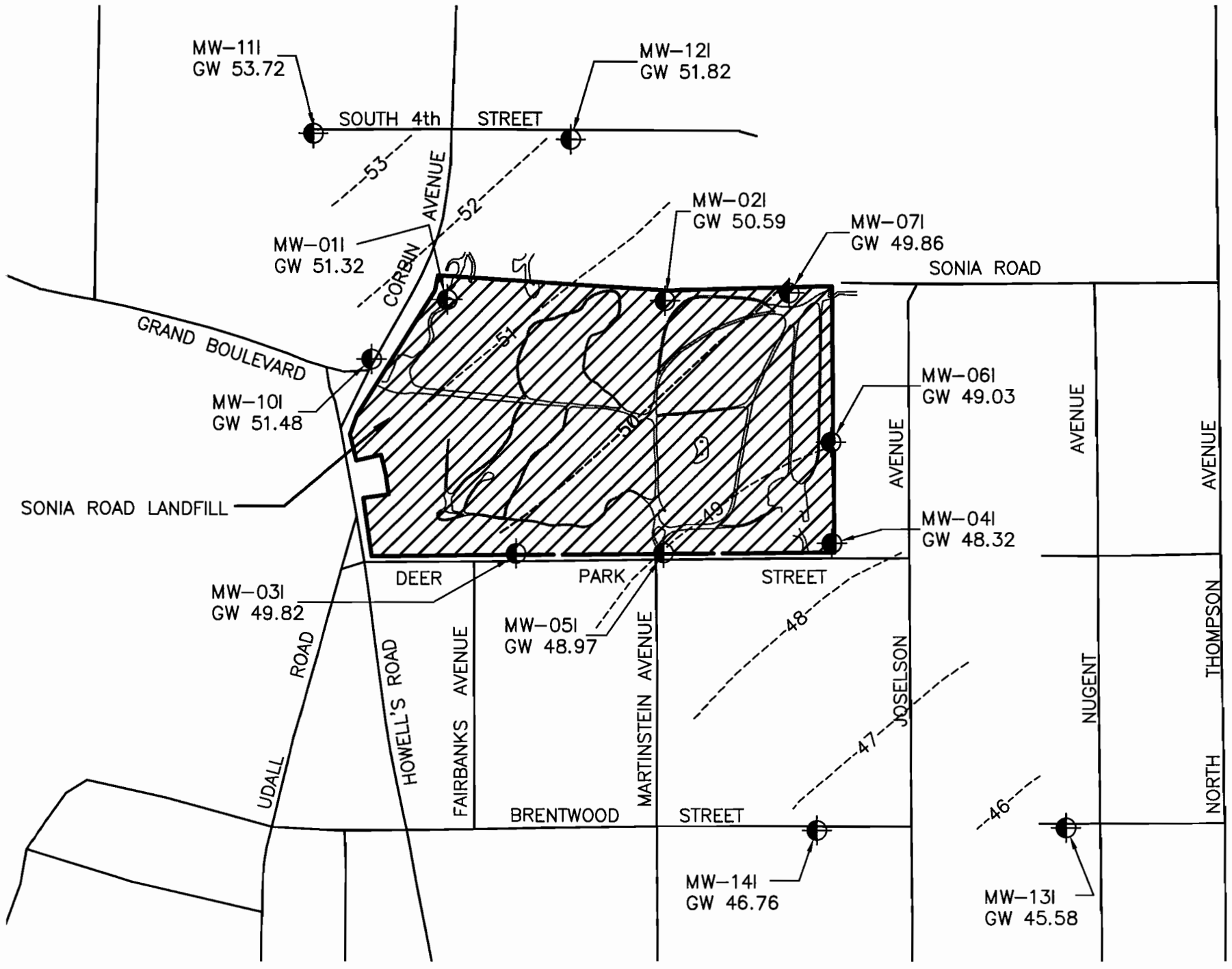
WATER TABLE ELEVATION CONTOUR MAP

TOWN OF ISLIP, SUFFOLK COUNTY, NEW YORK

SCALE 1" = 500' PROJECT No. ISLP-1001 DATE: MAY 2011

H2M GROUP
ENGINEERS ▸ ARCHITECTS ▸ PLANNERS ▸ SCIENTISTS ▸ SURVEYORS
HOLZMACHER, McLENDON & MURRELL, P.C.
575 Broad Hollow Road, Melville, New York 11747
E-mail: h2m@h2m.com
www.h2m.com
MELVILLE, N.Y. ■ (631)-756-8000
TOTOWA, N.J. □ (973)-942-0700

2" 1" 0 1"



LEGEND

MW-11I — MONITORING WELL LOCATION AND DESIGNATION

GW 51.29 — GROUNDWATER ELEVATION, IN FEET MSL

50 — GROUNDWATER ELEVATION CONTOUR, IN FEET MSL

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)

1 inch = 500 ft.

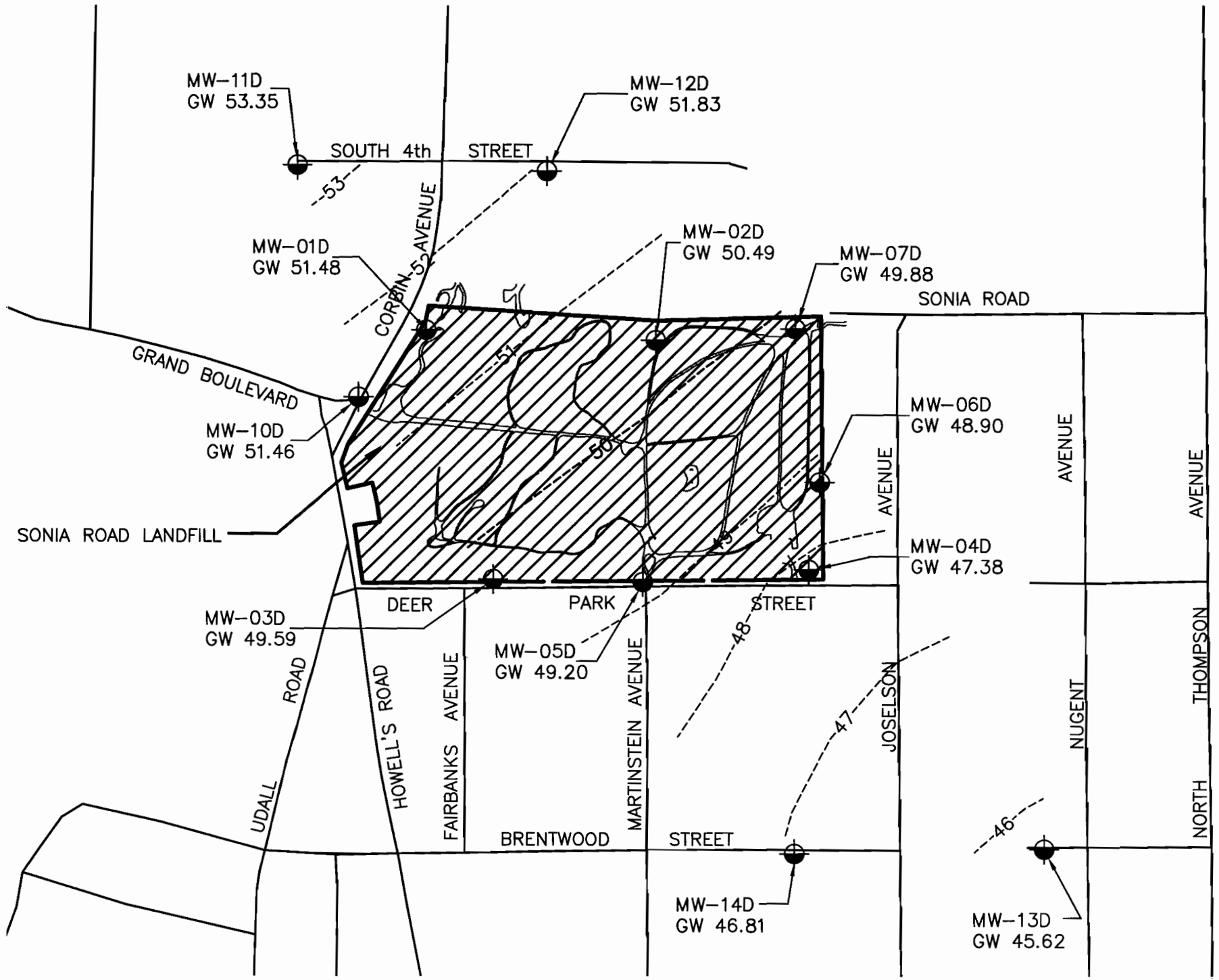
FIGURE 4
SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
POTENTIOMETRIC SURFACE ELEVATION CONTOUR MAP FOR INTERMEDIATE ZONE

TOWN OF ISLIP, SUFFOLK COUNTY, NEW YORK

SCALE 1" = 500' PROJECT No. ISLP-1001 DATE: MAY 2011

H2MGROUP
ENGINEERS ▲ ARCHITECTS ▲ PLANNERS ▲ SCIENTISTS ▲ SURVEYORS
HOLZMACHER, McLENDON & MURRELL, P.C.
575 Broad Hollow Road, Melville, New York 11747
E-mail: h2m@h2m.com
www.h2m.com
MELVILLE, N.Y. ■ (631)-756-8000
TOTOWA, N.J. □ (973)-942-0700

2" 1" 0 1"



LEGEND

MW-1D ⊕ MONITORING WELL LOCATION AND DESIGNATION

GW 53.11 GROUNDWATER ELEVATION, IN FEET MSL

------50------ GROUNDWATER ELEVATION CONTOUR, IN FEET MSL

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)

1 inch = 500 ft.

FIGURE 5
SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
POTENTIOMETRIC SURFACE ELEVATION CONTOUR MAP FOR DEEP ZONE

TOWN OF ISLIP, SUFFOLK COUNTY, NEW YORK

SCALE 1" = 500' PROJECT No. ISLP-1001 DATE: MAY 2011

H2M GROUP
ENGINEERS ▸ ARCHITECTS ▸ PLANNERS ▸ SCIENTISTS ▸ SURVEYORS
HOLZMACHER, McLENDON & MURRELL, P.C.
575 Broad Hollow Road, Melville, New York 11747
E-mail: h2m@h2m.com
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2" 1" 0 1"

APPENDIX A

HISTORIC DATA TABLES AND GRAPHS

APPENDIX A-1

Leachate Indicator Parameters

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 10/24/97 (mg/l)	MW-01D 11/30/2000 (mg/l)	MW-01D 01/30/2001 (mg/l)	MW-01D 8/21/02 (mg/l)	MW-01D 11/20/02 (mg/l)	MW-01D 3/5/03 (mg/l)	MW-01D 6/3/03 (mg/l)	MW-01D 8/21/03 (mg/l)	MW-01D 11/10/03 (mg/l)	MW-01D 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	30	NS	NS	20	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	11.4	37	43	41.6	51.3	44	66.2	66.1	63.4	60.5
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.36	0.46	0.49	0.21	0.33		0.49	0.10 U	0.10 U	0.60
Biochemical Oxygen Demand	-	-	(mg/l)	20	2 U	2 U	2 U	2 U	6	4	6	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U		0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	3 U	21.5	10.7	46.9	17.6	48.6	14.3	10 U	10 U	42.9
Chloride	250 ST	16887-00-6	(mg/l)	198								111	
Hardness (as CaCO3)	-	-	(mg/l)	146	74	80	140	290	100	58	23	15	160
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.2	0.42	1	1.08	1.66	0.84	0.61	2.22	2.69	0.41
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.8	19.8	33.2	60.2	27.5	26.7	46.8	33	27.5	17.8
Total Organic Carbon	-	-	(mg/l)	2.3	2.3	2.4	1.5	5.7	6	1.4	3.8	1.1	1 U
Total Dissolved Solids	-	-	(mg/l)	452	1060	1500	1340	1160	950	1100	548	290	1040
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.59	0.660	0.42	1.37	3.24	0.53	0.33	0.34	0.52

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 5/20/04 (mg/l)	MW-01D 8/19/04 (mg/l)	MW-01D 11/8/04 (mg/l)	MW-01D 2/28/05 (mg/l)	MW-01D 5/25/05 (mg/l)	MW-01D 8/24/05 (mg/l)	MW-01D 11/28/05 (mg/l)	MW-01D 2/24/06 (mg/l)	MW-01D 5/17/06 (mg/l)	MW-01D 8/8/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	53.6	38	36.8	30.8	32.6	42.1	53.2	55	55.2	52
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.82	0.1 U	1.14	1.52	1.6	1.2	1.28	0.88	0.8	0.78
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	19	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.8	0.5 U	0.5	0.6	0.7	0.5	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	70.3	122	31.1	88.5	23.5	43.5	969	57.2	67.3	78.9
Chloride	250 ST	16887-00-6	(mg/l)										
Hardness (as CaCO3)	-	-	(mg/l)	260	184	220	196	176	136	128	135	125	145
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.56	1.82	0.51	0.6	0.92	1.54	0.98	0.73	0.5	1.31
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	30.2	46.5	46.2	44.2	46.8	44.8	34.3	44.2	35.3	53.8
Total Organic Carbon	-	-	(mg/l)	1.6	1 U	1.4	1.8	1.8	2	2.4	2.4	1.9	2
Total Dissolved Solids	-	-	(mg/l)	1,020	1,770	2,060	2,050	1,780	1,960	1,720	2,060	2,200	2,320
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.61	1.76	1.35	1.80	1.67	1.62	2.4	1.37	1.1	1.01

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit.
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentration as determined by data validation.

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an appoximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 11/28/06 (mg/l)	MW-01D 2/21/07 (mg/l)	MW-01D 5/25/07 (mg/l)	MW-01D 8/17/07 (mg/l)	MW-01D 11/9/07 (mg/l)	MW-01D 02/11/08 (mg/l)	MW-01D 5/15/08 (mg/l)	MW-01D 8/5/08 (mg/l)	MW-01D 11/3/08 (mg/l)	MW-01D 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5	20	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	77.0	55.2	48.2	34.9	33.4	38.3	42.8	38.8	32.7	30.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.68	0.10 U	0.37	0.98	0.57	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	10	2 U	2 U	6	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	67.3	38.3	71.6	66.2	107	39.2	10 U	10 U	86.3	10 U
Chloride	250 ST	16887-00-6	(mg/l)					49.5			195	182	144
Hardness (as CaCO3)	-	-	(mg/l)	200	120	240	180	22.0	80.0	46.0	19.0	26.0	20.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.58	0.61	2.8	4.25	0.10 U					
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	84	36.3	81.6	75.0	5.0 U	42.8	20.9	14.8	7.32	10.6
Total Organic Carbon	-	-	(mg/l)	2.5	11.5	2.5	1.4	12.7	1.0	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	2,840	1,240	2,730	2,350	212	1190	729	446	399	388
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.49	3.65	1.66	1.01	3.65	0.68	0.30	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-01D 8/12/09 (mg/l)	MW-01D 2/4/10 (mg/l)	MW-01D 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	5	30	40
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	22.9	25.6	27.0 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.15
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	.50 U
Chemical Oxygen Demand	-	-	(mg/l)	18.2	10 U	37.2
Chloride	250 ST	16887-00-6	(mg/l)	104	37.1	3.11
Hardness (as CaCO3)	-	-	(mg/l)	15.0	56.0	38
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	11.4	4.43	1.03 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U		0.005 U
Sulfate	250 ST		(mg/l)	16.9	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	1	2.7	2.8
Total Dissolved Solids	-	-	(mg/l)	279	136	50
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1	0.65 U	1.97

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentration as determined by data validation.

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 10/24/97 (mg/l)	MW-01I 11/30/2000 (mg/l)	MW-01I 01/30/2001 (mg/l)	MW-01I 8/21/02 (mg/l)	MW-01I 11/20/02 (mg/l)	MW-01I 3/5/03 (mg/l)	MW-01I 6/3/03 (mg/l)	MW-01I 8/21/03 (mg/l)	MW-01I 11/10/03 (mg/l)	MW-01I 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	NS	5 U	5 U	NS	5	NS	NS	10	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	20.7	65.6	50	14.8	23.4	65.8	58.7	63.8	50	34.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.9	0.24	0.63	0.15	0.1 U	0.45	0.25	0.1 U	0.93	1.53
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2	2 U	2 U	2 U	2 U	8	7	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	1.3	1 U
Chemical Oxygen Demand	-	-	(mg/l)	3 U	10 U	10 U	12.7	10 U	30	10 U	16.8	11.9	13.1
Chloride	250 ST	16887-00-6	(mg/l)	195	34.6	72	16.4	68.7	59.5	13.1	122	96.7	98.8
Hardness (as CaCO3)	-	-	(mg/l)	42	5	30	40	32	80	14	48	106	140
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.72	0.53	1.3	2.74	0.6	0.1 U	0.1 U	0.91	0.79	0.26
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	35.2	10.2	5 U	5 U	12.1	23.4	9.2	5 U	9.6	7.7
Total Organic Carbon	-	-	(mg/l)	2.8	1.7	0.99 J	1.4	1 U	1.4	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	356	179	310	86	310	201	87	307	214	2910
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.35	1.16	0.21	0.45	0.7	0.23	0.84	1.41	1.12

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 5/20/04 (mg/l)	MW-01I 8/19/04 (mg/l)	MW-01I 11/8/04 (mg/l)	MW-01I 2/28/05 (mg/l)	MW-01I 5/25/05 (mg/l)	MW-01I 8/24/05 (mg/l)	MW-01I 11/28/05 (mg/l)	MW-01I 2/24/06 (mg/l)	MW-01I 5/17/06 (mg/l)	MW-01I 8/8/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	42.6	37.6	39.2	29.4	28.4	17.6	22.6	27.8	25.2	39.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.55	0.1 U	0.1 U	0.1 U	1.24	0.92	1.02	0.77	0.6	0.72
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.9	1.1	1.4	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	16.8	14.3	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	21.9	31.2	26.9	29.6	20.3	15.5	16	17.2	15.3	19.2
Hardness (as CaCO3)	-	-	(mg/l)	22	15	26	92	40	31	32	25	26	50
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.55	1.63	1.88	1.41	0.1 U	0.74	0.5	0.12	0.62	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	9.8	5 U	5 U	6.2	8.9	11.2	14	11.3	6.5	6.5
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1.2	1.2	1.1	1	1 U
Total Dissolved Solids	-	-	(mg/l)	157	119	125	121	140	169	119	92	79	97
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.84	0.59	0.56	0.30	1.59	1.15	2.03	1.03	0.8	1.22

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit.
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr.

: Concentration exceeds Standard/Guidance Value
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 11/28/06 (mg/l)	MW-01I 2/21/07 (mg/l)	MW-01I 5/25/07 (mg/l)	MW-01I 8/15/07 (mg/l)	MW-01I 11/9/07 (mg/l)	MW-01I 2/11/08 (mg/l)	MW-01I 5/15/08 (mg/l)	MW-01I 8/5/08 (mg/l)	MW-01I 11/3/08 (mg/l)	MW-01I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	37.4	25.5	25.2	24.3	14.8	15	12.8	17.7	13.6	7.95
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.65	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	13	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	16.7	20.7	19.7	14.6	12.1	30.9	35.6	5.90	5.12	4.86
Hardness (as CaCO3)	-	-	(mg/l)	55.0	50.0	50.0	42.0	35	46	50.0	28.0	24.0	130
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.30	1.01	1.11	1.82	2.66	0.1 U	0.1 U	1.77	1.38	0.83
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.3	16.2	14.6	15.0	17.4	11.9	11.9	19.4	14.7	18.4
Total Organic Carbon	-	-	(mg/l)	1 U	2.4	1.5	1 U	1.4	1 U	1 U	1.1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	100	90	95	94	96	89	134	77	53	58
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.10	0.97	0.94	1.53	0.58	0.93	0.72	0.77	0.20	0.34

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01I 8/12/09 (mg/l)	MW-01I 2/4/10 (mg/l)	MW-01I 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	5	10	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.0	8.90	6.40
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1U	.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	6.97	8.25	11.7
Hardness (as CaCO3)	-	-	(mg/l)	24.0	25.0	22 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.94	1.27	0.80
Phenols, total	0.001 ST	-	(mg/l)	24.0	5 U	0.005 U
Sulfate	250 ST		(mg/l)	21.9	13.2	9.89
Total Organic Carbon	-	-	(mg/l)	1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	58	63	84
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.13	0.55 U	0.10 U

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr:

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-01S DATE: 10/24/97 UNITS: (mg/l)	MW-01S 11/30/2000 (mg/l)	MW-01S 01/29/2001 (mg/l)	MW-01S 8/21/02 (mg/l)	MW-01S 11/20/02 (mg/l)	MW-01S 3/5/03 (mg/l)	MW-01S 6/3/03 (mg/l)	MW-01S 8/21/03 (mg/l)	MW-01S 11/10/03 (mg/l)	MW-01S 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units) 80	50	50	NS	50	NS	NS	20	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l) 264	183	180	126	211	177	151	161	165	192
Ammonia (as N)	2 ST	7664-41-7	(mg/l) 1			1.46		1.04	0.93	0.1 U	1.57	0.44
Biochemical Oxygen Demand	-	-	(mg/l) 2 U	2 U	6	2 U	2 U	2 U	4	8	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l) 0.7	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		1 U
Chemical Oxygen Demand	-	-	(mg/l) 46	29.6	10.7	22.5	29.8	83.2	10 U	21.6	38.6	33
Chloride	250 ST	16887-00-6	(mg/l) 69.7	28.4	42	36.6	40.9	60.7	131	65.8	158	56.6
Hardness (as CaCO3)	-	-	(mg/l) 310	140	200	240	520	200	270	320	460	54
Nitrate (as N)	10 ST	14797-55-8	(mg/l) 0.1 U	0.1 U	0.080 J	0.1 U	0.1 U	0.1 U	0.12	0.55	0.1 U	0.26
Phenols, total	0.001 ST	-	(mg/l) 0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l) 36.3	50	42.5	78	89	117	108	188		140
Total Organic Carbon	-	-	(mg/l) 11.7	6	9.1	4.8	5.1	6.9	4.3	5.6	8.3	7.4
Total Dissolved Solids	-	-	(mg/l) 432	259	310	250	420	74	506	534	690	498
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l) 2.3	1.9	3.3	1.26	2.11	1.21	0.84	0.85	1.72	0.77

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-01S DATE: 5/20/04 UNITS: (mg/l)	MW-01S 8/19/04 (mg/l)	MW-01S 11/8/04 (mg/l)	MW-01S 2/28/05 (mg/l)	MW-01S 5/25/05 (mg/l)	MW-01S 8/24/05 (mg/l)	MW-01S 11/28/05 (mg/l)	MW-01S 2/24/06 (mg/l)	MW-01S 5/17/06 (mg/l)	MW-01S 8/8/06 (mg/l)
Color (APHA Units)	-	-	(units) 20	NS	NS	20	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l) 184	127	150	171	174	160	121	257	204	190
Ammonia (as N)	2 ST	7664-41-7	(mg/l) 1.15	0.1 U	0.24	0.27	0.37	0.22	0.16	0.18	0.29	0.27
Biochemical Oxygen Demand	-	-	(mg/l) 2 U	2 U	2 U	10	2 U	2 U	2 U	4	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l) 0.5 U	0.8	1.8	1.4	1.2	0.5 U	0.5 U	0.7	0.5	0.7
Chemical Oxygen Demand	-	-	(mg/l) 10 U	10 U	15.6	36.8	26.8	24.3	10 U	41.2	38.7	16
Chloride	250 ST	16887-00-6	(mg/l) 72.1	73.2	83.9	82.9	118	69.2	48.4	85.3	103	78.2
Hardness (as CaCO3)	-	-	(mg/l) 750	190	248	300	290	250	196	330	280	260
Nitrate (as N)	10 ST	14797-55-8	(mg/l) 0.1 U	0.61	0.11	0.1 U	0.1 U	0.12	0.74	0.19	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l) 0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l) 130	104	140	98.5	87	88.5	86	76	108	98
Total Organic Carbon	-	-	(mg/l) 6.6	5.2	6.1	6.4	7.2	9.2	5.4	13.1	11.1	9.3
Total Dissolved Solids	-	-	(mg/l) 477	455	497	468	491	545	344	572	550	472
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l) 1.07	1.09	0.68	0.47	0.56	2.83	1.24	0.49	0.51	0.49

NOTES:
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: Concentration exceeds Standard/Guidance Value
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 11/28/06 (mg/l)	MW-01S 2/21/07 (mg/l)	MW-01S 5/25/07 (mg/l)	MW-01S 8/15/07 (mg/l)	MW-01S 11/9/07 (mg/l)	MW-01S 2/11/08 (mg/l)	MW-01S 5/15/08 (mg/l)	MW-01S 8/5/08 (mg/l)	MW-01S 11/3/08 (mg/l)	MW-01S 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	30	NA	NA	NA	NA	NA	NA	60.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	198	242	181	200	173	192	152	170	170	146
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.33	0.10 U	0.10 U	0.33	0.17	0.1 U	0.1 U	0.34	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	5	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	21.1	40.9	33.3	40.9	28.2	31.7	11.9	26.8	26.8	10 U
Chloride	250 ST	16887-00-6	(mg/l)	78.1	69.3	125	90.8	86.0	57.1	81.0	70.8	61.8	59.1
Hardness (as CaCO3)	-	-	(mg/l)	320	360	280	270	18.0	230	188	240	200	280
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.19	0.36	0.10 U	0.10 U	0.27	0.1 U	0.20	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	177	141	71.8	56	46.9	65.7	48.0	111	62.7	61.7
Total Organic Carbon	-	-	(mg/l)	10.1	12.0	9.6	9.4	6.8	8.4	6.1	9.7	7.8	6.0
Total Dissolved Solids	-	-	(mg/l)	604	562	498	459	395	379	386	477	365	329
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.84	1.38	1.35	1.26	0.75	0.54	0.50	0.68	0.48	0.41

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01S 8/12/09 (mg/l)	MW-01S 2/4/10 (mg/l)	MW-01S 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	50	20	30
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	168	157	137 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.41
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	32.7	19.4	18.6
Chloride	250 ST	16887-00-6	(mg/l)	106	46.4	175 D
Hardness (as CaCO3)	-	-	(mg/l)	200	170	220 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.14	0.33	0.16
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	86.0	47.1	57.8 D
Total Organic Carbon	-	-	(mg/l)	8.6	6.8	6.4
Total Dissolved Solids	-	-	(mg/l)	421	322	499
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.81	0.74 U	0.63 U*

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 12/1/97 (mg/l)	MW-02D 12/01/2000 (mg/l)	MW-02D 01/30/2001 (mg/l)	MW-02D 8/21/02 (mg/l)	MW-02D 11/20/02 (mg/l)	MW-02D 3/5/03 (mg/l)	MW-02D 6/3/03 (mg/l)	MW-02D 8/22/03 (mg/l)	MW-02D 11/11/03 (mg/l)	MW-02D 2/27/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.2	13.8	14	10.5	11.9	13.6	13.5	13.6	12.4	13
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.24	0.2	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	4	11	2 U	8
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	0.5	1 U
Chemical Oxygen Demand	-	-	(mg/l)	15 U	73	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	9.4	5.2	5.5	4.3	6.4	7.3	8.6	6.3	5.4	8.5
Hardness (as CaCO3)	-	-	(mg/l)	30	30	68	34	40	24	36	100	42	48
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.4	1.2	1	0.69	1.48	1.49	1.45	1.47	1.62	1.51
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	12.6	5 U	8.2	18.6	19.2	18.9	16.1	18.3	19.8	17.9
Total Organic Carbon	-	-	(mg/l)	0.7	1 U	0.88 J	1.2	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	76	96	80	60	110	80	73	91	69	139
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.23	0.19	0.340	0.1 U	0.1 U	0.18	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 5/20/04 (mg/l)	MW-02D 8/20/04 (mg/l)	MW-02D 11/8/04 (mg/l)	MW-02D 2/28/05 (mg/l)	MW-02D 5/26/05 (mg/l)	MW-02D 8/24/05 (mg/l)	MW-02D 11/29/05 (mg/l)	MW-02D 2/28/06 (mg/l)	MW-02D 5/18/06 (mg/l)	MW-02D 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	13.9	14.2	14.2	11.6	11	11.1	11.5	24.7	12.6	11.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.36	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.8	0.5	0.8	0.7	0.5	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	13.1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	6.4	7.3	7	9.8	9.1	9.4	8.6	8.4	7.7	7.8
Hardness (as CaCO3)	-	-	(mg/l)	110	18	39	38	40	37	39	48	33	35
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.69	1.36	1.38	1.35	1.35	1.31	1.25	1.2	1.32	1.2
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	25.6	20.3	20.1	22.2	8.8	18.6	18.2	17.7	17.9	19.3
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	88	83	95	81	88	137	48	79	67	81
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.27	0.11	0.21	0.14	0.1 U	0.1 U	0.1	0.34	0.12	0.64

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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
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HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 11/30/06 (mg/l)	MW-02D 2/22/07 (mg/l)	MW-02D 5/25/07 (mg/l)	MW-02D 8/14/07 (mg/l)	MW-02D 11/13/07 (mg/l)	MW-02D 2/12/08 (mg/l)	MW-02D 5/19/08 (mg/l)	MW-02D 8/4/08 (mg/l)	MW-02D 11/3/08 (mg/l)	MW-02D 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.3	8.2	7.8	8.4	7.2	8.6	6.7	6.9	6.85	6.85
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	6.3	6.7	5.8	5.6	6.2	5.7	4.86	4.66	4.98	4.64
Hardness (as CaCO3)	-	-	(mg/l)	28	40.0	25	26	22	28	22.0	21.0	22.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.64	0.44	0.31	0.34	0.30	0.14	0.1 U	0.1 U	0.18	0.11
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	17.9	19.3	19.3	19.1	13.4	17.0	16.1	15.3	14.7	11.7
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	2.3	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	61	67	59	62	51	68	55	53	47	42
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.18	0.55	0.50	0.50	0.16	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02D 8/14/09 (mg/l)	MW-02D 2/8/10 (mg/l)	MW-02D 5/31/11 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	8.30	7.60	9.60
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1	0.1 U	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	11.3	5.38	5.92
Hardness (as CaCO3)	-	-	(mg/l)	23.0	19.0	23
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.45	0.46	2.05 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	17.5	11.3	13.4
Total Organic Carbon	-	-	(mg/l)	1	1 U	1.0 U
Total Dissolved Solids	-	-	(mg/l)	62	56	61
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1U	0.23	0.10 U

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: Concentration exceeds Standard/Guidance Value
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-02I DATE: UNITS:	MW-02I 10/27/97 (mg/l)	MW-02I 12/01/2000 (mg/l)	MW-02I 01/30/2001 (mg/l)	MW-02I 8/21/02 (mg/l)	MW-02I 11/20/02 (mg/l)	MW-02I 3/7/03 (mg/l)	MW-02I 6/3/03 (mg/l)	MW-02I 8/21/03 (mg/l)	MW-02I 11/11/03 (mg/l)	MW-02I 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	10	NS	NS	10	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	12.3	9	9.3	4.5	9.6	16.2	17.2	7.4	7.5	9.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.65		0.64	0.10 U	0.1 U	0.29	0.19	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	3	7	3	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chemical Oxygen Demand	-	-	(mg/l)	15 U	56.7	10 U	12.7	10 U	14	10 U	10 U	10 U	28
Chloride	250 ST	16887-00-6	(mg/l)	10	12.8	15	10.8	3.8	14	6.2	8.2	11.1	14.7
Hardness (as CaCO3)	-	-	(mg/l)	26	34	80	32	90	44	46	42	40	44
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.9	2.2	2.4	2.39	2.56	1.68	1.92	2.72	2.82	2.28
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	32.9	5.4	7.80	10.3	13.8	25.1	27.7	16.6	13.9	15
Total Organic Carbon	-	-	(mg/l)	1.5	1.5	1.1	1.3	1.3	3.2	2.3	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	103	88	99	58	97	83	82	112	74	69
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.8	9	1.20	0.1 U	0.28	1.45	0.66	0.26	0.46	0.36

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-02I DATE: UNITS:	MW-02I 5/20/04 (mg/l)	MW-02I 8/20/04 (mg/l)	MW-02I 11/8/04 (mg/l)	MW-02I 2/28/05 (mg/l)	MW-02I 5/26/05 (mg/l)	MW-02I 8/24/05 (mg/l)	MW-02I 11/29/05 (mg/l)	MW-02I 2/28/06 (mg/l)	MW-02I 5/18/06 (mg/l)	MW-02I 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	20	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	32.1	10.2	17.8	8.8	8.3	7.4	6.4	9.1	17	25.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.23	0.1 U	0.1 U	0.71	0.66	0.42	0.85	0.65	0.33	0.27
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	8	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	1	0.8	0.5 U	0.9	0.9	1.1	0.5	0.5 U	0.5
Chemical Oxygen Demand	-	-	(mg/l)	23	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	8.3	11.4	11.3	11.4	12.4	15	26.4	31.4	38.2	24.3
Hardness (as CaCO3)	-	-	(mg/l)	110	25	39	34	36	37	42	39	53	64
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.19	3.04	3.03	2.28	2.19	1.96	1.9	2.05	1.4	1.76
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	27.2	19.4	16.5	16	15.3	17.1	8.5	7.8	27.2	33.5
Total Organic Carbon	-	-	(mg/l)	5.7	1 U	1.3	1 U	1 U	1.2	1 U	1.2	1 U	1.2
Total Dissolved Solids	-	-	(mg/l)	127	111	87	80	90	129	81	109	134	135
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.02	0.86	0.92	0.84	0.64	0.64	0.86	0.84	1.06	0.46

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 11/30/06 (mg/l)	MW-02I 2/22/07 (mg/l)	MW-02I 5/25/07 (mg/l)	MW-02I 8/14/07 (mg/l)	MW-02I 11/13/07 (mg/l)	MW-02I 2/12/08 (mg/l)	MW-02I 5/19/08 (mg/l)	MW-02I 8/4/08 (mg/l)	MW-02I 11/3/08 (mg/l)	MW-02I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	31.4	20.9	31.0	41.0	49.8	35.0	34.0	34.7	30.1	23.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.53	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.18
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	1035	10 UJ	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	36.8	37.9	35.4	40.3	28.3	16.2	19.1	15.2	14.8	16.5
Hardness (as CaCO3)	-	-	(mg/l)	76.0	64.0	68.0	68.0	54	54	45.0	40.0	38.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.62	1.74	0.84	1.2	0.93	1.96	0.1 U	1.58	1.47	2.03
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	18.4	23.6	46.6	32.1	24.4	12.8	9.05	8.07	8.98	13.4
Total Organic Carbon	-	-	(mg/l)	1.2	1.3	1.8	1.4	2.3	1 U	1 U	1.1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	129	159	146	194	139	95	101	86	73	86
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.82	0.71	0.69	0.68	1.92	0.13	0.14	0.50	0.51	0.25

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02I 8/14/09 (mg/l)	MW-02I 2/8/10 (mg/l)	MW-02I 5/31/11 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	28.1	29.6	44.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	
Biochemical Oxygen Demand	-	-	(mg/l)	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	26.7	20.0	16.9
Hardness (as CaCO3)	-	-	(mg/l)	44.0	42.0	44
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.35	1.80	0.42
Phenols, total	0.001 ST	-	(mg/l)	0.005 U		0.005 U
Sulfate	250 ST		(mg/l)	19.1	9.82	19
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.2
Total Dissolved Solids	-	-	(mg/l)	103	105	98
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.13	1.74	3.22

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 10/27/97 (mg/l)	MW-02S 11/30/2000 (mg/l)	MW-02S 01/31/2001 (mg/l)	MW-02S 8/21/02 (mg/l)	MW-02S 11/20/02 (mg/l)	MW-02S 3/5/03 (mg/l)	MW-02S 6/3/03 (mg/l)	MW-02S 8/21/03 (mg/l)	MW-02S 11/11/03 (mg/l)	MW-02S 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	86.6	86.2	85	NS	NS	NS	NS	NS	NS	NS
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.08	1.5	1.1	NS	NS	NS	NS	NS	NS	NS
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2	NS	NS	NS	NS	NS	NS	NS
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	NS	NS	NS	NS	NS	NS	NS
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	NS	NS	NS	NS	NS	NS	NS
Chloride	250 ST	16887-00-6	(mg/l)	21.2	9.5	10	NS	NS	NS	NS	NS	NS	NS
Hardness (as CaCO3)	-	-	(mg/l)	92	88	120	NS	NS	NS	NS	NS	NS	NS
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.82	2.4	1.8	NS	NS	NS	NS	NS	NS	NS
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	NS	NS	NS	NS	NS	NS	NS
Sulfate	250 ST	14808-79-8	(mg/l)	20.9	26.6	19.2	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon	-	-	(mg/l)	2.2	1.6	2.7	NS	NS	NS	NS	NS	NS	NS
Total Dissolved Solids	-	-	(mg/l)	171	138	170	NS	NS	NS	NS	NS	NS	NS
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2	1.4	1.1	NS	NS	NS	NS	NS	NS	NS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 5/20/04 (mg/l)	MW-02S 8/20/04 (mg/l)	MW-02S 11/8/04 (mg/l)	MW-02S 2/28/05 (mg/l)	MW-02S 5/26/05 (mg/l)	MW-02S 8/24/05 (mg/l)	MW-02S 11/29/05 (mg/l)	MW-02S 2/28/06 (mg/l)	MW-02S 5/18/06 (mg/l)	MW-02S 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	NS	NS	NS	NS	NS					
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	NS	NS	NS	NS	NS					
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	NS	NS	NS	NS	NS	A	A	A	A	A
Biochemical Oxygen Demand	-	-	(mg/l)	NS	NS	NS	NS	NS	B	B	B	B	B
Bromide	2 GV	24959-67-9	(mg/l)	NS	NS	NS	NS	NS	A	A	A	A	A
Chemical Oxygen Demand	-	-	(mg/l)	NS	NS	NS	NS	NS	N	N	N	N	N
Chloride	250 ST	16887-00-6	(mg/l)	NS	NS	NS	NS	NS	D	D	D	D	D
Hardness (as CaCO3)	-	-	(mg/l)	NS	NS	NS	NS	NS	O	O	O	O	O
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	NS	NS	NS	NS	NS	N	N	N	N	N
Phenols, total	0.001 ST	-	(mg/l)	NS	NS	NS	NS	NS	E	E	E	E	E
Sulfate	250 ST	14808-79-8	(mg/l)	NS	NS	NS	NS	NS	D	D	D	D	D
Total Organic Carbon	-	-	(mg/l)	NS	NS	NS	NS	NS					
Total Dissolved Solids	-	-	(mg/l)	NS	NS	NS	NS	NS					
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	NS	NS	NS	NS	NS					

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CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 11/30/06 (mg/l)	MW-02S 2/22/07 (mg/l)	MW-02S 5/25/07 (mg/l)	MW-02S 8/14/07 (mg/l)	MW-02S 11/13/07 (mg/l)	MW-02S 2/11/08 (mg/l)	MW-02S 5/19/08 (mg/l)	MW-02S 8/4/08 (mg/l)	MW-02S 11/3/08 (mg/l)	MW-02S 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)										
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)										
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	A	A	A	A	A	A	A	A	A	A
Biochemical Oxygen Demand	-	-	(mg/l)	B	B	B	B	B	B	B	B	B	B
Bromide	2 GV	24959-67-9	(mg/l)	A	A	A	A	A	A	A	A	A	A
Chemical Oxygen Demand	-	-	(mg/l)	N	N	N	N	N	N	N	N	N	N
Chloride	250 ST	16887-00-6	(mg/l)	D	D	D	D	D	D	D	D	D	D
Hardness (as CaCO3)	-	-	(mg/l)	O	O	O	O	O	O	O	O	O	O
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	N	N	N	N	N	N	N	N	N	N
Phenols, total	0.001 ST	-	(mg/l)	E	E	E	E	E	E	E	E	E	E
Sulfate	250 ST	14808-79-8	(mg/l)	D	D	D	D	D	D	D	D	D	D
Total Organic Carbon	-	-	(mg/l)										
Total Dissolved Solids	-	-	(mg/l)										
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)										

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-02S 8/14/09 (mg/l)	MW-02S (mg/l)
Color (APHA Units)	-	-	(units)		
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)		
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	A	A
Biochemical Oxygen Demand	-	-	(mg/l)	B	B
Bromide	2 GV	24959-67-9	(mg/l)	A	A
Chemical Oxygen Demand	-	-	(mg/l)	N	N
Chloride	250 ST	16887-00-6	(mg/l)	D	D
Hardness (as CaCO3)	-	-	(mg/l)	O	O
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	N	N
Phenols, total	0.001 ST	-	(mg/l)	E	E
Sulfate	250 ST		(mg/l)	D	D
Total Organic Carbon	-	-	(mg/l)		
Total Dissolved Solids	-	-	(mg/l)		
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)		

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Color (APHA Units)	-	-	(units)	70	70	100	NS	50	NS	NS	60	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	187	183	160	169	146	5 U	175	297	263	213
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	2		1.66				1.66			0.5 U
Biochemical Oxygen Demand	-	-	(mg/l)	11	11	18	5	13	10	8	8	12	9
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	1.5	0.5 U	0.5 U	0.5 U	0.6		
Chemical Oxygen Demand	-	-	(mg/l)	37	10 U	32.6	34.7	44.5	35.3	33.8	77.6	38.6	50.4
Chloride	250 ST	16887-00-6	(mg/l)	75.3	28.8	26.8	37.6	40.2	30.5	21.2	42.9	52.3	32.7
Hardness (as CaCO3)	-	-	(mg/l)	190	180	188	220	340	500	400	650	440	300
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.254	0.1 U	0.67	0.88	0.1 U	0.27	0.1 U	0.5 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.1	19	96			96.5	30.4	5.7	11.2
Total Organic Carbon	-	-	(mg/l)	7.7	4.3	4.67	4.9	3.9	5.8	5.7	8.1	7	6
Total Dissolved Solids	-	-	(mg/l)	246	237	248	290	695	876	452	528	345	320
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.1	2	1.7	3	2.48	8.69	1.46	2.92	3.23	2.03

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-03S 5/24/04 (mg/l)	MW-03S 8/23/04 (mg/l)	MW-03S 11/10/04 (mg/l)	MW-03S 3/2/05 (mg/l)	MW-03S 5/31/05 (mg/l)	MW-03S 8/26/05 (mg/l)	MW-03S 11/30/05 (mg/l)	MW-03S 3/1/06 (mg/l)	MW-03S 5/18/06 (mg/l)	MW-03S 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	120	NS	NS	200	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	209	225	225	228	278	258	326	368	312	327
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.57		1.42	1.73					1.35	
Biochemical Oxygen Demand	-	-	(mg/l)	10	2 U	14	10	10	17	7	10	10	16
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	1.5						1.6	1.5	1.1
Chemical Oxygen Demand	-	-	(mg/l)	25.5	10 U	10 U	29.3	66.8	24.3	26.8	36.1	23.6	21.1
Chloride	250 ST	16887-00-6	(mg/l)	41.7	51.1	69.7	52.4	47.9	45.2	56	56.6	45.9	49.2
Hardness (as CaCO3)	-	-	(mg/l)	700	172	320	250	370	270	420	390	320	315
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.56	0.1 U	0.14	0.42	0.18	0.1 U	0.1 U	0.12	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	24.3	5 U	5 U	6	16.6	5 U	110	43.8	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	6.8	6.1	6.2	7	9.5	8.4	10.4	12.8	8.1	9.4
Total Dissolved Solids	-	-	(mg/l)	320	513	334	335	393	486	564	554	424	602
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.27	2.61	2.08	2.06	2.89	2.99	3.89	3.32	3.77	4.32

NOTES:
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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-03S 11/29/06 (mg/l)	MW-03S 2/22/07 (mg/l)	MW-03S 6/1/07 (mg/l)	MW-03S 8/14/07 (mg/l)	MW-03S 11/14/07 (mg/l)	MW-03S 2/11/08 (mg/l)	MW-03S 5/15/08 (mg/l)	MW-03S 8/5/08 (mg/l)	MW-03S 11/5/08 (mg/l)	MW-03S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	100	NA	NA	NA	NA	NA	NA	50	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	274	288	326	288	259	228	278	240	217	236
Ammonia (as N)	2 ST	7664-41-7	(mg/l)						1.17	1.61	1.73	1.3	1.16
Biochemical Oxygen Demand	-	-	(mg/l)	9	21	12	12	19	16	11	11	14.3	14.4
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	43.7	33.3	28.2	33.3	40.9	16.9	10 U	21.8	24.3	13.3
Chloride	250 ST	16887-00-6	(mg/l)	47.7	45.8	43.5	37.5	38.2	37.2	36.3	34.0	33.8	34.9
Hardness (as CaCO3)	-	-	(mg/l)	300	320	340	270	234	240	260	220	220	450
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.13	0.1 U	0.1 U	0.1 U	0.15	0.13
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	11.9	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.3	8.8	9.8	7.9	7.4	6.7	7.1	7.2	6.8	5.7
Total Dissolved Solids	-	-	(mg/l)	404	364	410	360	347	293	337	330	278	329
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	3.60	4.52	4.09	4.57	3.67	2.77	2.70	3.41	2.83	1.90

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-03S 8/14/09 (mg/l)	MW-03S 2/4/10 (mg/l)	MW-03S 6/1/11 (mg/l)
Color (APHA Units)	-	-	(units)	200	200	150 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	304	259	210 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.67	1.27	
Biochemical Oxygen Demand	-	-	(mg/l)	9	16	9
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	30.3	21.8	25.9
Chloride	250 ST	16887-00-6	(mg/l)	48.8	53.8	50
Hardness (as CaCO3)	-	-	(mg/l)	300	240	220 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.24	0.10 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	9.30	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.9	6.4	7.5
Total Dissolved Solids	-	-	(mg/l)	419	338	304
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.40	3.55	2.69

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 10/28/97 (mg/l)	MW-04D 12/06/2000 (mg/l)	MW-04D 02/01/2001 (mg/l)	MW-04D 8/23/02 (mg/l)	MW-04D 11/21/02 (mg/l)	MW-04D 3/7/03 (mg/l)	MW-04D 6/3/03 (mg/l)	MW-04D 8/25/03 (mg/l)	MW-04D 11/11/03 (mg/l)	MW-04D 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	150	150	50	NS	60	NS	NS	80	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	210	232	260	117	103	88.2	110	1430	148	163
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										1.19
Biochemical Oxygen Demand	-	-	(mg/l)	8	4	8	13	2 U	2	12	7	4	9
Bromide	2 GV	24959-67-9	(mg/l)	1.1	0.8	1.1		0.5 U	0.5 U	0.5 U	0.5	2	
Chemical Oxygen Demand	-	-	(mg/l)	46	10 U	10.6	12.7	15.1	10 U	28.9	48.4	19.2	37.9
Chloride	250 ST	16887-00-6	(mg/l)	50.1	42.8	42	20	20.4	12.5	18.6	18.9	17.8	25.1
Hardness (as CaCO3)	-	-	(mg/l)	280	280	200	110	200	140	120	500	320	132
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	1.52	0.61	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	18.3	9.1	6.10	10	42.6	17.9	22.1	21.5	14.8	8
Total Organic Carbon	-	-	(mg/l)	4.7	6.5	6.2	3	1.7	2.9	2	1.8	1.7	2.3
Total Dissolved Solids	-	-	(mg/l)	318	304	310	170	241	40	162	214	208	50
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.6	6.6	7	4.47	3.06	4.85	4.14	4.69	4.27	4.54

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 5/24/04 (mg/l)	MW-04D 8/23/04 (mg/l)	MW-04D 11/9/04 (mg/l)	MW-04D 3/1/05 (mg/l)	MW-04D 5/27/05 (mg/l)	MW-04D 8/26/05 (mg/l)	MW-04D 11/30/05 (mg/l)	MW-04D 3/1/06 (mg/l)	MW-04D 5/22/06 (mg/l)	MW-04D 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	200	NS	NS	250	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	174	267	295	178	184	198	157	109	66.2	53
Ammonia (as N)	2 ST	7664-41-7	(mg/l)								1.74	0.48	1.06
Biochemical Oxygen Demand	-	-	(mg/l)	12	2 U	5	4	5	6	3	2	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5		0.6	0.5 U	0.8	0.7	0.6	0.9	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.1	10 U	30.5	16.8	34.3	14.3	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	27.6	34.8	41.7	34.7	37.5	37.3	38	31.2	26	16.7
Hardness (as CaCO3)	-	-	(mg/l)	800	172	220	260	270	230	168	135	95	80
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13	5.1	5 U	13.8	17.7	14.2	23.5	31.2	29.2	23.3
Total Organic Carbon	-	-	(mg/l)	3	3.5	4.1	4.1	4.72	5.4	3.7	3.8	1.8	1.5
Total Dissolved Solids	-	-	(mg/l)	248	415	376	283	271	362	252	226	170	137
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.4	5.04	3.89	3.66	3.46	2.88	2.48	2.05	1.44	1.28

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 11/30/06 (mg/l)	MW-04D 2/23/07 (mg/l)	MW-04D 5/24/07 (mg/l)	MW-04D 8/10/07 (mg/l)	MW-04D 11/13/07 (mg/l)	MW-04D 2/11/08 (mg/l)	MW-04D 5/15/08 (mg/l)	MW-04D 8/4/08 (mg/l)	MW-04D 11/3/08 (mg/l)	MW-04D 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	30	NA	NA	NA	NA	NA	NA	80.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	49.8	40.0	35.6	U*	39.8	40.7	33.6	25.9	23.2	20.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.90	0.10 U	0.10 U	0.89	0.10 U	0.56	0.73	0.52	0.3	0.36
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	10.4	10.4	7.6	U*	9.9	10.7	8.38	6.23	8.47	20.2
Hardness (as CaCO3)	-	-	(mg/l)	64	55.0	60	75	54.0	65.0	56.0	35.0	40.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.76	0.73	10 U	1.0	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	16.5	21.5	19.8	17.0	19	21.6	18.9	13.8	11.5	10.3
Total Organic Carbon	-	-	(mg/l)	1.6	1.0 U	3.3	1.4	1.1	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	106	106	95	U*	101	96	99	70	64	90
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.60	0.74	0.69	1.9	0.24	0.89	0.79	0.62	0.73	0.64

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04D 8/12/09 (mg/l)	MW-04D 2/4/10 (mg/l)	MW-04D 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	140	20	30
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	28.5	18.4	18.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.39	0.1 U	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	39.6	13.0	20.9
Hardness (as CaCO3)	-	-	(mg/l)	54.0	40.0	47
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.50	0.42
Phenols, total	0.001 ST	-	(mg/l)	0.005 U		0.005 U
Sulfate	250 ST		(mg/l)	16.8	11.0	15.3
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	177	72	97
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.50	0.21 U	0.10 U

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LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 10/29/97 (mg/l)	MW-04I 12/06/2000 (mg/l)	MW-04I 02/01/2001 (mg/l)	MW-04I 8/23/02 (mg/l)	MW-04I 11/22/02 (mg/l)	MW-04I 3/6/03 (mg/l)	MW-04I 6/3/03 (mg/l)	MW-04I 8/22/03 (mg/l)	MW-04I 11/12/03 (mg/l)	MW-04I 2/26/04 (mg/l)
Color (APHA Units)	-	-	(units)	30	200	60	NS	80	NS	NS	150	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	309	339	240	202	385	282	354	387	326	311
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.8									
Biochemical Oxygen Demand	-	-	(mg/l)	6	24	20	8	18	39	50	15	62	28
Bromide	2 GV	24959-67-9	(mg/l)	0.8	0.9	0.70		0.5 U	0.5 U	0.5 U	0.5 U	0.5	
Chemical Oxygen Demand	-	-	(mg/l)	37	10 U	10 U	20	46.9	51.3	31.4	21.6	48.4	30.5
Chloride	250 ST	16887-00-6	(mg/l)	28.7	50.9	48	22.1	49.5	44.4	49.8	47	46	40.2
Hardness (as CaCO3)	-	-	(mg/l)	210	480	200	80	460	290	440	320	390	270
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.12	0.1 U	0.1 U	0.59	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.5	5 U	5 U	5 U	10.7	5.6	6.3	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	5.2	7.5	7.5	5.5	6.4	6.4	7.2	7.4	6.5	6.6
Total Dissolved Solids	-	-	(mg/l)	424	410	310	195	402	400	422	504	368	420
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.3	11.4	10.1	6.38	7.29	7.93	6.21	6.88	5.09	4.45

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 5/24/04 (mg/l)	MW-04I 8/23/04 (mg/l)	MW-04I 11/8/04 (mg/l)	MW-04I 3/1/05 (mg/l)	MW-04I 5/27/05 (mg/l)	MW-04I 8/26/05 (mg/l)	MW-04I 11/30/05 (mg/l)	MW-04I 3/1/06 (mg/l)	MW-04I 5/22/06 (mg/l)	MW-04I 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	120	NS	NS	140	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	278	279	373	308	300	266	229	164	114	162
Ammonia (as N)	2 ST	7664-41-7	(mg/l)									1.56	
Biochemical Oxygen Demand	-	-	(mg/l)	10	8	11	15	19	15	7	9	2 U	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6		0.5 U	0.8	0.7	0.9	0.5 U	0.5 U	0.8
Chemical Oxygen Demand	-	-	(mg/l)	18.1	10 U	37.9	31.8	64.3	26.8	11.8	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	40.8	40.5	36.3	35	36.8	33.5	33.9	34.4	27.4	29.5
Hardness (as CaCO3)	-	-	(mg/l)	850	208	268	330	250	260	192	160	110	155
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.48	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.16	0.24	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	13.5	5.3	5 U	5 U	5 U	5.7	17.3	11.5
Total Organic Carbon	-	-	(mg/l)	6.7	7	8.9	8.2	8.79	8	6	5.4	3.4	3.7
Total Dissolved Solids	-	-	(mg/l)	370	480	465	403	333	437	269	250	210	242
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.38	4.34	5.37	8.62	7.94	6.64	5.27	3.81	5.47	2.77

NOTES:
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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 11/30/06 (mg/l)	MW-04I 2/23/07 (mg/l)	MW-04I 5/24/07 (mg/l)	MW-04I 8/10/07 (mg/l)	MW-04I 11/13/07 (mg/l)	MW-04I 2/11/08 (mg/l)	MW-04I 5/15/08 (mg/l)	MW-04I 8/5/08 (mg/l)	MW-04I 11/3/08 (mg/l)	MW-04I 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	20	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	104	68.8	76.4	245	102	98.8	50.6	70.2	48.4	65.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.33	0.10 U	0.10 U	[redacted]	0.10 U	1.00	0.1 U	1.09	0.5	0.82
Biochemical Oxygen Demand	-	-	(mg/l)	3	2 U	2 U	18	2 U	4	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	13.0	10 U	U*	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	19.8	20.8	21.3	42.1	26.5	48.7	32.0	47.1	39.6	55.1
Hardness (as CaCO3)	-	-	(mg/l)	100	85	85	230	112	130	88.0	116	94.0	200
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.98	0.99	10 U	[redacted]	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	7.8	12.3	12.4	5.0 U	10.5	18.4	13.5	10.3	20.5	32.1
Total Organic Carbon	-	-	(mg/l)	2.4	1.4	2.5	6.6	2.2	3.2	1 U	2.2	1.5	1.3
Total Dissolved Solids	-	-	(mg/l)	151	134	158	338	181	217	147	192	144	219
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.71	0.90	0.82	5.24	0.10 U	1.80	1.07	1.23	3.73	1.00

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04I 8/12/09 (mg/l)	MW-04I 2/4/10 (mg/l)	MW-04I 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	200	10	70
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	243	75.1	52.4 U
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.37	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	17 J*	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	27.9	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	79.6	48.8	19.1
Hardness (as CaCO3)	-	-	(mg/l)	180	92.0	58 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.28	0.83	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	11.3 U	19.9	14.8
Total Organic Carbon	-	-	(mg/l)	3.6	1.2	1.1
Total Dissolved Solids	-	-	(mg/l)	337	200	111
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.90	0.64 U	0.15 U*

NOTES:
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U: Analyzed for but not detected, value shown is instrument detection limit
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[redacted]: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 10/29/97 (mg/l)	MW-04S 12/06/2000 (mg/l)	MW-04S 02/01/2001 (mg/l)	MW-04S 8/23/02 (mg/l)	MW-04S 11/22/02 (mg/l)	MW-04S 3/6/03 (mg/l)	MW-04S 6/3/03 (mg/l)	MW-04S 8/25/03 (mg/l)	MW-04S 11/12/03 (mg/l)	MW-04S 3/2/04 (mg/l)
Color (APHA Units)	-	-	(units)	150	200	80	NS	70	NS	NS	60	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	618	364	400	405	543	489	452	374	402	343
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										1.16
Biochemical Oxygen Demand	-	-	(mg/l)	5	37	34	26	23	44	34	31	41	31
Bromide	2 GV	24959-67-9	(mg/l)	1	1.2	1		0.5 U	0.5 U	0.5 U	0.5 U	1.1	
Chemical Oxygen Demand	-	-	(mg/l)	67	10 U	13.4	34.7	37.1	61.9	33.8	996	48.4	60.3
Chloride	250 ST	16887-00-6	(mg/l)	63.3	42.2	49	49.9	51.3	49.3	54.9	44.7	37.9	40.3
Hardness (as CaCO3)	-	-	(mg/l)	540	480	340	380	440	500	460	700	660	560
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U	0.26	0.1 U	0.21	0.5
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	8.9	5.30	5 U	14	6.4	11.2	15.9	125	28.2
Total Organic Carbon	-	-	(mg/l)	17.3	8.1	11	9	8.8	9.6	8.4	8.9	9.5	8.4
Total Dissolved Solids	-	-	(mg/l)	624	426	460	430	465	595	547	546	610	471
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	23.3	8.9	10.7	7.24	8.65	12.6	10.4	9.9	7.64	5.24

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 5/24/04 (mg/l)	MW-04S 8/23/04 (mg/l)	MW-04S 11/9/04 (mg/l)	MW-04S 3/1/05 (mg/l)	MW-04S 5/27/05 (mg/l)	MW-04S 8/26/05 (mg/l)	MW-04S 11/29/05 (mg/l)	MW-04S 2/28/06 (mg/l)	MW-04S 5/22/06 (mg/l)	MW-04S 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	140	NS	NS	140	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	379	378	438	375	336	348	363	350	351	338
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										
Biochemical Oxygen Demand	-	-	(mg/l)	67	22	12	17	21	33	18	22	18	16
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6		1.7	1.4	1.2				1.4
Chemical Oxygen Demand	-	-	(mg/l)	35.5	10 U	37.9	24.3	46.8	31.8	24.3	51.2	26.1	26.1
Chloride	250 ST	16887-00-6	(mg/l)	49.3	52.5	51.1	50	59.2	58.3	55.1	59.6	62.6	70.1
Hardness (as CaCO3)	-	-	(mg/l)	900	296	410	440	300	380	360	330	365	305
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.48	0.1 U	0.5	0.24	0.1 U	0.15	0.75	0.2	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	49.4	16.5	30.9	12.4	5 U	11.6	5 U	17.2	17.6	5 U
Total Organic Carbon	-	-	(mg/l)	10.1	8.4	8.6	8.6	9.5	10.1	7.2	9	8.1	9
Total Dissolved Solids	-	-	(mg/l)	440	608	614	490	438	570	444	508	504	474
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6.73	6.59	5.46	6.05	6.3	5.55	6.7	5.71	6.04	6.07

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 11/30/06 (mg/l)	MW-04S 3/2/07 (mg/l)	MW-04S 5/24/07 (mg/l)	MW-04S 8/10/07 (mg/l)	MW-04S 11/13/07 (mg/l)	MW-04S 2/11/08 (mg/l)	MW-04S 5/15/08 (mg/l)	MW-04S 8/4/08 (mg/l)	MW-04S 11/3/08 (mg/l)	MW-04S 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	80	60	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	338	285	321	316	342	296	300	332	288	311
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										
Biochemical Oxygen Demand	-	-	(mg/l)	13	20	12	18	9	12	11	20	15.9	22.0
Bromide	2 GV	24959-67-9	(mg/l)	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	58.6	25.7	U*	43.4	21.8	26.8	26.8	66.5	10 U
Chloride	250 ST	16887-00-6	(mg/l)	72.9	70.7	71.7	61.2	68.1	57.4	60.2	55.0	49.9	48.6
Hardness (as CaCO3)	-	-	(mg/l)	360	1,100	310	320	290	280	260	268	300	510
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.0	8.2	8.9	8.5	7.9	7.4	7.0	8.1	8.6	4.8
Total Dissolved Solids	-	-	(mg/l)	424	416	435	460	440	417	422	416	385	396
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.14	7.50	8.45	6.49	7.03	5.59	5.79	6.04	4.73	4.27

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-04S 8/12/09 (mg/l)	MW-04S 2/4/10 (mg/l)	MW-04S 5/31/11 (mg/l)
Color (APHA Units)	-	-	(units)	120	60	300 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	350	297	292 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)			
Biochemical Oxygen Demand	-	-	(mg/l)	19 J*	14	17 J*
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.50 U
Chemical Oxygen Demand	-	-	(mg/l)	23.0	36.0	28.6
Chloride	250 ST	16887-00-6	(mg/l)	48.4	49.9	52.4 D
Hardness (as CaCO3)	-	-	(mg/l)	290	275	300 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.11	0.10 UU*J*
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	10.2	5 U	5.00 U
Total Organic Carbon	-	-	(mg/l)	6.3	5.4	6.6
Total Dissolved Solids	-	-	(mg/l)	398	378	432
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.38	4.79	6.03 D

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 10/29/97 (mg/l)	MW-05D 12/08/2000 (mg/l)	MW-05D 02/02/2001 (mg/l)	MW-05D 8/23/02 (mg/l)	MW-05D 11/22/02 (mg/l)	MW-05D 3/7/03 (mg/l)	MW-05D 6/5/03 (mg/l)	MW-05D 8/25/03 (mg/l)	MW-05D 11/12/03 (mg/l)	MW-05D 3/2/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	50	10	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	234	467	505	138	128	90	50.9	34.4	29.6	41.5
Ammonia (as N)	2 ST	7664-41-7	(mg/l)					0.1 U		0.1 U	0.1 U	0.1	1.44
Biochemical Oxygen Demand	-	-	(mg/l)	2	5	12	8	10	2 U	13	6	2 U	2
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	1.1	
Chemical Oxygen Demand	-	-	(mg/l)	43	40.5	32.6	17.6	22.5	10 U	10 U	36.2	21.6	15.6
Chloride	250 ST	16887-00-6	(mg/l)	51.5	65.4	51.6	27.9	32.8	34	38.5	27.1	23.3	32.7
Hardness (as CaCO3)	-	-	(mg/l)	260	410	360	148	130	136	160	110	300	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	1.5	4.46	5.73		0.68			8.85
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	27.5	25.5	17.8	33.5	32.7	15	9.8	7.6	8.9	9
Total Organic Carbon	-	-	(mg/l)	6	13.6	11.1	4.3	2.7	1.7	1 U	1 U	1.4	1.3
Total Dissolved Solids	-	-	(mg/l)	337	549	566	266	297	242	258	344	190	284
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6	15.3	18	4.57	2.54	3.46	1.86	1.4	1.14	1.39

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 5/25/04 (mg/l)	MW-05D 8/23/04 (mg/l)	MW-05D 11/10/04 (mg/l)	MW-05D 3/2/05 (mg/l)	MW-05D 5/31/05 (mg/l)	MW-05D 8/26/05 (mg/l)	MW-05D 11/30/05 (mg/l)	MW-05D 3/1/06 (mg/l)	MW-05D 5/18/06 (mg/l)	MW-05D 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	5	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	39.6	31.2	29.6	29.2	27.2	27.7	27.4	26.6	28.8	92
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.4	0.1 U	0.1 U	0.93	0.88	0.69	1.05	0.74	0.1 U	0.92
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	4	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1	1.6			1.9	1.8				1.6
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	24.3	10 U	10 U	10 U	10 U	16
Chloride	250 ST	16887-00-6	(mg/l)	23.9	24.8	27.9	28.9	25.6	25.9	31.5	31	27.7	69
Hardness (as CaCO3)	-	-	(mg/l)	160	40	110	84	84	80	88	128	100	215
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	7.52	9.95	10.1	8.12	7.49	7.87	8.69	8.7	9.97	3.46
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.4	12.2	9.5	11.1	9.9	11.9	11.3	11.8	12.9	85.5
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.2	1 U	1 U	1.3	1.5	1.4	1	3.1
Total Dissolved Solids	-	-	(mg/l)	189	300	150	154	168	285	185	178	178	388
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.52	1.28	1.36	0.72	1.02	0.77	0.9	0.88	0.78	1.29

NOTES:
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HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 11/30/06 (mg/l)	MW-05D 2/21/07 (mg/l)	MW-05D 5/25/07 (mg/l)	MW-05D 8/14/07 (mg/l)	MW-05D 11/13/07 (mg/l)	MW-05D 2/11/08 (mg/l)	MW-05D 5/15/08 (mg/l)	MW-05D 8/5/08 (mg/l)	MW-05D 11/5/08 (mg/l)	MW-05D 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	77.0	42.3	73	59.8	31.5	48.5	19.2	37.4	27.1	19.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.90	0.10 U	0.10 U	0.46	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	20.6	20.6	18.1	20.6	19.4	19.4	10 U	11.9	10 U
Chloride	250 ST	16887-00-6	(mg/l)	63.7	61.0	48.5	44.2	42.6	82.6	65.9	46.7	37.4	35.8
Hardness (as CaCO3)	-	-	(mg/l)	190	160	200	180	120	180	152	132	150	220
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.16	2.84	1.57	2.4	4.33	1.60	3.64	5.60	7.65	9.56
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	112	85.5	157	103	77.1	82.7	80.9	105	90.6	53.2
Total Organic Carbon	-	-	(mg/l)	2.9	2.9	3.6	3.3	2.9	2.4	3.2	2.0	1.4	1 U
Total Dissolved Solids	-	-	(mg/l)	344	303	348	369	275	351	296	292	262	237
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.46	1.00	1.33	1.3	0.58	0.96	0.94	0.52	0.27	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05D 8/17/09 (mg/l)	MW-05D 2/8/10 (mg/l)	MW-05D 6/1/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	10	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	23.5	12.4	13.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.13
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	12
Chloride	250 ST	16887-00-6	(mg/l)	67.5	46.4	34.5
Hardness (as CaCO3)	-	-	(mg/l)	110	82.0	70
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.45	5.28	2.3 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	84.0	29.3	49.9 D
Total Organic Carbon	-	-	(mg/l)	1.0	1.2	1.2
Total Dissolved Solids	-	-	(mg/l)	300	179	163
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.41	1.37	0.19

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05I 10/29/97 (mg/l)	MW-05I 12/08/2000 (mg/l)	MW-05I 02/02/2001 (mg/l)	MW-05I 8/23/02 (mg/l)	MW-05I 11/22/02 (mg/l)	MW-05I 3/7/03 (mg/l)	MW-05I 6/5/03 (mg/l)	MW-05I 8/25/03 (mg/l)	MW-05I 11/12/03 (mg/l)	MW-05I 3/2/04 (mg/l)
Color (APHA Units)	-	-	(units)	40	300	100	NS	60	NS	NS	50	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	30.4	113	157	93	92.5	133	135	105	177	140
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.49			1.28	0.1			0.1 U		0.86
Biochemical Oxygen Demand	-	-	(mg/l)	3	4 U	9	10	7	2 U	3	13	4	7
Bromide	2 GV	24959-67-9	(mg/l)	0.6	0.5 U	0.5 U	1.3	1	0.5 U	0.5 U	0.9	0.5 U	
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	10 U	27.3	10 U	43.5	21.6	25.5
Chloride	250 ST	16887-00-6	(mg/l)	24.3	29.6	39.9	25.3	34.3	39.1	31.6	27.5	49.1	46.4
Hardness (as CaCO3)	-	-	(mg/l)	50	104	140	100	140	120	160	170	240	400
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	1.4	1.94	0.66	0.32	0.1 U	3.16	0.1 U	4.52
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	8.9	24.2	17	21.5	20.4	22.3	25.1	15.2	27.9	17.1
Total Organic Carbon	-	-	(mg/l)	1.8	4.7	5.12	3.4	2.5	3.2	2.5	3.7	4.5	4
Total Dissolved Solids	-	-	(mg/l)	100	216	250	432	207	280	218	257	291	303
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.7	4.4	5	2.44	1.43	4.77	3.46	0.7	5.75	3.62

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-05I 5/25/04 (mg/l)	MW-05I 8/23/04 (mg/l)	MW-05I 11/10/04 (mg/l)	MW-05I 3/2/05 (mg/l)	MW-05I 5/31/05 (mg/l)	MW-05I 8/29/05 (mg/l)	MW-05I 11/30/05 (mg/l)	MW-05I 3/1/06 (mg/l)	MW-05I 5/18/06 (mg/l)	MW-05I 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	40	NS	NS	140	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	184	136	188	178	156	150	176	129	140	124
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		0.1 U							0.1 U	
Biochemical Oxygen Demand	-	-	(mg/l)	6	4	3	6	6	4	2 U	3	4	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U		1.7	1.2	1.7	1.5	0.7	0.5 U	0.5
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	21.8	26.8	16.8	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	49.6	37.4	58.8	45.1	45.4	46.6	65.1	42.7	53.9	60.2
Hardness (as CaCO3)	-	-	(mg/l)	850	98	184	210	200	230	224	185	190	210
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	3.88	0.11	0.39	0.15	0.1 U	0.1 U	0.13	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14	15.6	17.7	17.1	27.1	41	60.5	54	68.5	99.5
Total Organic Carbon	-	-	(mg/l)	4.8	3.7	5.5	4.8	4.6	5.5	5.9	5.5	5.2	5.9
Total Dissolved Solids	-	-	(mg/l)	287	396	313	284	275	383	357	289	325	412
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	5.92	4.28	6.11	4.18	3.28	2.69	2.33	3.01	1.91	2.82

NOTES:
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: Concentration exceeds Standard/Guidance Value
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 11/30/06 (mg/l)	MW-05I 2/21/07 (mg/l)	MW-05I 5/25/07 (mg/l)	MW-05I 8/14/07 (mg/l)	MW-05I 11/13/07 (mg/l)	MW-05I 2/11/08 (mg/l)	MW-05I 5/15/08 (mg/l)	MW-05I 8/5/08 (mg/l)	MW-05I 11/5/08 (mg/l)	MW-05I 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	20	NA	NA	NA	NA	NA	NA	40.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	79.5	72.5	63.3	70.5	57	57.8	69.4	71.8	42.6	47.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.85	0.10 U	0.10 U	1.52	0.10 U	0.28 UJ	0.53	0.1 U	0.1 U	0.1 UJ*
Biochemical Oxygen Demand	-	-	(mg/l)	3	2 U	7	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	25.7	10 U	10.5	18.1	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	35.2	33.7	59.1	62.3	61.6	52.9	51.4	18.1	21.0	22.6
Hardness (as CaCO3)	-	-	(mg/l)	136	120	130	180	124	110	96.0	96.0	14.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.46	0.11	0.1 U	1.78	0.1 U	0.1 U	0.1 U	0.1 U	0.11
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	76.0	59.3	56.8	52.8	50.0	36.1	36.8	67.3	32.3	38.0
Total Organic Carbon	-	-	(mg/l)	3.3	3.1	3.9	3.4	3.4	3	2.9	3.1	1.4	1.0
Total Dissolved Solids	-	-	(mg/l)	231	207	267	286 J	297	212	223	203	126	151
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.26	1.05	2.45	2.32	0.41	1.28	0.74	0.48	0.18	0.16 J*

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05I 8/17/09 (mg/l)	MW-05I 2/8/10 (mg/l)	MW-05I 5/31/11 (mg/l)
Color (APHA Units)	-	-	(units)	10	60	250 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	42.3	38.3	57.6 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.13
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	26.5	10 U
Chloride	250 ST	16887-00-6	(mg/l)	37.6	28.0	27.0
Hardness (as CaCO3)	-	-	(mg/l)	88.0	64.0	90 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.63	0.10 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U		0.005 U
Sulfate	250 ST		(mg/l)	32.7	22.5	28.7
Total Organic Carbon	-	-	(mg/l)	1.3	2.6	2.3
Total Dissolved Solids	-	-	(mg/l)	196	126	164
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.23	1.67	0.20

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: Concentration exceeds Standard/Guidance Value
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 10/29/97 (mg/l)	MW-05S 12/08/2000 (mg/l)	MW-05S 02/02/2001 (mg/l)	MW-05S 8/23/02 (mg/l)	MW-05S 11/22/02 (mg/l)	MW-05S 3/7/03 (mg/l)	MW-05S 6/5/03 (mg/l)	MW-05S 8/25/03 (mg/l)	MW-05S 11/12/03 (mg/l)	MW-05S 3/2/04 (mg/l)
Color (APHA Units)	-	-	(units)	60	400	100	NS	60	NS	NS	100	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	412	390	362	236	258	218	252	106	386	160
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										0.97
Biochemical Oxygen Demand	-	-	(mg/l)	8	25	33	32	23	21	28	10	21	4
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6	0.9	1	1.4	0.5 U	0.5 U	0.5		
Chemical Oxygen Demand	-	-	(mg/l)	46	10 U	21.8	22.5	15.1	38	31.4	63	50.8	65.3
Chloride	250 ST	16887-00-6	(mg/l)	82.1	36.4	36.6	39.4	46.1	36.3	29.5	37.5	41.4	17.9
Hardness (as CaCO3)	-	-	(mg/l)	400	290	276	240	210	250	600	650	660	220
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.29	0.1 U	0.28	0.83	0.17	1	1.44	7.94
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	5 U	8.9	25.1	27.5	36	78.5	13.4	28.5
Total Organic Carbon	-	-	(mg/l)	9.6	12	9.17	6.5	5.4	5.2	6.7	10.3	10.7	4.6
Total Dissolved Solids	-	-	(mg/l)	482	385	383	288	342	275	360	640	457	396
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.6	7.8	8.4	6.3	2.48	4.41	5.7	14.3	8.66	4.66

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 5/25/04 (mg/l)	MW-05S 8/23/04 (mg/l)	MW-05S 11/10/04 (mg/l)	MW-05S 3/2/05 (mg/l)	MW-05S 5/31/05 (mg/l)	MW-05S 8/29/05 (mg/l)	MW-05S 11/30/05 (mg/l)	MW-05S 3/1/06 (mg/l)	MW-05S 5/18/06 (mg/l)	MW-05S 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	140	NS	NS	120	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	160	317	270	177	302	377	368	423	414	405
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.44									
Biochemical Oxygen Demand	-	-	(mg/l)	15	2 U	9	15	12	28	9	10	13	17
Bromide	2 GV	24959-67-9	(mg/l)	0.8	1.3		0.5 U		1.8	0.9	1.2		
Chemical Oxygen Demand	-	-	(mg/l)	28	15.6	10 U	11.8	69.3	29.3	79.3	38.7	16	28.6
Chloride	250 ST	16887-00-6	(mg/l)	35.8	40.7	50.7	49.8	47	47	51.7	54.1	53.1	54.6
Hardness (as CaCO3)	-	-	(mg/l)	1100	280	340	310	300	320	408	400	370	400
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.45	3.24	1.27	2.49	0.6	0.34	0.9	0.42	0.26	0.3
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	17.2	8.9	7.8	7	5 U	5 U	112	47.8	5.2	5 U
Total Organic Carbon	-	-	(mg/l)	8.2	8	8	5.5	9.5	11.9	11.3	15.6	10.4	11
Total Dissolved Solids	-	-	(mg/l)	361	598	415	318	429	598	588	586	486	546
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.44	5.61	3.85	3.28	5.29	7.1	7.51	10.5	10.3	8.89

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: Concentration exceeds Standard/Guidance Value
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POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 11/30/06 (mg/l)	MW-05S 2/21/07 (mg/l)	MW-05S 6/1/07 (mg/l)	MW-05S 8/14/07 (mg/l)	MW-05S 11/13/07 (mg/l)	MW-05S 2/11/08 (mg/l)	MW-05S 5/15/08 (mg/l)	MW-05S 8/5/08 (mg/l)	MW-05S 11/5/08 (mg/l)	MW-05S 2/26/09 (mg/l)
Color (APHA Units)	-	-	(units)	70	50	NA	NA	NA	NA	NA	NA	60.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	392	389	386	420	351	328	302	324	277	266
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										
Biochemical Oxygen Demand	-	-	(mg/l)	18	12	12	23	16	10	9	2 U	15.2	15.5
Bromide	2 GV	24959-67-9	(mg/l)		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16.0	38.3	38.3	51	43.4	16.9	36.7	26.8	29.3	10.9
Chloride	250 ST	16887-00-6	(mg/l)	60.6	58.4	48.8	46.2	49	45.6	36.3	38.5	38.3	34.2
Hardness (as CaCO3)	-	-	(mg/l)	340	360	360	440	340	310	220	290	300	460
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.22	0.54	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.20	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	8.8	10.3	11.1	10.9	9.5	7.9	8.1	1.4	8.9	5.8
Total Dissolved Solids	-	-	(mg/l)	460	451	454	502	456	395	363	403	371	372
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.46	8.54	9.15	9.63	8.4	6.90	6.71	7.46	5.77	5.01

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-05S 8/17/09 (mg/l)	MW-05S 2/8/10 (mg/l)	MW-05S 5/31/11 (mg/l)
Color (APHA Units)	-	-	(units)	40	50	200 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	334	195	264 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		0.50	
Biochemical Oxygen Demand	-	-	(mg/l)	15	18	2
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	32.7	21.8	29.2
Chloride	250 ST	16887-00-6	(mg/l)	49.3	35.0	46.6
Hardness (as CaCO3)	-	-	(mg/l)	320	280	270 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.18	0.17
Phenols, total	0.001 ST	-	(mg/l)	0.005 U		0.005 U
Sulfate	250 ST		(mg/l)	11.6	22.8	5 U
Total Organic Carbon	-	-	(mg/l)	8.7	4.8	7.4
Total Dissolved Solids	-	-	(mg/l)	496	313	357
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.62	5.79	5.66 D

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 10/28/97 (mg/l)	MW-06D 12/05/2000 (mg/l)	MW-06D 01/31/2001 (mg/l)	MW-06D 8/22/02 (mg/l)	MW-06D 11/20/02 (mg/l)	MW-06D 3/5/03 (mg/l)	MW-06D 6/5/03 (mg/l)	MW-06D 8/22/03 (mg/l)	MW-06D 11/11/03 (mg/l)	MW-06D 2/27/04 (mg/l)
Color (APHA Units)	-	-	(units)	10	30	5 U	NS	20	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	31.3	40.6	38	40	31.2	35.5	27.3	34.3	36.8	24.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.32	0.1 U	0.24	0.1 U	0.1 U	0.14	0.1 U	0.1 U	0.24	0.2
Biochemical Oxygen Demand	-	-	(mg/l)	3	37	2 U	2 U	2 U	2 U	2 U	8	16	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.60	0.5 U	0.5 U	0.5 U	0.5 U	0.7		
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	22.5	22.5	19.3	10 U	10 U	55.7	10.6
Chloride	250 ST	16887-00-6	(mg/l)	7.3	12.6	9.3	14.7	16.2	10.5	5.6	5.1	5	7
Hardness (as CaCO3)	-	-	(mg/l)	120	44	68	72	62	80	80	80	80	40
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.2	0.14	0.67	0.4	0.36	1.47	0.2	1.04	0.33
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	20.3	23.3	17.2	14.5	23	26	25.5	24.4	26.8	17.8
Total Organic Carbon	-	-	(mg/l)	2	1.7	1.1	1.2	1 U	1 U	1 U	1 U	1.7	1 U
Total Dissolved Solids	-	-	(mg/l)	78	130	120	100	150	96	97	117	105	155
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.2	0.46	0.1 U	0.1 U	0.1	0.1 U	0.1 U	3.07	0.24

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 5/24/04 (mg/l)	MW-06D 8/20/04 (mg/l)	MW-06D 11/9/04 (mg/l)	MW-06D 3/1/05 (mg/l)	MW-06D 5/27/05 (mg/l)	MW-06D 8/26/05 (mg/l)	MW-06D 11/29/05 (mg/l)	MW-06D 2/28/06 (mg/l)	MW-06D 5/18/06 (mg/l)	MW-06D 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	5	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	11.6	23.8	30.8	22.5	21	21.7	18.8	8.6	24.4	21.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.21	0.1 U	0.1 U	0.12	0.1 U	0.12	0.11	0.28	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	10	2 U	2 U	2 U	2 U	2 U	2 U	3
Bromide	2 GV	24959-67-9	(mg/l)	0.6				0.5					
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	135	11.8	24.3	16.8	10 U	13.5	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	5.9	8	8.9	9.7	8.58	8.1	8.4	9.4	9.3	11.2
Hardness (as CaCO3)	-	-	(mg/l)	105	28	63	58	52	40	42	39	5 U	5 U
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.45	0.5	0.21	0.71	0.519	0.18	0.58	0.34	0.37	0.49
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	26.6	19.2	16.9	16.8	20.5	17.9	17.8	19.6	16.6	14.6
Total Organic Carbon	-	-	(mg/l)	1.1	1 U	3.2	1	1.19	1 U	1 U	1.3	1.2	1.2
Total Dissolved Solids	-	-	(mg/l)	93	109	92	105	87	99	55	96	80	160
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.23	0.73	2.06	0.88	1 J	0.1 U	0.47	0.11	0.1 U	0.18

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 12/1/06 (mg/l)	MW-06D 2/22/07 (mg/l)	MW-06D 5/24/07 (mg/l)	MW-06D 8/10/07 (mg/l)	MW-06D 11/9/07 (mg/l)	MW-06D 2/11/08 (mg/l)	MW-06D 5/15/08 (mg/l)	MW-06D 8/4/08 (mg/l)	MW-06D 11/3/08 (mg/l)	MW-06D 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	19.9	10.1	6.0	U*	12.2	27.4	17.8	29.8	30.9	29.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.14	0.10 U	0.10 U	0.01 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	[redacted]	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	23.1	10 U	10 U	14.4	19.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	12.7	14.7	14.1	U*	13.9	16.8	15.8	23.9	25.5	29.3
Hardness (as CaCO3)	-	-	(mg/l)	52	43.0	24	56	30.0	42.0	48.0	72.0	64.0	150
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.74	0.73	0.70	U*	0.7	0.1 U	0.37	0.60	0.53	1.38
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.7	17.9	16.7	16.6	17.7	17.3	16.9	19.8	19.4	14.0
Total Organic Carbon	-	-	(mg/l)	1 U	1.0	1.2	1.0 U	1.7	1.0	1 U	1.4	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	82	74	72	U*	74	85	97	117	109	131
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.26	0.71	0.63	0.50	0.19	0.10	0.18	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06D 8/11/09 (mg/l)	MW-06D 2/4/10 (mg/l)	MW-06D 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	5	5	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	32.3	13.6	16.8
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	25.0	28.0	24.0
Hardness (as CaCO3)	-	-	(mg/l)	40.0	36.0	36 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.75	0.68	0.36
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	24.5	20.1	26.9
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	130	101	99
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.1 U

NOTES:
NA: Not analyzed
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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-06I DATE: 10/28/97 UNITS: (mg/l)	MW-06I 12/05/2000 (mg/l)	MW-06I 02/01/2001 (mg/l)	MW-06I 8/21/02 (mg/l)	MW-06I 11/21/02 (mg/l)	MW-06I 3/5/03 (mg/l)	MW-06I 6/5/03 (mg/l)	MW-06I 8/22/03 (mg/l)	MW-06I 11/11/03 (mg/l)	MW-06I 2/27/04 (mg/l)
Color (APHA Units)	-	-	(units) 10	30	30	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l) 115	97.1	77	43.7	50.7	55.7	48.9	58.7	45	37.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l) 0.76	1.7	1.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17	0.17
Biochemical Oxygen Demand	-	-	(mg/l) 2 U	14	2	2 U	2 U	2 U	11	8	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l) 0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.8	[redacted]	0.5 U
Chemical Oxygen Demand	-	-	(mg/l) 15 U	10 U	10 U	10.2	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l) 25.4	20.1	18	12.3	16.2	8.8	8.4	10.1	13.1	12.7
Hardness (as CaCO3)	-	-	(mg/l) 180	108	120	80	170	40	108	85	88	110
Nitrate (as N)	10 ST	14797-55-8	(mg/l) 0.1 U	0.1 U	0.14	2.24	0.97	0.79	2.1	0.95	1.15	1.19
Phenols, total	0.001 ST	-	(mg/l) [redacted]	0.005 U	0.005 U	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l) 21.2	47.8	50.4	12.7	12.7	16	17.4	25.9	30.9	31
Total Organic Carbon	-	-	(mg/l) 2.4	1.8	2.4	1.7	1.4	1	1.2	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l) 190	211	120	99	151	94	123	153	119	60
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l) 1.4	2	2.30	0.1 U	0.1 U	0.23	0.13	0.14	0.19	0.18

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: MW-06I DATE: 5/24/04 UNITS: (mg/l)	MW-06I 8/20/04 (mg/l)	MW-06I 11/9/04 (mg/l)	MW-06I 3/1/05 (mg/l)	MW-06I 5/27/05 (mg/l)	MW-06I 8/25/05 (mg/l)	MW-06I 11/29/05 (mg/l)	MW-061 2/28/06 (mg/l)	MW-06I 5/18/06 (mg/l)	MW-06I 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units) 20	NS	NS	5	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l) 33.2	45.4	58.8	41.9	44.6	42.8	49.8	74.6	62.2	81.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l) 0.22	0.1 U	0.49	0.27	0.562	0.87	[redacted]	1.47	0.1 U	[redacted]
Biochemical Oxygen Demand	-	-	(mg/l) 2 U	2 U	2 U	2 U	3	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l) 0.5 U	0.5 U	[redacted]	0.5 U	0.5 U	1.3	1.3	0.6	0.5	0.5 U
Chemical Oxygen Demand	-	-	(mg/l) 10 U	10 U	70.3	10 U	51.8	16.8	10 U	11	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l) 18.7	19.4	42.9	25.9	14	14	41	47.2	23.5	20.7
Hardness (as CaCO3)	-	-	(mg/l) 180	34	92	112	70	66	94	130	90	90
Nitrate (as N)	10 ST	14797-55-8	(mg/l) 1.67	1.18	1.06	1.89	1.33	1.34	2.01	0.47	0.48	0.32
Phenols, total	0.001 ST	-	(mg/l) 0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l) 20.5	26.7	28.7	36.1	18.7	19.5	25.3	46.2	23.9	25.0
Total Organic Carbon	-	-	(mg/l) 1.2	1	1.8	1.7	2.03	1.2	1.3	2.7	1.3	1.7
Total Dissolved Solids	-	-	(mg/l) 119	142	189	144	108	203	145	240	146	86
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l) 0.2	0.17	0.96	0.34	0.664	1.06	2.2	2.27	2.98	4.57

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[redacted]: Concentration exceeds Standard/Guidance Value
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POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 12/1/06 (mg/l)	MW-06I 2/22/07 (mg/l)	MW-06I 5/24/07 (mg/l)	MW-06I 8/10/07 (mg/l)	MW-06I 11/9/07 (mg/l)	MW-06I 2/11/08 (mg/l)	MW-06I 5/15/08 (mg/l)	MW-06I 8/4/08 (mg/l)	MW-06I 11/3/08 (mg/l)	MW-06I 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	65.2	27.5	24.7	U*	33	43.0	31.0	37.0	36.8	40.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)			0.10 U		0.56 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	98.7	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	31.5	31.8	32.3	29.9	36.4	26.3	16.8	25.5	16.7	17.9
Hardness (as CaCO3)	-	-	(mg/l)	68	70.0	72	76	76	58	52.0	56.0	56.0	150 J*
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.64	4.61	5.37	2.79	6.02	2.12	2.48	4.20	6.12	1.65
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	21.0	22.1	19.9	24.1	21.2	14.1	11.6	9.42	9.38	9.31
Total Organic Carbon	-	-	(mg/l)	1.1	1.3	1.0	1.3	1.2	1 U	1.0	1 U	1.0	1.1
Total Dissolved Solids	-	-	(mg/l)	144	147	161	166	184	108	111	137	105	92
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6.21	1.93	1.28	5.36	0.81 J	2.34	1.53	1.48	1.27	1.66

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06I 8/11/09 (mg/l)	MW-06I 2/4/10 (mg/l)	MW-06I 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	10	10	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	26.3	24.9	37.1
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.26
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	30.7	23.2	33.9
Hardness (as CaCO3)	-	-	(mg/l)	45.0	45.0	80 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	1.11 J*	0.86 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	11.1	9.46	56.2 D
Total Organic Carbon	-	-	(mg/l)	1.0	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	124	98	188
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.41	0.25 U	0.35 U*

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LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 10/27/97 (mg/l)	MW-06S 12/5/00 (mg/l)	MW-06S 02/01/2001 (mg/l)	MW-06S 8/21/02 (mg/l)	MW-06S 11/20/02 (mg/l)	MW-06S 3/5/03 (mg/l)	MW-06S 6/4/03 (mg/l)	MW-06S 8/22/03 (mg/l)	MW-06S 11/11/03 (mg/l)	MW-06S 2/27/04 (mg/l)
Color (APHA Units)	-	-	(units)	150	100	70	NS	60	NS	NS	150	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	453	245	200	161	183	156	202	279	239	258
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										
Biochemical Oxygen Demand	-	-	(mg/l)	5	17	10	2 U	6	3	55	16	25	9
Bromide	2 GV	24959-67-9	(mg/l)	0.6	0.7	0.5 U	1.2	0.5 U	0.5 U	0.5 U	0.5 U		
Chemical Oxygen Demand	-	-	(mg/l)	46	10.7	10 U	24.9	10 U	27.3	10 U	41.1	21.6	30.5
Chloride	250 ST	16887-00-6	(mg/l)	39.8	14.8	20	15.8	19.6	10.7	20	22.3	17.4	19.9
Hardness (as CaCO3)	-	-	(mg/l)	440	280	140	220	280	80	200	420	280	36
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.1 U	0.1 U	0.1 U	0.21	1.97	0.32	0.17	0.29	0.1 U	1.15
Phenols, total	0.001 ST	-	(mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	5 U	5 U	8.40	33.8	38.2	18.3	20.6	133	39.8	12.2
Total Organic Carbon	-	-	(mg/l)	11.4	4.4	5.8	4.6	2.9	5.1	4.2	13.1	5.7	9
Total Dissolved Solids	-	-	(mg/l)	480	270	220	213	391	230	239	564	338	395
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	17.3	3.9	4.9	4.68	3.24	3.53	3.3	7.64	4.11	3.67

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 5/24/04 (mg/l)	MW-06S 8/20/04 (mg/l)	MW-06S 11/9/04 (mg/l)	MW-06S 3/1/05 (mg/l)	MW-06S 5/25/05 (mg/l)	MW-06S 8/25/05 (mg/l)	MW-06S 11/29/05 (mg/l)	MW-06S 2/28/06 (mg/l)	MW-06S 5/22/06 (mg/l)	MW-06S 8/9/06 (mg/l)
Color (APHA Units)	-	-	(units)	100	NS	NS	300	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	206	337	182	166	126	310	240	75.4	410	410
Ammonia (as N)	2 ST	7664-41-7	(mg/l)					0.96					
Biochemical Oxygen Demand	-	-	(mg/l)	4	14	5	6	2 U	6	6	8	11	13
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	2	1	0.5 U				0.5 U	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	23	18.1	185	16.8	19.3	109	10 U	41.2	33.6	36.1
Chloride	250 ST	16887-00-6	(mg/l)	16.4	37.4	29.6	28.1	13	37	28.8	27.6	27	28.3
Hardness (as CaCO3)	-	-	(mg/l)	950	250	150	184	330	280	264	310	370	390
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	3.76	0.17	0.22	3.76		0.17	0.48	3.91	0.25	0.34
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	80	5.5	6.7	12.8	72.2	6.6	50.3	53.2	37.9	6.4
Total Organic Carbon	-	-	(mg/l)	7.8	9.6	4.1	1 U	10.8	10.3	7.1	10.8	14.2	13.2
Total Dissolved Solids	-	-	(mg/l)	336	442	292	269	327	564	346	410	538	520
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.7	12.3	4.29	2.8	3.37	7.36	5.65	5.21	8.01	8.15

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit.
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr.

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
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Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 12/1/06 (mg/l)	MW-06S 2/22/07 (mg/l)	MW-06S 5/24/07 (mg/l)	MW-06S 8/10/07 (mg/l)	MW-06S 11/9/07 (mg/l)	MW-06S 2/11/08 (mg/l)	MW-06S 5/15/08 (mg/l)	MW-06S 8/4/08 (mg/l)	MW-06S 11/3/08 (mg/l)	MW-06S 2/23/09 (mg/l)
Color (APHA Units)	-	-	(units)	80	80	NA	NA	NA	NA	NA	NA	100	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	327	216	258	166	289	291	222	209	286	209
Ammonia (as N)	2 ST	7664-41-7	(mg/l)										
Biochemical Oxygen Demand	-	-	(mg/l)	14	9	10	4	140	8	3	2 U	8.6	10.3
Bromide	2 GV	24959-67-9	(mg/l)	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	35.8	25.7	U*	38.3	24.3	11.9	21.8	26.8	10 U
Chloride	250 ST	16887-00-6	(mg/l)	24.1	28.8	41.0	33.0	32.4	41.9	46.3	30.7	39.3	34.8
Hardness (as CaCO3)	-	-	(mg/l)	312	240	260	160	500	260	210	190	360	480
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.48	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	5.0 U	5.0 U	5.0 U	5.1	5.0 U	5.0 U	8.50	5 U	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	9.1	6.6	9.5	5.0	8.0	7.1	6.3	4.9	8.5	4.5
Total Dissolved Solids	-	-	(mg/l)	364	246	331	233	348	368	327	268	344	324
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	9.50	6.48	7.96	U*	6.56	5.98	5.80	4.87	5.22	3.72

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-06S 8/11/09 (mg/l)	MW-06S 2/4/10 (mg/l)	MW-06S 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	100	70	100 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	220	77.7	259 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.41 J*	1.46	
Biochemical Oxygen Demand	-	-	(mg/l)	8 J*	8	10 J*
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	25.4	21.8	20.0
Chloride	250 ST	16887-00-6	(mg/l)	21.9	23.0	27.9
Hardness (as CaCO3)	-	-	(mg/l)	200	180	240
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.50	0.20	0.10 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	7.40	5 U	5 U
Total Organic Carbon	-	-	(mg/l)	5.4	3.3	8.1 J*
Total Dissolved Solids	-	-	(mg/l)	277	228	329
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	4.08	3.37	7.07 D

NOTES:
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U: Analyzed for but not detected, value shown is instrument detection limit
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 10/28/97 (mg/l)	MW-07I 12/01/2000 (mg/l)	MW-07I 01/31/2001 (mg/l)	MW-07I 8/21/02 (mg/l)	MW-07I 11/20/02 (mg/l)	MW-07I 3/5/03 (mg/l)	MW-07I 6/3/03 (mg/l)	MW-07I 8/22/03 (mg/l)	MW-07I 11/11/03 (mg/l)	MW-07I 2/27/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	5	NS	NS	5 U	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	23.4	22.1	23	13.9	12.6	17.5	28.1	24.1	21.5	23.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.3	0.89	1.2	0.1 U	0.1 U	0.54	0.99	0.51	0.52	1.84
Biochemical Oxygen Demand	-	-	(mg/l)	6	2 U	8	2 U	3	3	7	4	2 U	11
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.6		1.2
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	12.7	10 U	27.3	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	9.2	37.6	31	7.8	5.8	6.4	19.8	10.1	10.3	24
Hardness (as CaCO3)	-	-	(mg/l)	180	72	88	40	160	80	34	58	40	48
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.88	3.4	3.1	3.63	2.47	2.03	1.6	1.7	2.46	1.66
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.9	6	18.9	13.8	17.9	16.6	15.9	22.3	15.9	15.8
Total Organic Carbon	-	-	(mg/l)	1.9	1 U	1.2	1.6	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	65	164	140	74	54	84	89	99	74	90
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.7	0.84	1.6	0.1 U	0.1 U	0.92	1.03	0.62	1.02	1.5

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 5/20/04 (mg/l)	MW-07I 8/20/04 (mg/l)	MW-07I 11/9/04 (mg/l)	MW-07I 2/28/05 (mg/l)	MW-07I 5/27/05 (mg/l)	MW-07I 8/24/05 (mg/l)	MW-07I 11/29/05 (mg/l)	MW-07I 2/28/06 (mg/l)	MW-07I 5/22/06 (mg/l)	MW-07I 8/10/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	16.8	23	25.2	23.6	23	23.3	20.6	20.4	19	20.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.41	0.1 U	1.04	1.17	1.07	0.68	0.73	0.74	0.1 U	0.6
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	4	2 U	5	2 U	2 U	2 U	3	17	2
Bromide	2 GV	24959-67-9	(mg/l)	1.7	1.7			0.7			1.7	1.9	
Chemical Oxygen Demand	-	-	(mg/l)	30.5	10 U	172	14.3	11.8	10 U	10 U	16	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	28.4	27.6	24	21.5	21.6	22.7	25.5	24.3	84.1	64.7
Hardness (as CaCO3)	-	-	(mg/l)	100	30	43	47	54	70	62	46	165	105
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.66	4.72	2.66	2.76	2.89	2.61	1.8	1.28	2.93	1.66
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	21.8	20.4	13.9	17.2	19.3	25.8	27.8	15.4	30.7	29.2
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1	1 U	1.02	1.7	1 U	1.6	1.5	2.6
Total Dissolved Solids	-	-	(mg/l)	114	129	111	101	112	214	147	117	332	265
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.53	2.75	2.08	1.3	1.27	0.75	0.61	0.95	1.49	0.88

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HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 11/28/06 (mg/l)	MW-07I 2/22/07 (mg/l)	MW-07I 5/24/07 (mg/l)	MW-07I 8/10/07 (mg/l)	MW-07I 11/14/07 (mg/l)	MW-07I 2/11/08 (mg/l)	MW-07I 5/19/08 (mg/l)	MW-07I 8/5/08 (mg/l)	MW-07I 11/5/08 (mg/l)	MW-07I 2/24/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	20.4	14.7	27.9	U*	33.8	26.4	35.6	40.2	49.6	40.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.36	0.10 U	0.10 U	1.68	1.76	1.22	0.93	0.86	0.2	0.32
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	4	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	15.5	10 U	10 U	10 U	10 U	10 U	10 U	14.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	57.5	49.7	43.7	35.0	37.7	46.0	44.3	44.6	49.0	36.5
Hardness (as CaCO3)	-	-	(mg/l)	65.0	54.0	55.0	56.0	44.0	75	62.0	68.0	76.0	160
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.91	1.47	1.52	10 U	1.05	2.74	0.1 U	1.32	1.24	0.75
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	10	11.5	28.9	24.1	21.9	14.7	10.1	6.75	6.98	11.4
Total Organic Carbon	-	-	(mg/l)	1 U	1.2	1.7	3	1.4	1 U	1.1	8.9	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	190	148	147	162	326	126	149	163	157	123
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.52	0.87	1.47	U*	1.98	2.04	1.18	0.88	0.24	0.58

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-07I 8/14/09 (mg/l)	MW-07I 2/8/10 (mg/l)	MW-07I 5/26/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	29.5	22.0	42.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.13	0.1 U	0.87
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	7	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	74.0	43.3	67.8 D
Hardness (as CaCO3)	-	-	(mg/l)	68.0	41.0	120 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.77	2.60	1.51 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	20.6	12.9	28.1
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.1
Total Dissolved Solids	-	-	(mg/l)	243	136	298
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.70	1.78	0.99 U*

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LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 10/31/97 (mg/l)	MW-11D 12/13/2000 (mg/l)	MW-11D 02/07/2001 (mg/l)	MW-11D 8/22/02 (mg/l)	MW-11D 11/21/02 (mg/l)	MW-11D 3/6/03 (mg/l)	MW-11D 6/4/03 (mg/l)	MW-11D 8/21/03 (mg/l)	MW-11D 11/13/03 (mg/l)	MW-11D 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	80	5 U	5 U	NS	5	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	36.8	3.6	6.8	5.2	4.4	4	3.7	2.9	3.8	3.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.5	0.14	0.481	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.23
Biochemical Oxygen Demand	-	-	(mg/l)	4	2	2 U	2 U	2 U	2 U	2 U	6	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.8	0.6	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	40	10 U	10 U	12.7	10 U	22	11.9	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	13.3	7.9	10.3	5.4	17.3	13.9	16.6	19	18.2	23.8
Hardness (as CaCO3)	-	-	(mg/l)	26	17	28	24	110	22	24	28	43	30
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.5	1.9	1.79	0.74	1.91	1.96	2.59	3.67	4.92	4.17
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	31.3	11.3	10.9	17.2	12	13.5	10.1	9.3	12.1	8.6
Total Organic Carbon	-	-	(mg/l)	5.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	124	61	84	60	109	69	88	126	103	194
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.58	0.1 U	0.46	0.1 U	0.1 U	0.2 U	0.2 U	0.1 U	0.11	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 5/21/04 (mg/l)	MW-11D 8/24/04 (mg/l)	MW-11D 11/11/04 (mg/l)	MW-11D 2/24/05 (mg/l)	MW-11D 5/26/05 (mg/l)	MW-11D 8/25/05 (mg/l)	MW-11D 11/28/05 (mg/l)	MW-11D 2/27/06 (mg/l)	MW-11D 5/19/06 (mg/l)	MW-11D 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	20	NS	NS	5	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	26.4	19.2	7.8	7.8	5.8	5.9	4.2	17.8	8	4.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.16	0.1 U	0.32	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	[redacted]	0.8	0.9	0.8	0.9	0.5 U	0.5 U	0.6
Chemical Oxygen Demand	-	-	(mg/l)	45.4	10 U	10 U	19.3	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	18.3	16.9	19.3	26.7	25	20.1	21.2	21.1	21.1	22.6
Hardness (as CaCO3)	-	-	(mg/l)	120	24	42	40	46	40	34	40	35	44
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.32	4.4	4.65	3.9	3.44	3.42	3.86	2.14	1.82	2.22
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	13.7	13	10.3	10.7	11.1	14.4	17.1	22.5	20.9	20.6
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	70	274	144	160	153	219	120	133	117	17
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.18	0.65	0.1 U	0.27	0.1 U	0.1 U	0.15	1.75	0.1 U	1.76

NOTES:
NA: Not analyzed
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D; Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

[redacted]: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 11/29/06 (mg/l)	MW-11D 2/28/07 (mg/l)	MW-11D 6/1/07 (mg/l)	MW-11D 8/17/07 (mg/l)	MW-11D 11/14/07 (mg/l)	MW-11D 2/12/08 (mg/l)	MW-11D 5/14/08 (mg/l)	MW-11D 8/6/08 (mg/l)	MW-11D 11/5/08 (mg/l)	MW-11D 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	10	5	NA	NA	NA	NA	NA	NA	5	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	8.6	9.0	20.6	10.0	8.0	5.6	5.2	4.2	5.30	3.90
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.7	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	30.7	10 U	10.5	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	19.6	25.0	21.9	22.9	23.1	21.4	19.6	20.6	20.7	15.6
Hardness (as CaCO3)	-	-	(mg/l)	40.0	44.0	52.0	50.0	42.0	36.0	36.0	30.0	34.0	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	3.43	5.86	5.38	6.05	6.57	5.48	5.90	5.87	[redacted]	4.16
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	20.9	21.7	27.8	21.8	18.7	18.6	16.7	15.8	16.4	19.3
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	133	130	155	166	169	128	121	115	103	211
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.46	0.63	1.07	0.1 U	0.2	0.15	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11D 8/13/09 (mg/l)	MW-11D 2/5/10 (mg/l)	MW-11D 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	250	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.55	101	95.0 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.14
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	16
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	136
Chloride	250 ST	16887-00-6	(mg/l)	19.9	39.0	10.3
Hardness (as CaCO3)	-	-	(mg/l)	27.0	105	270 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.77	2.22	0.10 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	[redacted]
Sulfate	250 ST		(mg/l)	24.4	15.9	16.3
Total Organic Carbon	-	-	(mg/l)	1U	2.5	3.3
Total Dissolved Solids	-	-	(mg/l)	104	197	138 D
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	7.58	0.77

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
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D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

[redacted]: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an appoximate concentration of the analyte in the sample as determined by data validation.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 10/31/97 (mg/l)	MW-11I 12/13/2000 (mg/l)	MW-11I 02/07/2001 (mg/l)	MW-11I 8/22/02 (mg/l)	MW-11I 11/21/02 (mg/l)	MW-11I 3/6/03 (mg/l)	MW-11I 6/4/03 (mg/l)	MW-11I 8/21/03 (mg/l)	MW-11I 11/13/03 (mg/l)	MW-11I 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	5 U	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	27.6	34.2	27.4	14.4	28.2	58	57.6	32.9	28.6	48
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.99	1.1	0.91	0.1 U	0.1 U	1.15	0.1 U	0.1 U	0.1 U	1.15
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2	2 U	3	4	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.8	0.8	0.5 U	0.5 U	0.7
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	12.7	10 U	16.7	10 U	10 U	10 U	15.6
Chloride	250 ST	16887-00-6	(mg/l)	40.4	17.3	17.5	7	24.3	7.7	14.3	19.7	11.7	22.7
Hardness (as CaCO3)	-	-	(mg/l)	54	34	40	40	180	56	62	40	36	48
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.13	0.42	1.8	3.07	1.85	0.1 U	1.03	1.01	0.96	0.53
Phenols, total	0.001 ST	-	(mg/l)	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.9	6.8	7	5	7.9	10	5.8	10.7	12.9	5 U
Total Organic Carbon	-	-	(mg/l)	1.6	1.3	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	96	42	63	58	152	109	84	103	78	110
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.5	1.2	0.79	0.1	0.19	0.99	1.18	0.8	0.36	1.11

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11I 5/21/04 (mg/l)	MW-11I 8/24/04 (mg/l)	MW-11I 11/11/04 (mg/l)	MW-11I 2/24/05 (mg/l)	MW-11I 5/26/05 (mg/l)	MW-11I 8/25/05 (mg/l)	MW-11I 11/28/05 (mg/l)	MW-11I 2/27/06 (mg/l)	MW-11I 5/19/06 (mg/l)	MW-11I 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	37.8	28.8	27.8	19.4	32.4	24	26.1	33.4	19.2	17.3
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.19	0.1 U	0.15	0.1 U	1.08	0.79	0.58	0.73	0.1 U	0.13
Biochemical Oxygen Demand	-	-	(mg/l)	4	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.7	0.5 U	1.7	0.5 U	0.6	1.5	1.8	0.9	1	0.6
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	16.8	13.5	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	14.1	10	15.3	17.5	15.1	9.6	11.6	8.1	9	7.3
Hardness (as CaCO3)	-	-	(mg/l)	150	25	45	52	52	45	40	48	31	30
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.33	1.85	0.74	1.16	1.5	2.11	0.89	0.21	1.31	1.14
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	0.5 U	11	10.7	13.4	14.4	15.4	12.2	28.2	13.6	11.7
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	38	149	83	92	107	155	87	110	81	67
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.93	0.88	0.79	0.12	0.85	0.77	0.7	0.82	0.52	0.56

NOTES:
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U: Analyzed for but not detected, value shown is instrument detection limit.
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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11I 11/29/06 (mg/l)	MW-11I 2/28/07 (mg/l)	MW-11I 6/1/07 (mg/l)	MW-11I 8/16/07 (mg/l)	MW-11I 11/14/07 (mg/l)	MW-11I 2/12/08 (mg/l)	MW-11I 5/14/08 (mg/l)	MW-11I 8/6/08 (mg/l)	MW-11I 11/5/08 (mg/l)	MW-11I 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	11.8	5.8	8.8	4.4	4.9	3.4	3.4	2.8	3.05	1.45
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.29	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	4.9	5.3	6.3	5.2	4.8	7.1	22.5	12.3	10.1	9.10
Hardness (as CaCO3)	-	-	(mg/l)	16.0	12.0	19.0	18.0	24.0	18.0	36.0	15.0	60.0	90.0
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.78	0.70	1.12	0.53	0.62	0.60	2.38	0.65	0.30	0.20
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	11.0	13.1	14.5	16.9	18.9	15.1	8.93	11.5	12.7	11.1
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	58	47	53	71	78	60	104	63	53	82
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.28	0.62	0.72	0.1 U	0.10 U	0.1 U	0.1 U	0.23	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-11I 8/13/09 (mg/l)	MW-11I 2/5/10 (mg/l)	MW-111 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	150 D
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	2.05	2.95	2.10
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	8.38	5.77	4.64
Hardness (as CaCO3)	-	-	(mg/l)	13	11.0	5 U
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.23	0.16	0.10 U
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	16.7	10.6	9.22
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.0 U
Total Dissolved Solids	-	-	(mg/l)	64	47	33
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.1 U

NOTES:
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: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 10/31/97 (mg/l)	MW-11S 12/13/2000 (mg/l)	MW-11S 02/07/2001 (mg/l)	MW-11S 8/22/02 (mg/l)	MW-11S 11/21/02 (mg/l)	MW-11S 3/6/03 (mg/l)	MW-11S 6/4/03 (mg/l)	MW-11S 8/21/03 (mg/l)	MW-11S 11/13/03 (mg/l)	MW-11S 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	100	5 U	5 U	NS	5	NS	NS	10	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	127	134	135	91.2	133	106	125	174	206	160
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1	1.3	1.51	1.16	0.1 U	0.58	0.1 U	0.1 U	0.1 U	0.35
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	6	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5	0.8	0.5 U	0.5	0.5 U	0.5 U	1.2
Chemical Oxygen Demand	-	-	(mg/l)	22	10 U	11	12.7	10 U	19.3	19.2	10 U	21.6	20.5
Chloride	250 ST	16887-00-6	(mg/l)	65.1	50.7	36.1	35.1	21.3	23	97.7	139	96.6	86.4
Hardness (as CaCO3)	-	-	(mg/l)	120	210	156	120	230	156	250	270	290	220
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.28	0.21	0.25	2.6	2.25	1.6	1.65	1.31	1.52	1.59
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	42.1	28.6	49.6	29.2	41	64.8	80.5	68	76.4	45.5
Total Organic Carbon	-	-	(mg/l)	3.7	4.6	3.53	2.8	2.8	4	3.8	7.2	5	4
Total Dissolved Solids	-	-	(mg/l)	261	253	254	179	326	250	423	560	465	392
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.2	1.5	7.76	4.53	0.18	0.77	0.26	0.34	0.31	0.32

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 5/21/04 (mg/l)	MW-11S 8/24/04 (mg/l)	MW-11S 11/11/04 (mg/l)	MW-11S 2/24/05 (mg/l)	MW-11S 5/26/05 (mg/l)	MW-11S 8/25/05 (mg/l)	MW-11S 11/28/05 (mg/l)	MW-11S 2/27/06 (mg/l)	MW-11S 5/19/06 (mg/l)	MW-11S 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	5	NS	NS	5	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	113	117	151	96	116	120	134	140	134	148
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.81	0.1 U	[redacted]	[redacted]	[redacted]	[redacted]	0.72	0.42	0.1 U	1.12
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2
Bromide	2 GV	24959-67-9	(mg/l)	1.8	0.6	0.8	2.0	0.5	1.1	1.2	0.5	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	25.5	10 U	10 U	11.8	10 U	16.8	34.3	13.5	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	79.6	73.7	57.3	76.9	88.5	65.4	87.6	82.8	52.9	105
Hardness (as CaCO3)	-	-	(mg/l)	450	120	208	220	220	200	300	215	190	205
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.04	2.87	1.15	1.21	1.07	1.2	1.71	1.07	0.48	0.81
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	61	55.8	48.8	45.8	50.3	72.5	93.5	74.5	46	59
Total Organic Carbon	-	-	(mg/l)	4.2	3.8	4.9	3.7	3.7	4.3	5.5	4.3	3.1	5.5
Total Dissolved Solids	-	-	(mg/l)	300	532	322	339	366	442	330	413	308	453
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.65	1.27	1.93	2.69	3.54	2.31	1.7	0.85	0.58	1.09

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit.
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D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

[redacted]: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 11/29/06 (mg/l)	MW-11S 2/23/07 (mg/l)	MW-11S 6/1/07 (mg/l)	MW-11S 8/16/07 (mg/l)	MW-11S 11/14/07 (mg/l)	MW-11S 2/12/08 (mg/l)	MW-11S 5/14/08 (mg/l)	MW-11S 8/6/08 (mg/l)	MW-11S 11/5/08 (mg/l)	MW-11S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	30	NA	NA	NA	NA	NA	NA	20.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	140	136	136	151	151	152	148	129	108	100
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.64	0.10 U	0.10 U	[redacted]	1.19	0.70	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	4	4	2 U	2 U	2 U	6	3	4.2	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16.0	51.0	89	23.1	28.2	21.8	71.4	41.7	14.4	10.9
Chloride	250 ST	16887-00-6	(mg/l)	46.6	39.8	53.9	62.8	60.3	41.0	53.3	64.9	84.5	49.1
Hardness (as CaCO3)	-	-	(mg/l)	130	140	180	160	128	122	200	156	180	240
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.59	0.41	1.09	0.93	0.63	0.64	0.85	0.68	0.46	0.35
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	31.4	27.7	51.1	63.4	47.8	35.0	38.2	54.9	38.1	33.3
Total Organic Carbon	-	-	(mg/l)	3.4	3.8	8.0	6.6	5.9	4.1	5.7	5.4	3.8	2.6
Total Dissolved Solids	-	-	(mg/l)	277	276	322	373	345	283	323	369	317	265
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	2.04	3.82	4.8	3.36	2.7	3.05	1.90	4.21	2.92	0.92

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-11S 8/13/09 (mg/l)	MW-11S 2/5/10 (mg/l)	MW-11S 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	10
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	118	150	84 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.64
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	23.0	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	61.6	92.0	64.4 D
Hardness (as CaCO3)	-	-	(mg/l)	145	170	130 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.21	1.42	0.65
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	63.3	49.2	37.0
Total Organic Carbon	-	-	(mg/l)	3.8	5.0	3.2
Total Dissolved Solids	-	-	(mg/l)	286	380	276
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	1.01 UJ*	1.19 U	0.57

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
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[redacted]: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 10/31/97 (mg/l)	MW-12D 12/08/2000 (mg/l)	MW-12D 02/07/2001 (mg/l)	MW-12D 8/22/02 (mg/l)	MW-12D 11/21/02 (mg/l)	MW-12D 3/6/03 (mg/l)	MW-12D 6/4/03 (mg/l)	MW-12D 8/21/03 (mg/l)	MW-12D 11/3/03 (mg/l)	MW-12D 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	5	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	19.3	7.3	7.8	6.7	6.8	8.4	7.9	8.1	7.4	6.7
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	7	4	2 U	2 U	2 U	4	7	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	15 U	10 U	10 U	15.1	10 U	10 U	10 U	10 U	11.9	10 U
Chloride	250 ST	16887-00-6	(mg/l)	11.7	4.7	5.71	3.1	4.3	5.6	8.9	6.2	4.2	4.8
Hardness (as CaCO3)	-	-	(mg/l)	34	15	28	16	36	64	34	36	33	22
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.32	0.38	0.31	0.13	0.24	0.58	0.66	0.63	0.54	0.75
Phenols, total	0.001 ST	-	(mg/l)	[redacted]	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	19.5	20.1	12.8	6.9	11.9	17.1	15.6	16.6	13.5	8.3
Total Organic Carbon	-	-	(mg/l)	0.5 U	2.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	45	77	380	37	69	78	58	88	50	10 U
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.2 U	0.1 U	8.54	0.16	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 5/21/04 (mg/l)	MW-12D 8/24/04 (mg/l)	MW-12D 11/11/04 (mg/l)	MW-12D 2/24/05 (mg/l)	MW-12D 5/26/05 (mg/l)	MW-12D 8/25/05 (mg/l)	MW-12D 11/28/05 (mg/l)	MW-12D 2/27/06 (mg/l)	MW-12D 5/19/06 (mg/l)	MW-12D 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	6.8	7	7.4	7.1	6.7	6.9	7.4	10.4	11.2	19.6
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.11	0.1 U	0.13	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.6	0.7	0.7	1	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	3.6	4.3	4.0	6.1	4.5	4.9	5.8	5.4	5.5	5
Hardness (as CaCO3)	-	-	(mg/l)	36	5 U	18	18	19	15	20	22	21	26
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.29	0.30	0.26	0.16	0.13	0.19	0.4	0.33	0.25	0.25
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	11.3	11.7	10.5	11.1	9.5	10.8	11	11.7	13.5	34
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1
Total Dissolved Solids	-	-	(mg/l)	25	113	52	58	49	77	75	72	59	70
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.97	0.1 U	0.26	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.1 U

NOTES:
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[redacted]: Concentration exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 11/29/06 (mg/l)	MW-12D 2/23/07 (mg/l)	MW-12D 6/1/07 (mg/l)	MW-12D 8/16/07 (mg/l)	MW-12D 11/14/07 (mg/l)	MW-12D 2/12/08 (mg/l)	MW-12D 5/14/08 (mg/l)	MW-12D 8/6/08 (mg/l)	MW-12D 11/5/08 (mg/l)	MW-12D 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	1 U	23.9	12.3	8.8	7.8	8.8	10.1	10	9.75	7.95
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.10	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	13.5	23.1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	5.5	6.9	7.7	10.6	20.5	21.7	27.6	31.0	29.3	33.6
Hardness (as CaCO3)	-	-	(mg/l)	26.0	50.0	32.0	40.0	52.0	50.0	56.0	52.0	52.0	130
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.67	0.70	1.84	2.3	2.25	1.55	1.67	1.67	2.04	2.05
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	14.8	16.4	18.8	22.0	25.8	28.7	25.0	24.0	21.1	20.1
Total Organic Carbon	-	-	(mg/l)	1 U	1.0 U	1.0 U	1.0 U	1.3	1 U	1 U	1 U	109	1 U
Total Dissolved Solids	-	-	(mg/l)	71	70	69	85	128	112	128	140	1 U	127
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.14	0.95	0.55	0.1 U	0.10 U	0.1 U	0.1 U	0.18	0.1 U	0.1 U

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12D 8/13/09 (mg/l)	MW-12D 2/5/10 (mg/l)	MW-12D 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	9.15	12.8	16
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	12
Chloride	250 ST	16887-00-6	(mg/l)	40.1	26.4	8.80
Hardness (as CaCO3)	-	-	(mg/l)	53.0	42.0	30
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.79	1.79	2.70 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	30.8	20.8	15.7
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1.0 U
Total Dissolved Solids	-	-	(mg/l)	119	110	73
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.1 U	0.44

NOTES:
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 10/31/97 (mg/l)	MW-12I 12/07/2000 (mg/l)	MW-12I 02/08/2001 (mg/l)	MW-12I 8/22/02 (mg/l)	MW-12I 11/21/02 (mg/l)	MW-12I 3/6/03 (mg/l)	MW-12I 6/4/03 (mg/l)	MW-12I 8/21/03 (mg/l)	MW-12I 11/13/03 (mg/l)	MW-12I 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5 U	NS	10	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	10.5	31.8	17.2	2.8	6.8	4.4	7.1	3.1	4.4	4.2
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.51	0.61	0.703	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6	2 U	2 U	2 U	2 U	2 U	6	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.700	0.5 U	1.1	1	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	39.6	14	10 U	10 U	10 U	15.6
Chloride	250 ST	16887-00-6	(mg/l)	17.5	14.9	13.1	4.5	8.4	4.6	13.1	7.9	4.8	5.5
Hardness (as CaCO3)	-	-	(mg/l)	54	52	36.0	16	1900	32	32	20	26	24
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	4.7	0.73	1.1	0.93	1.54	0.33	0.53	0.21	1.3	0.7
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	43.1	48.3	24.2	10	10.4	11.6	11.3	8.6	9.8	6.9
Total Organic Carbon	-	-	(mg/l)	3.6	1.2	0.0010 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	106	143	90	39	79	55	62	49	40	14
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.46	0.84	8.30	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.13

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12I 5/21/04 (mg/l)	MW-12I 8/24/04 (mg/l)	MW-12I 11/11/04 (mg/l)	MW-12I 2/24/05 (mg/l)	MW-12I 5/26/05 (mg/l)	MW-12I 8/25/05 (mg/l)	MW-12I 11/28/05 (mg/l)	MW-12I 2/27/06 (mg/l)	MW-12I 5/19/06 (mg/l)	MW-12I 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	3.5	5.6	6.4	29.6	4.3	5.4	14.4	29.4	15.7	7.9
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.29	0.1 U	0.29	0.1 U	1.11	0.49	0.15	0.56
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	5	2 U	2 U	2 U	2 U	2 U	3	3
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.6	1.2	0.7	0.5 U	0.5 U	1.3	0.5 U	0.5	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	10 U	14.3	10 U	10 U	13.5	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	4.3	12.5	28.1	45.5	10.5	18.5	29.2	27	26.2	15.9
Hardness (as CaCO3)	-	-	(mg/l)	22	10	34	66	18	22	49	80	70	40
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.52	1.65	1.23	0.72	0.52	0.86	0.26	0.77	3.73	1.41
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	8.8	7.6	6.7	8.7	9	7.5	29.6	35	51.8	35.4
Total Organic Carbon	-	-	(mg/l)	1 U	1 U	1 U	1.4	1 U	1 U	1.9	3.3	1.5	1.3
Total Dissolved Solids	-	-	(mg/l)	47	152	77	136	50	101	127	153	155	112
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.56	0.5	0.53	0.24	0.36	2.13	0.69	4.15	2.89

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UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12I 11/29/06 (mg/l)	MW-12I 2/23/07 (mg/l)	MW-12I 6/1/07 (mg/l)	MW-12I 8/16/07 (mg/l)	MW-12I 11/14/07 (mg/l)	MW-12I 2/12/08 (mg/l)	MW-12I 5/14/08 (mg/l)	MW-12I 8/6/08 (mg/l)	MW-12I 11/5/08 (mg/l)	MW-12I 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5	NA	NA	NA	NA	NA	NA	5.00	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	21.8	58.8	4	24.6	17.8	20.2	22.4	31.1	23.7	34.0
Ammonia (as N)	2 ST	7664-41-7	(mg/l)		1.02	0.10 U		0.64	0.23			0.2	
Biochemical Oxygen Demand	-	-	(mg/l)	5	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	78.8	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	12.9	21.7	12.6	14.8	18.1	14.2	17.9	12.2	10.7	23.1
Hardness (as CaCO3)	-	-	(mg/l)	24.0	84.0	14.0	13.0	22.0	23.0	24.0	23.0	26.0	140
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.61	0.11	1.46	1.03	2.14	1.92	1.48	1.61	1.72	1.48
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	26.4	31.1	20.8	8.0	5.0 U	11.7	14.80	14.3	15.2	14.0
Total Organic Carbon	-	-	(mg/l)	1.1	21.3	1.1	1.0 U	1.0 U	1 U	1 U	1	1 U	1 U
Total Dissolved Solids	-	-	(mg/l)	97	124	74	62	54	72	84	79	58	105
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	7.67	3.99	3.95	3.11	3.32	3.84	4.45	5.58	3.31	3.81

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE : DATE : UNITS:	MW-12I 8/13/09 (mg/l)	MW-12I 2/5/10 (mg/l)	MW-12I 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	10
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	17.0	1 U	2.80
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	1.64	0.1 U	0.74
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	10
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	12
Chloride	250 ST	16887-00-6	(mg/l)	46.1	20.0	12.6
Hardness (as CaCO3)	-	-	(mg/l)	30.0	24.0	26
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.48	3.88	3.32 D
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	23.2	11.0	7.03
Total Organic Carbon	-	-	(mg/l)	1 U	1.0	2.1
Total Dissolved Solids	-	-	(mg/l)	155	77	74
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	6.49	1.13 U	2.18

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 10/31/97 (mg/l)	MW-12S 12/07/2000 (mg/l)	MW-12S 02/05/2001 (mg/l)	MW-12S 8/22/02 (mg/l)	MW-12S 11/21/02 (mg/l)	MW-12S 3/6/03 (mg/l)	MW-12S 6/4/03 (mg/l)	MW-12S 8/21/03 (mg/l)	MW-12S 11/13/03 (mg/l)	MW-12S 3/1/04 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	5 U	5	NS	5	NS	NS	5	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	102	104	98	113	111	77.8	74.3	141	150	118
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.11	0.02 U	0.07 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	3	2	2 U	2 U	2 U	2 U	2 U	4	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.8	0.5 U	0.5	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	16	10 U	10 U	10 U	10 U	16.7	21.6	10 U	10 U	13.1
Chloride	250 ST	16887-00-6	(mg/l)	21	16	24	15.7	17.7	113	25.6	11.2	25.8	52.2
Hardness (as CaCO3)	-	-	(mg/l)	90	96	100	140	108	108	82	110	220	120
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.75	0.67	0.4	2.21	1.14	0.89	0.58	1.54	1.89	1.18
Phenols, total	0.001 ST	-	(mg/l)	0.0010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	32.8	36.4	13.4	37.5	27.6	32.1	23.3	32	38.4	24.4
Total Organic Carbon	-	-	(mg/l)	2.3	1.7	2.2	3.3	1.7	1.9	1.6	1.8	2	1.6
Total Dissolved Solids	-	-	(mg/l)	170	175	250	185	290	352	151	241	265	296
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.21	0.2 U	0.12	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.22	0.13

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 5/21/04 (mg/l)	MW-12S 8/24/04 (mg/l)	MW-12S 11/11/04 (mg/l)	MW-12S 2/24/05 (mg/l)	MW-12S 5/26/05 (mg/l)	MW-12S 8/25/05 (mg/l)	MW-12S 11/28/05 (mg/l)	MW-12S 2/27/06 (mg/l)	MW-12S 5/19/06 (mg/l)	MW-12S 8/11/06 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	NS	NS	5 U	NS	NS	NS	NS	NS	NS
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	119	130	74	97.1	98	105	65.2	76.4	70.8	59
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.13	0.1 U	0.1 U	0.11	0.12	0.19	1.24	0.46	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.7	1.8	0.5	0.5 U	1	1.4	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	10 U	10 U	21.8	29.3	10 U	10 U	10 U	10 U	10 U
Chloride	250 ST	16887-00-6	(mg/l)	31.6	31.6	19.7	245	42.2	45.5	48.9	56.6	24	20.5
Hardness (as CaCO3)	-	-	(mg/l)	320	88	94	172	128	98	90	105	66	44
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	1.24	1.76	0.52	0.83	1.06	1.18	1.86	1.79	1.67	2.12
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250 ST	14808-79-8	(mg/l)	29.5	54.8	17.7	39.1	28.4	32.6	14.9	21.7	26.8	20.1
Total Organic Carbon	-	-	(mg/l)	1.7	1.8	2.6	1.7	2.7	2.8	1.1	1.8	1.5	1.2
Total Dissolved Solids	-	-	(mg/l)	184	474	170	568	216	382	212	247	181	163
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.18	0.17	0.1 U	0.19	0.21	0.2	1.54	0.65	0.1U	0.12

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit.
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an approximate concentration of the analyte in the sample as determined by data validation.

Appendix A-1

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
LEACHATE INDICATORS

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 11/29/06 (mg/l)	MW-12S 2/23/07 (mg/l)	MW-12S 6/1/07 (mg/l)	MW-12S 8/16/07 (mg/l)	MW-12S 11/14/07 (mg/l)	MW-12S 2/12/08 (mg/l)	MW-12S 5/14/08 (mg/l)	MW-12S 8/6/08 (mg/l)	MW-12S 11/5/08 (mg/l)	MW-12S 2/25/09 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	NA	NA	NA	NA	NA	NA	30.0	NA
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	73.0	71.2	60.6	60.8	67.2	68	67.2	76.2	86.8	68.4
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 UJ*	0.1 U	0.1 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	6.0	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10 U	40.9	10 U	10 U	10 U	10 U	10 U	34.2	19.4	10 U
Chloride	250 ST	16887-00-6	(mg/l)	25.2	25.5	27.7	17.8	23.9	32.9	28.5	32.4	44.1	38.0
Hardness (as CaCO3)	-	-	(mg/l)	110	80.0	72.0	64.0	80.0	82	70.0	88.0	85.0	190
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	2.33	2.30	2.32	1.71	2.03	1.46	1.54	1.12	1.37	0.79
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	5 U
Sulfate	250 ST	14808-79-8	(mg/l)	22.8	25.0	21.6	33.2	29.9	33.2	32.0	34.6	36.2	28.3
Total Organic Carbon	-	-	(mg/l)	1.5	1.4	2.0	1.5	1.1	1.4	1.5	1.9	212	1 U
Total Dissolved Solids	-	-	(mg/l)	189	183	159	167	193	196	185	199	2.0	195
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.16	0.75	0.69	0.1 U	0.10 U	0.14	0.10	0.85	0.22	0.13

CONSTITUENT	NYSDEC Class GA Groundwater Standard and Guidance Values	CAS #	SITE: DATE: UNITS:	MW-12S 8/13/09 (mg/l)	MW-12S 2/5/10 (mg/l)	MW-12S 5/27/11 (mg/l)
Color (APHA Units)	-	-	(units)	5 U	20	20
Alkalinity (as CaCO3)	-	471-34-1	(mg/l)	63.9	81.6	88.0 D
Ammonia (as N)	2 ST	7664-41-7	(mg/l)	0.1 U	0.1 U	0.10 U
Biochemical Oxygen Demand	-	-	(mg/l)	2 U	2 U	2 U
Bromide	2 GV	24959-67-9	(mg/l)	0.5 U	0.5 U	0.5 U
Chemical Oxygen Demand	-	-	(mg/l)	10.9	10 U	18.6
Chloride	250 ST	16887-00-6	(mg/l)	48.6	42.1	49.0
Hardness (as CaCO3)	-	-	(mg/l)	90.0	80.0	120 D
Nitrate (as N)	10 ST	14797-55-8	(mg/l)	0.81	1.34	1.22
Phenols, total	0.001 ST	-	(mg/l)	0.005 U	5 U	0.005 U
Sulfate	250 ST		(mg/l)	49.4	29.0	37.8
Total Organic Carbon	-	-	(mg/l)	1.4	1.2	3.3
Total Dissolved Solids	-	-	(mg/l)	200	192	233
Total Kjeldahl Nitrogen (as N)	-	7727-37-9	(mg/l)	0.1 U	0.56 U	0.63

NOTES:
NA: Not analyzed
U: Analyzed for but not detected, value shown is instrument detection limit
J: Estimated value
D: Diluted.
UJ*: Value was not detected above quantitation limit but was an appoximate concentr

: Concentration exceeds Standard/Guidance Value
U*: Analyte considered undetected based on data validation criteria.
J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

APPENDIX A-2

Inorganic Parameters

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 10/24/1997 (ug/l)	MW-01D 11/30/2000 (ug/l)	MW-01D 1/30/2001 (ug/l)	MW-01D 8/21/2002 (ug/l)	MW-01D 11/20/2002 (ug/l)	MW-01D 3/5/2003 (ug/l)	MW-01D 6/3/2003 (ug/l)	MW-01D 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	ug/l	105	59.6 B	79.6 B	NA	131 B	NA	NA	39.8 B
Antimony	3 GV	7440-36-0	ug/l	3 U	1.7 U	12.3 U	NA	[redacted]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	ug/l	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	ug/l	111	124 B	87.6	NA	93	NA	NA	22.4 B
Beryllium	3 GV	7440-41-7	ug/l	0.13	0.1 U	0.21	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	ug/l	NA	102	161	NA	113	NA	NA	139
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.4 U	0.2 U	0.11 B	0.5 U	0.81 B	0.10 B	0.30 U
Calcium	-	7440-70-2	ug/l	35,300	19500	15200	26,400	24,400	21,100	15,800	5,650
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	ug/l	0.53	3.5 U	0.6 U	NA	3.6 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	ug/l	1.3	2.1 B	1.7 U	NA	5 B	NA	NA	5.0 B
Copper	200 ST	7440-50-8	ug/l	1.9	2 B	2.1	NA	7 B	NA	NA	2.3 B
Iron	300 ST	7439-89-6	ug/l	110	32 B	34.2	205	[redacted]	[redacted]	120	63.1 B
Lead	25 ST	7439-92-1	ug/l	1.3	1.4 U	1.1 U	0.8 U	1.4 U	3.2	1.7 B	0.80 U
Magnesium	35,000 GV	7439-95-4	ug/l	10,700	6010	4800	9,680	8,130	7,530	5,740	1,710 B
Manganese	300 ST	7439-96-5	ug/l	132	9.9 B	7.3	34.3	28.6	67.5	6.8 B	3.6 B
Mercury	0.7 ST	7439-97-6	ug/l	0.1 U	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	ug/l	2.2	1.9 U	1.4 U	NA	7.5 B	NA	NA	6.0 B
Potassium	-	7440-09-7	ug/l	6,780	10,400	9,240	7,740	20,500	10,700	6,830	2,390 B
Selenium	10 ST	7782-49-2	ug/l	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	ug/l	0.9 U	0.77 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	ug/l	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	[redacted]
Vanadium	-	7440-62-2	ug/l	1.2 U	0.7 U	1.7 U	NA	1.4 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	ug/l	39	3.8 B	5.1	NA	190	NA	NA	33.2
Cyanide	200 ST	0057-12-5	ug/l	17	17	20.4	NA	30.4	NA	NA	29
Iron + Manganese	500 ST	-	ug/l	242	41.9	41.5	239.3	329.6	368.5	126.8	66.7

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection limit.

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 11/10/2003 (ug/l)	MW-01D 2/26/2004 (ug/l)	MW-01D 5/20/2004 (ug/l)	MW-01D 8/19/2004 (ug/l)	MW-01D 11/8/2004 (ug/l)	MW-01D 2/28/2005 (ug/l)	MW-01D 5/25/2005 (ug/l)	MW-01D 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	52.5 B	NA	NA	143 B	NA	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	123 B	NA	NA	284	NA	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	173 B	NA	NA	158	NA	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.20 U	0.3 U	0.30 U	0.23 U	0.23 U	0.74 B	0.65 U
Calcium	-	7440-70-2	ug/l	1,420 B	19,500	27,800	61,300	62,800	57,100	49,800	38,500
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	0.63 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	7.2 B	NA	NA	12.4 B	NA	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	3.6 B	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	ug/l	119	79.6 B	96.9 B	61.7 B	22.3 B	59.1 B	64.9 B	192
Lead	25 ST	7439-92-1	ug/l	2.5 B	1.6 U	1.2 U	1.2 U	1.1 U	1.1 U	1.7 U	1.7 U
Magnesium	35,000 GV	7439-95-4	ug/l	504 B	6,270	9,620	17,700	16,300	12,700	10,200	8,020
Manganese	300 ST	7439-96-5	ug/l	3.6 B	9.3 B	17.6	22.5	21	23.4	21.7	28.5
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	5.1 B	NA	NA	17.4 B	NA	NA
Potassium	-	7440-09-7	ug/l	1,380 B	5,480	7,230	12,200	13,700	15,300	9,870	8,800
Selenium	10 ST	7782-49-2	ug/l	NA	NA	2.1 U	NA	NA	3 U	NA	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	0.5 U	NA	NA	0.86 B	NA	NA
Sodium	20,000 ST	7440-23-5	ug/l	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	2.8 U	NA	NA	3.7 B	NA	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	32.4	NA	NA	50.9	NA	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	10 U	NA	NA	18	NA	NA
Iron + Manganese	500 ST*	-	ug/l	122.6	88.9	114.5	84.2	43.3	82.5	86.6	220.5

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection limit.

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 11/28/2005 (ug/l)	MW-01D 2/24/2006 (ug/l)	MW-01D 5/17/2006 (ug/l)	MW-01D 8/9/2006 (ug/l)	MW-01D 11/28/2006 (ug/l)	MW-01D 2/21/2007 (ug/l)	MW-01D 5/25/2007 (ug/l)	MW-01D 8/17/2007 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	137 B	1,290	121 B	NA
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	3.2 U	3.2 U	1.9 B	NA
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	260	114 B	284	NA
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.50 B	0.17 U	0.71 B	NA
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	125 B	85.0 B	166	NA
Cadmium	5 ST	7440-43-9	ug/l	0.3 U	0.46 B	0.34 U	0.94 B	0.78 B	1.2 B	0.39 B	0.80 B
Calcium	-	7440-70-2	ug/l	35,900	35,800	36,100	37,700	53,100	33,800	58,800	51,900
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.50 B	2.3 B	0.33 U	NA
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	29.1 B	14.5 B	21.6 B	NA
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	5.0 B	11.2 B	0.44 U	NA
Iron	300 ST	7439-89-6	ug/l	53.9 B	83.5 B	58.0 B	74.2 B	147	[redacted]	53.1 B	74.8 B
Lead	25 ST	7439-92-1	ug/l	1.6 U	1.3 U	1.9 U	1.9 U	1.5 U	12.7	1.1 U	1.7 U
Magnesium	35,000 GV	7439-95-4	ug/l	7,250	7,570	7,600	8,340	14,000	8,340	15,800	12,100
Manganese	300 ST	7439-96-5	ug/l	31.2	47.9	65.8	105	[redacted]	118	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	14.4 B	6.9 B	15.8 B	NA
Potassium	-	7440-09-7	ug/l	7,840	11,000	8,880	10,600	13,400	23,800	12,700	10,400
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	2.0 B	3.4 B	3.0 U	NA
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.71 B	0.40 B	1.3 B	NA
Sodium	20,000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	U*
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	2.9 U	3.4 B	2.2 U	NA
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	1.4 U	3.1 B	1.1 U	NA
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	59.2	346	U*	NA
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	65.5	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	ug/l	85.1	131.4	123.8	179.2	457	[redacted]	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection limit.

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined by data validation.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 11/9/2007 (ug/l)	MW-01D 2/11/2008 (ug/l)	MW-01D 5/15/2008 (ug/l)	MW-01D 8/5/2008 (ug/l)	MW-01D 11/3/2008 (ug/l)	MW-01D 2/24/2009 (ug/l)	MW-01D 8/12/2009 (ug/l)	MW-01D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	ug/l	NA	NA	NA	NA	75.1 B	NA	1,130	268
Antimony	3 GV	7440-36-0	ug/l	NA	NA	NA	NA	2.3 U	NA	2.5 U	[redacted]
Arsenic	25 ST	7440-38-2	ug/l	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	ug/l	NA	NA	NA	NA	59.8 B	NA	35.8 B	30.2 B
Beryllium	3 GV	7440-41-7	ug/l	NA	NA	NA	NA	0.10 B	NA	0.13 U	0.91 B
Boron	1,000 ST	7440-42-8	ug/l	NA	NA	NA	NA	54.5 BN	NA	52.0 B	32.0 B
Cadmium	5 ST	7440-43-9	ug/l	2.0 B	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.60 B	4.0 B
Calcium	-	7440-70-2	ug/l	5,160	24,200	11,900	5,180	3,420 B	3,680 B	4,810 B	11,100
Chromium Hexavalent	50 ST	18540-29-9	ug/l	NA	NA	NA	NA	1.1 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	ug/l	NA	NA	NA	NA	0.02 U	NA	2.6 B	2.1 B
Cobalt	-	7440-48-4	ug/l	NA	NA	NA	NA	1.9 B	NA	1.5 B	1.4 B
Copper	200 ST	7440-50-8	ug/l	NA	NA	NA	NA	3.1 B	NA	3.3 B	10.6 B
Iron	300 ST	7439-89-6	ug/l	[redacted]	97.2 B	180	276	78.6 B	69.6 B	[redacted]	[redacted]
Lead	25 ST	7439-92-1	ug/l	4.9 J	1.5 B	2.3 U	2.3 U	1.3 U	1.3 U	[redacted]	3.8
Magnesium	35,000 GV	7439-95-4	ug/l	1,320 B	5,250	2,840 B	1,330 B	811 B	892 B	1,210 B	2,900 B
Manganese	300 ST	7439-96-5	ug/l	106	[redacted]	[redacted]	184	126	137	123	72.7
Mercury	0.7 ST	7439-97-6	ug/l	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	ug/l	NA	NA	NA	NA	1.7 B	NA	2.0 B	2.9 B
Potassium	-	7440-09-7	ug/l	33,400 J	33,400 J	2,360 B	2,040 B	1,550 B	1,750 B	1,840 B	6370
Selenium	10 ST	7782-49-2	ug/l	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 B
Silver	50 ST	7440-22-4	ug/l	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	ug/l	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	15,100
Thallium	0.5 GV	7440-28-0	ug/l	NA	NA	NA	NA	4.0 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	ug/l	NA	NA	NA	NA	0.74 U	NA	2.1 B	1.9 B
Zinc	2,000 ST	7440-66-6	ug/l	NA	NA	NA	NA	8.3 B	NA	30.8	49.7
Cyanide	200 ST	0057-12-5	ug/l	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	ug/l	[redacted]	[redacted]	[redacted]	460	204.6	206.6	[redacted]	387.7

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection limit.

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined by data validation.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	SITE: DATE: UNITS:	MW-01D 5/26/2011 (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)	MW-01D (ug/l)
Aluminum	-	7429-90-5	ug/l	3,070							
Antimony	3 GV	7440-36-0	ug/l	2.1 U							
Arsenic	25 ST	7440-38-2	ug/l	1.9 U							
Barium	1,000 ST	7440-39-3	ug/l	22.4 B							
Beryllium	3 GV	7440-41-7	ug/l	0.13 U							
Boron	1,000 ST	7440-42-8	ug/l	5.5 B							
Cadmium	5 ST	7440-43-9	ug/l	3.3 B							
Calcium	-	7440-70-2	ug/l	9,050							
Chromium Hexavalent	50 ST	18540-29-9	ug/l	20 U							
Chromium Total	50 ST	7440-47-3	ug/l	6.9 B							
Cobalt	-	7440-48-4	ug/l	1.8 B							
Copper	200 ST	7440-50-8	ug/l	12.0 B							
Iron	300 ST	7439-89-6	ug/l	[redacted]							
Lead	25 ST	7439-92-1	ug/l	20.4							
Magnesium	35,000 GV	7439-95-4	ug/l	2,410 B							
Manganese	300 ST	7439-96-5	ug/l	104							
Mercury	0.7 ST	7439-97-6	ug/l	0.10 UU*J*							
Nickel	100 ST	7440-02-0	ug/l	3.9 B							
Potassium	-	7440-09-7	ug/l	5,000							
Selenium	10 ST	7782-49-2	ug/l	2.6 UNU*J*							
Silver	50 ST	7440-22-4	ug/l	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	ug/l	2,980 B							
Thallium	0.5 GV	7440-28-0	ug/l	2.7 U							
Vanadium	-	7440-62-2	ug/l	8.2 B							
Zinc	2,000 ST	7440-66-6	ug/l	76.4							
Cyanide	200 ST	0057-12-5	ug/l	10.0 U							
Iron + Manganese	500 ST*	-	ug/l	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection limit.

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined by data validation.

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01I 10/24/1997 (ug/l)	MW-01I 11/30/2000 (ug/l)	MW-01I 1/30/2001 (ug/l)	MW-01I 8/21/2002 (ug/l)	MW-01I 11/20/2002 (ug/l)	MW-01I 3/5/2003 (ug/l)	MW-01I 6/3/2003 (ug/l)	MW-01I 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	60.8	12.5 B	27.7	NA	19 B	NA	NA	13.9 U
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	93.2	4.3 B	7.8	NA	26.2 B	NA	NA	38.9 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.2 U
Boron	1,000 ST	7440-42-8	NA	65.8 B	94.3	NA	68.1 B	NA	NA	176
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.21 B	0.50 U	0.16 B	0.10 U	0.30 U
Calcium	-	7440-70-2	7,510	723 B	1,350	4,840 B	10,200	5,850	2,520 B	13,200
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.4 U	3.5 U	0.6 U	NA	0.80 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	2.7	2.2 B	1.7 U	NA	5.7 B	NA	NA	5.8 B
Copper	200 ST	7440-50-8	0.93	2.1 B	1.7	NA	2.0 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	80.1	13.3 B	22.8	242	78.8 B	105	45.2 B	23.6 U
Lead	25 ST	7439-92-1	1	1.4 U	1.1 U	1.3 B	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35,000 GV	7439-95-4	3,720	154 B	266	904 B	1,910 B	1,160 B	439	2,490 B
Manganese	300 ST	7439-96-5	286	1.3 B	3.9	32.4	24	16.5	7.4 B	24.4
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	5.1	1.9 U	1.4 U	NA	8.2 B	NA	NA	6.1 B
Potassium	-	7440-09-7	4,250	951 B	1,510	1,370 B	1,770 B	1,970 B	1,250 B	2,700 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.5 U	2.6	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5	[illegible]	[illegible]	[illegible]	16,100	[illegible]	[illegible]	[illegible]	[illegible]
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	[illegible]
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7	NA	0.60 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	29.5	2.2 U	8.6	NA	27.6	NA	NA	3.4 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	366.1	14.6	26.7	274.4	102.8	121.5	52.6	48

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01I 11/10/2003 (ug/l)	MW-01I 2/26/2004 (ug/l)	MW-01I 5/20/2004 (ug/l)	MW-01I 8/19/2004 (ug/l)	MW-01I 11/8/2004 (ug/l)	MW-01I 2/28/2005 (ug/l)	MW-01I 5/25/2005 (ug/l)	MW-01I 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	21.5 B	NA	NA	99.2 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	9.2 B	NA	NA	17.3 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	229 B	NA	NA	299	NA	NA
Cadmium	5 ST	7440-43-9	0.30 U	0.20 U	0.3 U	0.30 U	0.23 U	0.35 B	0.65 U	0.65 U
Calcium	-	7440-70-2	25,100	17,300	2720 B	6,790	5,700	13,000	10,500	7,890
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	1.4 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	11 B	NA	NA	5.7 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3.6 B	NA	NA	15.6 B	NA	NA
Iron	300 ST	7439-89-6	44.1 B	31.6 B	82.6 B	48.9 B	30.6 B	99.4 B	37.2 B	43.4 B
Lead	25 ST	7439-92-1	1.2 B	1.6 U	1.2 U	1.2 U	1.1 U	1.6 B	1.7 U	1.7 U
Magnesium	35,000 GV	7439-95-4	4,750 B	3,560 B	559 B	1,710 B	1,320 B	3,010 B	2,430 B	1,860 B
Manganese	300 ST	7439-96-5	71.2	70.6	16	51.6	13.6	33.3	63.2	147
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	7.4 B	NA	NA	6.4 B	NA	NA
Potassium	-	7440-09-7	3040 B	3,860	1640 B	1900 B	2180 B	2700 B	2630 B	1950 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.85 B	NA	NA
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	13,700	12,000
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	13.3 B	NA	NA	89	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	115.3	102.2	98.6	100.5	44.2	132.7	100.4	190.4

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01I 11/28/2005 (ug/l)	MW-01I 2/24/2006 (ug/l)	MW-01I 5/17/2006 (ug/l)	MW-01I 8/8/2006 (ug/l)	MW-01I 11/28/2006 (ug/l)	MW-01I 2/21/2007 (ug/l)	MW-01I 5/25/2007 (ug/l)	MW-01I 8/15/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	33.1 B	37.5 B	104 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	14.7 B	13.4 B	14.0 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.55 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	269 B	304 B	237	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.55 B	0.16 U	0.25 B
Calcium	-	7440-70-2	7,910	7,190	7,260	13,500	13,200	13,400	13,100	12,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	0.50 U	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	7.1 B	8.9 B	5.2 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.2 B	10 B	U*	NA
Iron	300 ST	7439-89-6	20 B	52.0 B	24.7 B	63.8 B	21.3 B	112	102	8.5 B
Lead	25 ST	7439-92-1	1.6 B	1.3 U	1.9 U	1.9 U	1.5 U	1.9 B	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	1,870 B	1,740 B	1,580 B	2,910 B	3,100 B	3,280 B	3,160 B	3,390 B
Manganese	300 ST	7439-96-5	133	135	217	[redacted]	[redacted]	121	81.9	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	6.9 B	8.1 B	3.9 B	NA
Potassium	-	7440-09-7	2,160 B	2,730 B	1,960 B	2,980 B	2,170 B	2,840 B	2,280 B	1,960 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 B	NA
Sodium	20,000 ST	7440-23-5	15,500	18,100	17,500	10,400	12,400	13,900	12,400	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	47.7	48.3	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	153	187	231.7	[redacted]	[redacted]	233	183.9	456.5

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01I 11/9/2007 (ug/l)	MW-01I 2/11/2008 (ug/l)	MW-01I 5/15/2008 (ug/l)	MW-01I 8/5/2008 (ug/l)	MW-01I 11/3/2008 (ug/l)	MW-01I 2/24/2009 (ug/l)	MW-01I 8/12/2009 (ug/l)	MW-01I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	12.5 U	118 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	6.7 B	NA	8.0 B	7.9 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	62.8 BN	NA	52.2 B	47.9 B
Cadmium	5 ST	7440-43-9	0.55 B	0.32 U	0.45 B	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	9,220	12,200	13,600	8,380	6,510	6,160	6,620	6,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02U	NA	0.60 B	1.2 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.5 B	NA	0.70 B	2.4 B
Iron	300 ST	7439-89-6	122	24.2 U	31.7 B	21.4 B	27.6 B	13.3 B	31.8 B	[redacted]
Lead	25 ST	7439-92-1	1.5 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	10.4	2.0 B
Magnesium	35,000 GV	7439-95-4	2,800	3,420 B	3,960 B	2,280 B	1,830 B	1,740 B	1,750 B	2,060 B
Manganese	300 ST	7439-96-5	178	[redacted]	[redacted]	[redacted]	148	64.8	107	112
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	14.5	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.7 B	NA	0.82 U	2.4 B
Potassium	-	7440-09-7	2,020 J	1,650 B	1,950 B	1,970 B	1,390 B	1,130 B	1,400 B	1,580 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	10,200	12,300	15,400	11,400	8,450	6,950	6,450	5,790
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	4.2 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	9.9 B	NA	10.1 B	46.8
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	300	487.2	375	357.4	175.6	78.1	138.8	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01I 5/26/2011 (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)	MW-01I (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	4.9 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	24.4 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	5,290							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.3 B							
Cobalt	-	7440-48-4	0.49 U							
Copper	200 ST	7440-50-8	1.9 B							
Iron	300 ST	7439-89-6	71.0 B							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	1,940 B							
Manganese	300 ST	7439-96-5	9.6 B							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	1620 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	6,510							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	0.56 U							
Zinc	2,000 ST	7440-66-6	9.1 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	80.6							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01S 10/24/1997 (ug/l)	MW-01S 11/30/2000 (ug/l)	MW-01S 1/29/2001 (ug/l)	MW-01S 8/21/2002 (ug/l)	MW-01S 11/20/2002 (ug/l)	MW-01S 3/5/2003 (ug/l)	MW-01S 6/3/2003 (ug/l)	MW-01S 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	378	21 B	32.1	NA	101 B	NA	NA	30.7 B
Antimony	3 GV	7440-36-0	3.0 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.5	2.5 U	5.9	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	75.5	52.7 B	58	NA	67.4 B	NA	NA	66.9 B
Beryllium	3 GV	7440-41-7	0.2	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	622	553	NA	271	NA	NA	140
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.50 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	93,000	53,000	63,900	65,400	82,400	87,700	81,200	92,000
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	2.7	3.5 U	1.5	NA	1.1 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	2.5	2.8 B	4.8	NA	5.4 B	NA	NA	3.4 B
Copper	200 ST	7440-50-8	3.2	1.5 U	2.4	NA	3.5 B	NA	NA	3.4 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	12.7	1.4 U	6.5	2.2 B	1.4 B	1.5 U	1.9 B	0.80 U
Magnesium	35,000 GV	7439-95-4	8,940	6010	7240	7,530	8,980	10,700	9,690	9,000
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.12	0.1 U	0.1 U	NA	0.10 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	1.2 B	NA	NA	4.6 B
Potassium	-	7440-09-7	10,000	16200	15700	8,380	11,000	9,900	13,600	9,910
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	5.5 N	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.58 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	
Vanadium	-	7440-62-2	1.2	0.7 U	1.7 U	NA	0.65 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	37	2.2 U	22.4	NA	40.6	NA	NA	66.9
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01S 11/10/2003 (ug/l)	MW-01S 2/26/2004 (ug/l)	MW-01S 5/20/2004 (ug/l)	MW-01S 8/19/2004 (ug/l)	MW-01S 11/8/2004 (ug/l)	MW-01S 2/28/2005 (ug/l)	MW-01S 5/25/2005 (ug/l)	MW-01S 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	30.3 B	NA	NA	67 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	46.1 B	NA	NA	45.9 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	168 B	NA	NA	152	NA	NA
Cadmium	5 ST	7440-43-9	0.30 U	0.20 U	0.3 U	0.30 U	0.23 U	0.34 B	0.65 U	0.65 U
Calcium	-	7440-70-2	133,000	93,100	83,800	88,500	79,900	77,400	80,100	66,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.8 B	NA	NA	1.0 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	5.2 B	NA	NA	4.8 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3.3 B	NA	NA	1.5 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	1.6 U	1.3 B	1.2 U	1.1 U	1.1 U	3.2	2.4 B
Magnesium	35,000 GV	7439-95-4	14,000	13,300	9,930	10,100	9,680	10,200	9,940	7,950
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	2.2 B	NA	NA	1.8 B	NA	NA
Potassium	-	7440-09-7	16600	8,580	8,960	10,700	11,400	10,100	10,800	9,530
Selenium	10 ST	7782-49-2	NA	NA	2.6 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	40.7	NA	NA	72	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01S 11/28/2005 (ug/l)	MW-01S 2/24/2006 (ug/l)	MW-01S 5/17/2006 (ug/l)	MW-01S 8/8/2006 (ug/l)	MW-01S 11/28/2006 (ug/l)	MW-01S 2/21/2007 (ug/l)	MW-01S 5/25/2007 (ug/l)	MW-01S 8/15/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	43.7 B	19.2 B	188 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	4.6 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	69.7 B	54.5 B	50.7 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.48 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	182 B	196 B	141	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.62 B	0.16 U	0.26 B
Calcium	-	7440-70-2	58,500	98,000	91,700	73,000	100,000	99,800	78,900	68,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	0.50 U	0.88 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	5.6 B	2.6 B	5.3 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	4.2 B	4.4 B	U*	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	3.5	1.3 U	4.6	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	6,370	17,500	12,300	11,100	17,000	19,800	12,900	9,480
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	9,250	12,500	13,800	9,630	15,700	13,800	12,800	14,900
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.47 B	0.65 B	NA
Sodium	20,000 ST	7440-23-5								U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	50.3	31.4	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	25.7	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01S 11/9/2007 (ug/l)	MW-01S 2/11/2008 (ug/l)	MW-01S 5/15/2008 (ug/l)	MW-01S 8/5/2008 (ug/l)	MW-01S 11/3/2008 (ug/l)	MW-01S 2/24/2009 (ug/l)	MW-01S 8/14/2009 (ug/l)	MW-01S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	63.5 B	NA	197 B	44.6 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	3.5 B	NA	11.2	3.2 B
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	45.7 B	NA	103 B	48.6 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	125 BN	NA	76.5 B	107
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.50 B	0.34 U
Calcium	-	7440-70-2	63,100	71,000	60,800	79,700	62,900	58,000	64,100	55,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.49 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.80 B	1.0 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	2.0 B	NA	2.7 B	1.6 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.3 B	NA	2.1 B	2.4 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	2.1 B	2.3 U	2.5 B	1.3 U	1.3 U	11.9	2.1 B
Magnesium	35,000 GV	7439-95-4	9,110	11,000	8,960	11,700	9,990	8,690	8,020	7,650
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	13,900 J	11,800	12,600	14,700	15,900	12,400	13,100	13,500
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	4.1 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.90 B	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	14.8 B	NA	78.3	30.6
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-01S 5/26/2011 (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)	MW-01S (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	43.7 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	64.1 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	61,800							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.9 B							
Cobalt	-	7440-48-4	.88 B							
Copper	200 ST	7440-50-8	2.4 B							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	8,650							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	16,500							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	0.56 U							
Zinc	2,000 ST	7440-66-6	13.8							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02D 10/27/1997 (ug/l)	MW-02D 12/1/2000 (ug/l)	MW-02D 1/30/2001 (ug/l)	MW-02D 8/21/2002 (ug/l)	MW-02D 11/20/2002 (ug/l)	MW-02D 3/5/2003 (ug/l)	MW-02D 6/3/2003 (ug/l)	MW-02D 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	33.5	15.3 B	16	NA	21.9 B	NA	NA	22.3 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	6.9	5.2 B	5	NA	7.4 B	NA	NA	6.0 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.1 U	NA	0.40 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	5.1 B	32.9	NA	18 B	NA	NA	22.4 B
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.17 B	0.5 U	0.29 B	0.10 U	0.30 U
Calcium	-	7440-70-2	4,750	6,070	5,720	6,040	8,290	8,530	8,370	7,610
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.4 U	3.5 U	0.6 U	NA	1.6 B	NA	NA	1.2 B
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	0.7 U	1.5 U	1.5 U	NA	8.7 B	NA	NA	1.4 B
Iron	300 ST	7439-89-6	33.2	4.2 B	12.3	139	89.1 B	119	52.6 B	96.2
Lead	25 ST	7439-92-1	1 U	1.4 U	1.1 U	0.8 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	2,220	2,840 B	2,680	2,600 B	3,530 B	3,640 B	3,610 B	3,250 B
Manganese	300 ST	7439-96-5	54.8	1.6 B	1.1 U	30.6	11 B	7.3 B	3.4 B	5.9 B
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	1.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	636	740 B	806	741 B	710 B	768 B	895 B	736 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.5 U	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5	8,120	8,460	7,560	6,780	8,170	8,210	8,650	7,640
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	27.5	3.6 B	5.3	NA	57.8	NA	NA	9.9 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	88	5.8	12.3	169.6	100.1	126.3	56	102.1

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02D 11/11/2003 (ug/l)	MW-02D 2/27/2004 (ug/l)	MW-02D 5/20/2004 (ug/l)	MW-02D 8/20/2004 (ug/l)	MW-02D 11/8/2004 (ug/l)	MW-02D 2/28/2005 (ug/l)	MW-02D 5/26/2005 (ug/l)	MW-02D 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	20.7 B	NA	NA	53.8 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	6.9 B	NA	NA	6.7 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	16.7 B	NA	NA	21.2 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.3 U	0.30 U	0.23 U	0.23 U	0.65 U	0.65 U
Calcium	-	7440-70-2	7,640	7,800	7,980	7,810	8,590	8,360	8,570	9,260
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.5 B	NA	NA	1.2 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	4.2 B	NA	NA	1.2 B	NA	NA
Iron	300 ST	7439-89-6	62.4 B	26.8 B	103	56.8 B	46.8 B	64.4 B	48.4 B	98.4 B
Lead	25 ST	7439-92-1	1.1 U	1.6 U	1.2 U	1.2 U	1.1 U	1.1 U	1.7 U	1.7 U
Magnesium	35,000 GV	7439-95-4	3,340 B	3,420 B	3,260 B	3,250 B	3,620 B	3,530 B	3,580 B	3,960 B
Manganese	300 ST	7439-96-5	3.7 B	1.2 B	14.9 B	2.6 B	2.8 B	3.1 B	3.4 B	5.6 B
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	697 B	674 B	883 B	730 B	877 B	848 B	734 B	741 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	7,590	8,450	7,760	8,290	8,840	8,540	7,380	9,170
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	15.2 B	NA	NA	72.3	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	66.1	28	117.9	59.4	49.6	67.5	51.8	104

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02D 11/29/2005 (ug/l)	MW-02D 2/28/2006 (ug/l)	MW-02D 5/18/2006 (ug/l)	MW-02D 8/10/2006 (ug/l)	MW-02D 11/30/2006 (ug/l)	MW-02D 2/22/2007 (ug/l)	MW-02D 5/25/2007 (ug/l)	MW-02D 8/15/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	47.0 B	34.0 B	103 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	6.4 U	6.4 U	4.6 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.50 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	16.4 B	24.0 B	20.3 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.62 B	0.28 U	0.28 U	0.16 U	0.17 B
Calcium	-	7440-70-2	8,190	8,310	8,180	7,740	6,840	6,260	5,500	6,320
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	1.9 B	0.72 B	0.56 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.8 B	9.7 B	0.44 U	NA
Iron	300 ST	7439-89-6	40.7 B	95.8 B	155	60.1 B	129	70.1 B	43.0 B	8.9 B
Lead	25 ST	7439-92-1	2.8 B	2.3 B	2.1 B	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	3,560 B	3,840 B	3,430 B	3,330 B	3,160 B	3,120 B	2,640 B	2,950 B
Manganese	300 ST	7439-96-5	2.4 B	4.4 B	12 B	1.7 B	4.8 B	3.6 B	2.1 B	2.1 B
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	676 B	929 B	699 B	1490 B	791 B	889 B	711 B	754 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.87 B	NA
Sodium	20,000 ST	7440-23-5	7,570	7,790	7,590	7,750	6,690	6,310	5,030	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	66.2	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	43.1	100.2	167	61.8	133.8	73.7	45.1	11.0

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02D 11/13/2007 (ug/l)	MW-02D 2/12/2008 (ug/l)	MW-02D 5/19/2008 (ug/l)	MW-02D 8/4/2008 (ug/l)	MW-02D 11/3/2008 (ug/l)	MW-02D 2/24/2009 (ug/l)	MW-02D 8/14/2009 (ug/l)	MW-02D 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	181 B	132 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	3.3 B	NA	225	4.2 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.20 B	0.30 B
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	13.5 BN	NA	196	18.8 B
Cadmium	5 ST	7440-43-9	0.32 B	0.60 B	0.27 U	0.27 U	0.35 U	0.35 U	1.1 B	0.34 U
Calcium	-	7440-70-2	5,460	5,540	4,990 B	4,830 B	4,620B	4,600 B	95,700	4,150 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	1.2 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.4 B	2.2 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	1.0 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.8 B	NA	1.4 B	1.8 B
Iron	300 ST	7439-89-6	[redacted]	50.4	23.8 B	90.2 B	19.7 B	30.7 B	[redacted]	215
Lead	25 ST	7439-92-1	2.2 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	17.5	2.7 B
Magnesium	35,000 GV	7439-95-4	2,630 B	2,570 B	2,380 B	2,330 B	2,290 B	2,230 B	14,000	2,130 B
Manganese	300 ST	7439-96-5	11.6 B	1.8 B	1.7 B	4.2 B	1.0 B	1.2 B	[redacted]	5.2 B
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	997 JB	642 B	637 B	874 B	654 B	622 B	13,200	759 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	4,240 B	4,950 B	4,960 B	4,630 B	5,010	4,500 B	[redacted]	4,890 B
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	10.5 B	NA	27.5	21.9
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	[redacted]	52.2	25.5	94.4	20.7	31.9	[redacted]	220.2

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02D 5/31/2011 (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)	MW-02D (ug/l)
Aluminum	-	7429-90-5	36.7 B							
Antimony	3 GV	7440-36-0	[redacted]							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	5.3 B							
Beryllium	3 GV	7440-41-7	0.73 B							
Boron	1,000 ST	7440-42-8	23.6 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	5,380							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.2 B							
Cobalt	-	7440-48-4	0.70 B							
Copper	200 ST	7440-50-8	1.4 B							
Iron	300 ST	7439-89-6	39.0 B							
Lead	25 ST	7439-92-1	2.1 B							
Magnesium	35,000 GV	7439-95-4	2,720 B							
Manganese	300 ST	7439-96-5	2.4 B							
Mercury	0.7 ST	7439-97-6	0.10 UN							
Nickel	100 ST	7440-02-0	2.3 B							
Potassium	-	7440-09-7	1290 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UN							
Sodium	20,000 ST	7440-23-5	7,690							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	0.76 B							
Zinc	2,000 ST	7440-66-6	21.6							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	41.4							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02I 10/27/1997 (ug/l)	MW-02I 12/1/2000 (ug/l)	MW-02I 1/30/2001 (ug/l)	MW-02I 8/21/2002 (ug/l)	MW-02I 11/20/2002 (ug/l)	MW-02I 3/7/2003 (ug/l)	MW-02I 6/3/2003 (ug/l)	MW-02I 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	80.2	26.4 B	11.8 U	NA	70.4 B	NA	NA	48.0 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	47.9	39.9 B	36.9	NA	30.8 B	NA	NA	35.5 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	126	97.2	NA	105	NA	NA	103
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.43 B	0.5 U	0.19 B	0.11 B	0.30 U
Calcium	-	7440-70-2	4,990	10,700	10,500	7,090	6,060	11,600	13,200	9,450
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.7	3.5 U	0.6 U	NA	0.8 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	1.1	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	3.6	1.5 U	1.5 U	NA	5.9 B	NA	NA	1.4 B
Iron	300 ST	7439-89-6	249	6.9 B	5.4	207	173	44.3 B	142	99.8 B
Lead	25 ST	7439-92-1	3.5	1.4 U	1.1 U	1.2 B	1.7 B	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	685	2,670 B	2,600	1,900 B	1,780	3,240 B	3,320 B	2,680 B
Manganese	300 ST	7439-96-5	40.9	[redacted]	[redacted]	181	[redacted]	[redacted]	[redacted]	295
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	1.1	NA	NA	1.5 U
Potassium	-	7440-09-7	3,100	1,630 B	1,680	1,740 B	3,600	3,070 B	4,130 B	1,480 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5	15,300	8,700	7,580	7,370	7,100	12,300	8,740	6,460
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.60 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	37	2.2 U	3.6 U	NA	36	NA	NA	9.8 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	289.9	423.9	411.4	388	[redacted]	[redacted]	470	394.8

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02I 11/11/2003 (ug/l)	MW-02I 2/26/2004 (ug/l)	MW-02I 5/20/2004 (ug/l)	MW-02I 8/20/2004 (ug/l)	MW-02I 11/8/2004 (ug/l)	MW-02I 2/28/2005 (ug/l)	MW-02I 5/26/2005 (ug/l)	MW-02I 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	133 B	NA	NA	184 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	31.2 B	NA	NA	39.5 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.33 B	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	39.5 B	NA	NA	58.9 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.41 B	0.3 U	0.36 B	0.43 B	0.53 B	0.65 U	0.65 U
Calcium	-	7440-70-2	9,840	11,200	17,700	10,900	11,900	10,200	9,950	9,410
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.7 B	NA	NA	1.5 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	8.3 B	NA	NA	14.3 B	NA	NA
Iron	300 ST	7439-89-6	121	94.5 B	177	93.2 B	109	198	67.2 B	93.9 B
Lead	25 ST	7439-92-1	1.9 B	1.6 U	3.2	1.9 B	1.1 U	2.4 B	2.3 B	1.7 U
Magnesium	35,000 GV	7439-95-4	2,310 B	2,400	2,980 B	1,910 B	1,840 B	1,910 B	1,940 B	1,900 B
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	266	[redacted]	249	239	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	2.2 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	1,670 B	1,760 B	3,100 B	1,780 B	2,390 B	2,010 B	1,570 B	1,340 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.50 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	6,510	9,210	6,970	8,040	7,660	9,060	8,630	9,060
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	36.4	NA	NA	110	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	[redacted]	454.5	443	413.2	358	437	396.2	403.9

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

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U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02I 11/29/2005 (ug/l)	MW-02I 2/28/2006 (ug/l)	MW-02I 5/18/2006 (ug/l)	MW-02I 8/10/2006 (ug/l)	MW-02I 11/30/2006 (ug/l)	MW-02I 2/22/2007 (ug/l)	MW-02I 5/25/2007 (ug/l)	MW-02I 8/14/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	54.6 B	48.0 B	130 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	46.3 B	56.4 B	42.2 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.58 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	112 B	117 B	95.4 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.38 B	0.16 U	0.24 B
Calcium	-	7440-70-2	11,200	12,100	16,800	20,000	24,700	21,600	19,000	24,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.2 B	1.2 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	6.8 B	16.7 B	U*	NA
Iron	300 ST	7439-89-6	30.8 B	27.1 B	35.5 B	3.7 U	94.2 B	186	87.5 B	6.7 B
Lead	25 ST	7439-92-1	1.6 U	1.6 B	1.9 B	1.9 U	1.5 U	1.6 B	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	2,160 B	2,520 B	2,810 B	3,060 B	3,480 B	3,730 B	2,880 B	2,850 B
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	[redacted]	251	210	[redacted]	110	83
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	2,560 B	3,600 B	2,410 B	2,520 B	2,110 B	2,360 B	1,700 B	2,500 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.8 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	9,820	12,500	[redacted]	15,000	17,000	18,700	15,200	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.4 B	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	58.8	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	365.8	460.1	431.5	251	304.2	[redacted]	197.5	89.7

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02I 11/13/2007 (ug/l)	MW-02I 2/12/2008 (ug/l)	MW-02I 5/19/2008 (ug/l)	MW-02I 8/4/2008 (ug/l)	MW-02I 11/3/2008 (ug/l)	MW-02I 2/24/2009 (ug/l)	MW-02I 8/14/2009 (ug/l)	MW-02I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	81.1 B	39.3 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	32.3 B	NA	38.2 B	37.8 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	106 BN	NA	53.3 B	51.6 B
Cadmium	5 ST	7440-43-9	0.35 B	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	18,200	18,600	16,300	14,000	13,500	13,800	15,500	14,700
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.9 B	0.60 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.0 B	NA	1.2 B	2.1 B
Iron	300 ST	7439-89-6	183	24.2 U	20.3 B	10.0 B	13.7 B	26.0 B	42.1 B	63.7 B
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	4.1	3.3
Magnesium	35,000 GV	7439-95-4	2,230 B	1,560 B	1,390 B	1,150 B	1,080 B	1,260 B	1,250 B	1,550 B
Manganese	300 ST	7439-96-5	[redacted]	20.3	23.3	20.6	26.9	39.6	38.4	28.2
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	3,430 JB	1,590 B	1,670 B	3,900 B	4,610 B	3,600 B	3,940 B	3,990 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	[redacted]	16,000	15,000	11,900	11,500	10,800	10,600	10,400
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	5.6 B	NA	6.8 B	12.6 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	[redacted]	44.5	43.6	30.6	40.6	65.6	[redacted]	91.9

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02I 5/31/2011 (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)	MW-02I (ug/l)
Aluminum	-	7429-90-5	32.3 B							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	45.0 B							
Beryllium	3 GV	7440-41-7	0.26 B							
Boron	1,000 ST	7440-42-8	36.9 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	13,900							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.1 B							
Cobalt	-	7440-48-4	0.49 U							
Copper	200 ST	7440-50-8	1.0 B							
Iron	300 ST	7439-89-6	110							
Lead	25 ST	7439-92-1	2.1 B							
Magnesium	35,000 GV	7439-95-4	1,620 B							
Manganese	300 ST	7439-96-5	25.6							
Mercury	0.7 ST	7439-97-6	0.12 BNU*							
Nickel	100 ST	7440-02-0	1.8 B							
Potassium	-	7440-09-7	3790 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UN							
Sodium	20,000 ST	7440-23-5	18,600							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	0.56 U							
Zinc	2,000 ST	7440-66-6	17.8 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	135.6							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02S 10/27/1997 (ug/l)	MW-02S 11/30/2000 (ug/l)	MW-02S 1/31/2001 (ug/l)	MW-02S 8/21/2002 (ug/l)	MW-02S 11/20/2002 (ug/l)	MW-02S 3/5/2003 (ug/l)	MW-02S 6/3/2003 (ug/l)	MW-02S 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	146	15.8 B	11.8 U					
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U					
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U					
Barium	1,000 ST	7440-39-3	26.3	34.1 B	31.9					
Beryllium	3 GV	7440-41-7	0.77	0.1 U	0.14					
Boron	1,000 ST	7440-42-8	NA	59.7 B	87.8					
Cadmium	5 ST	7440-43-9	0.57	0.4 U	0.2 U					
Calcium	-	7440-70-2	27,000	30,300	33,100					
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	N	N	N	N	N
Chromium Total	50 ST	7440-47-3	1.1	3.5 U	0.6 U	O	O	O	O	O
Cobalt	-	7440-48-4	1.5	0.9 U	1.7 U	T	T	T	T	T
Copper	200 ST	7440-50-8	4	2.6 B	1.5 U					
Iron	300 ST	7439-89-6	[redacted]	18.7 B	13.8	S	S	S	S	S
Lead	25 ST	7439-92-1	2.1	1.4 U	1.1 U	A	A	A	A	A
Magnesium	35,000 GV	7439-95-4	2,890	2360 B	2750	M	M	M	M	M
Manganese	300 ST	7439-96-5	5.6	61.1	68.4	P	P	P	P	P
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	L	L	L	L	L
Nickel	100 ST	7440-02-0	1.3	1.9 U	1.4 U	E	E	E	E	E
Potassium	-	7440-09-7	4,660	7,850	7,600	D	D	D	D	D
Selenium	10 ST	7782-49-2	2.8 U	4 B	1.5 U					
Silver	50 ST	7440-22-4	0.9 U	0.93 B	1.6 U					
Sodium	20,000 ST	7440-23-5	18,900	12,900	13,100					
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 B	2.8 U					
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U					
Zinc	2,000 ST	7440-66-6	20.8	2.8 B	3.6 U					
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U					
Iron + Manganese	500 ST	-	317.6	79.8	82.2					

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

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Appendix A-2

SONIA ROAD LANDFILL
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HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02S 11/11/2003 (ug/l)	MW-02S 2/26/2004 (ug/l)	MW-02S 5/20/2004 (ug/l)	MW-02S 8/20/2004 (ug/l)	MW-02S 11/10/2004 (ug/l)	MW-02S 2/28/2005 (ug/l)	MW-02S 5/26/2005 (ug/l)	MW-02S 8/24/2005 (ug/l)
Aluminum	-	7429-90-5								
Antimony	3 GV	7440-36-0								
Arsenic	25 ST	7440-38-2								
Barium	1,000 ST	7440-39-3								
Beryllium	3 GV	7440-41-7								
Boron	1,000 ST	7440-42-8								
Cadmium	5 ST	7440-43-9								
Calcium	-	7440-70-2								W
Chromium Hexavalent	50 ST	18540-29-9	N	N	N	N	N	N	N	E
Chromium Total	50 ST	7440-47-3	O	O	O	O	O	O	O	L
Cobalt	-	7440-48-4	T	T	T	T	T	T	T	L
Copper	200 ST	7440-50-8								
Iron	300 ST	7439-89-6	S	S	S	S	S	S	S	A
Lead	25 ST	7439-92-1	A	A	A	A	A	A	A	B
Magnesium	35,000 GV	7439-95-4	M	M	M	M	M	M	M	A
Manganese	300 ST	7439-96-5	P	P	P	P	P	P	P	N
Mercury	0.7 ST	7439-97-6	L	L	L	L	L	L	L	D
Nickel	100 ST	7440-02-0	E	E	E	E	E	E	E	O
Potassium	-	7440-09-7	D	D	D	D	D	D	D	N
Selenium	10 ST	7782-49-2								E
Silver	50 ST	7440-22-4								D
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2								
Zinc	2,000 ST	7440-66-6								
Cyanide	200 ST	0057-12-5								
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02S 11/30/2005 (ug/l)	MW-02S 3/1/2006 (ug/l)	MW-02S 5/18/2006 (ug/l)	MW-02S 8/9/2006 (ug/l)	MW-02S 11/29/2006 (ug/l)	MW-02S 2/22/2007 (ug/l)	MW-02S 6/1/2007 (ug/l)	MW-02S 8/14/2007 (ug/l)
Aluminum	-	7429-90-5								
Antimony	3 GV	7440-36-0								
Arsenic	25 ST	7440-38-2								
Barium	1,000 ST	7440-39-3								
Beryllium	3 GV	7440-41-7								
Boron	1,000 ST	7440-42-8								
Cadmium	5 ST	7440-43-9								
Calcium	-	7440-70-2	W	W	W	W	W	W	W	W
Chromium Hexavalent	50 ST	18540-29-9	E	E	E	E	E	E	E	E
Chromium Total	50 ST	7440-47-3	L	L	L	L	L	L	L	L
Cobalt	-	7440-48-4	L	L	L	L	L	L	L	L
Copper	200 ST	7440-50-8								
Iron	300 ST	7439-89-6	A	A	A	A	A	A	A	A
Lead	25 ST	7439-92-1	B	B	B	B	B	B	B	B
Magnesium	35,000 GV	7439-95-4	A	A	A	A	A	A	A	A
Manganese	300 ST	7439-96-5	N	N	N	N	N	N	N	N
Mercury	0.7 ST	7439-97-6	D	D	D	D	D	D	D	D
Nickel	100 ST	7440-02-0	O	O	O	O	O	O	O	O
Potassium	-	7440-09-7	N	N	N	N	N	N	N	N
Selenium	10 ST	7782-49-2	E	E	E	E	E	E	E	E
Silver	50 ST	7440-22-4	D	D	D	D	D	D	D	D
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2								
Zinc	2,000 ST	7440-66-6								
Cyanide	200 ST	0057-12-5								
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02S 11/14/2007 (ug/l)	MW-02S 2/12/2008 (ug/l)	MW-02S 5/19/2008 (ug/l)	MW-02S 8/4/2008 (ug/l)	MW-02S 11/3/2008 (ug/l)	MW-02S 2/24/2009 (ug/l)	MW-02S 8/14/2009 (ug/l)	MW-02S (ug/l)
Aluminum	-	7429-90-5								
Antimony	3 GV	7440-36-0								
Arsenic	25 ST	7440-38-2								
Barium	1,000 ST	7440-39-3								
Beryllium	3 GV	7440-41-7								
Boron	1,000 ST	7440-42-8								
Cadmium	5 ST	7440-43-9								
Calcium	-	7440-70-2	W	W	W	W	W	W	W	W
Chromium Hexavalent	50 ST	18540-29-9	E	E	E	E	E	E	E	E
Chromium Total	50 ST	7440-47-3	L	L	L	L	L	L	L	L
Cobalt	-	7440-48-4	L	L	L	L	L	L	L	L
Copper	200 ST	7440-50-8								
Iron	300 ST	7439-89-6	A	A	A	A	A	A	A	A
Lead	25 ST	7439-92-1	B	B	B	B	B	B	B	B
Magnesium	35,000 GV	7439-95-4	A	A	A	A	A	A	A	A
Manganese	300 ST	7439-96-5	N	N	N	N	N	N	N	N
Mercury	0.7 ST	7439-97-6	D	D	D	D	D	D	D	D
Nickel	100 ST	7440-02-0	O	O	O	O	O	O	O	O
Potassium	-	7440-09-7	N	N	N	N	N	N	N	N
Selenium	10 ST	7782-49-2	E	E	E	E	E	E	E	E
Silver	50 ST	7440-22-4	D	D	D	D	D	D	D	D
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2								
Zinc	2,000 ST	7440-66-6								
Cyanide	200 ST	0057-12-5								
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)	MW-02S (ug/l)
Aluminum	-	7429-90-5								
Antimony	3 GV	7440-36-0								
Arsenic	25 ST	7440-38-2								
Barium	1,000 ST	7440-39-3								
Beryllium	3 GV	7440-41-7								
Boron	1,000 ST	7440-42-8								
Cadmium	5 ST	7440-43-9								
Calcium	-	7440-70-2	W	W	W	W	W	W	W	W
Chromium Hexavalent	50 ST	18540-29-9	E	E	E	E	E	E	E	E
Chromium Total	50 ST	7440-47-3	L	L	L	L	L	L	L	L
Cobalt	-	7440-48-4	L	L	L	L	L	L	L	L
Copper	200 ST	7440-50-8								
Iron	300 ST	7439-89-6	A	A	A	A	A	A	A	A
Lead	25 ST	7439-92-1	B	B	B	B	B	B	B	B
Magnesium	35,000 GV	7439-95-4	A	A	A	A	A	A	A	A
Manganese	300 ST	7439-96-5	N	N	N	N	N	N	N	N
Mercury	0.7 ST	7439-97-6	D	D	D	D	D	D	D	D
Nickel	100 ST	7440-02-0	O	O	O	O	O	O	O	O
Potassium	-	7440-09-7	N	N	N	N	N	N	N	N
Selenium	10 ST	7782-49-2	E	E	E	E	E	E	E	E
Silver	50 ST	7440-22-4	D	D	D	D	D	D	D	D
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2								
Zinc	2,000 ST	7440-66-6								
Cyanide	200 ST	0057-12-5								
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-03S 10/30/1997 (ug/l)	MW-03S 12/6/2000 (ug/l)	MW-03S 2/2/2001 (ug/l)	MW-03S 8/22/2002 (ug/l)	MW-03S 11/22/2002 (ug/l)	MW-03S 3/7/2003 (ug/l)	MW-03S 6/3/2003 (ug/l)	MW-03S 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	1,080	16.5 B	53.7	NA	803	NA	NA	46.0 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA		NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	3.2	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	136	125 B	125	NA	176 B	NA	NA	158 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.24	NA	0.80 B	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	128	153	NA	139	NA	NA	222
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.22	0.13 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	50,800	51,200	57,700	67,400	92,400	112,000	84,900	91,600
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	3.1	3.5 U	0.6	NA	2.9 B	NA	NA	1.2 B
Cobalt	-	7440-48-4	1.1	0.9 U	1.7 U	NA	13.1 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	3.3	2.6 B	1.5 U	NA	11.5 B	NA	NA	5.2 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4	1.4 U	1.1 U	0.8 U	2.1 B	1.5 U	1.8 B	0.84 B
Magnesium	35,000 GV	7439-95-4	7,970	7,620	8,320	9,840	16,000	21,700	14,100	14,600
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	2.6	1.9 U	1.4 U	NA	23.4 B	NA	NA	2.8 B
Potassium	-	7440-09-7	7,870	8310	9590	8,680	7,850	12,200	19,300	14,100
Selenium	10 ST	7782-49-2	2.8 U	2.8 B	2 N	NA	6	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.7 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5							17,600	
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	3.7	0.7 U	1.7 U	NA	2.9 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	34	3.5 B	3.6 U	NA	799	NA	NA	57.5
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-03S 11/13/2003 (ug/l)	MW-03S 3/2/2004 (ug/l)	MW-03S 5/24/2004 (ug/l)	MW-03S 8/23/2004 (ug/l)	MW-03S 11/10/2004 (ug/l)	MW-03S 3/2/2005 (ug/l)	MW-03S 5/31/2005 (ug/l)	MW-03S 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	57.5 B	NA	NA	121 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	5.1 B	NA	NA	4.6 B	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	147 B	NA	NA	192 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	171 B	NA	NA	161	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.92 B	0.30 U	0.51 B	1.3 B	0.37 U	0.65 U
Calcium	-	7440-70-2	76,200	66,200	67,100	69,300	72,800	71,000	82,600	74,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.9 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	2.1 B	NA	NA	2.1 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	0.70 U	0.7 U	1.2 U	1.1 U	1.1 U	1.2 U	3.9
Magnesium	35,000 GV	7439-95-4	11,800	9,800	10,100	9,850	10,400	10,400	13,000	10,000
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.5 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	15,900	12,900	10,800	12,000	12,400	13,200	13,600	16,000
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	20.7 B	NA	NA	72.2	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-03S 11/30/2005 (ug/l)	MW-03S 3/1/2006 (ug/l)	MW-03S 5/18/2006 (ug/l)	MW-03S 8/9/2006 (ug/l)	MW-03S 11/29/2006 (ug/l)	MW-03S 2/22/2007 (ug/l)	MW-03S 6/1/2007 (ug/l)	MW-03S 8/14/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	56.5 B	367	63.6 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	2.2 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	6.3 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	230	250	265	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.30 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	193 B	201 B	231 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.92 B	0.27 B	0.16 U
Calcium	-	7440-70-2	124,000	115,000	93,400	97,500	85,200	82,400	91,900	76,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	1.7 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.9 B	4.3 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.6 U	1.3 U	2.7 B	1.9 U	1.5 U	1.9 B	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	18,200	18,900	13,700	14,300	13,300	13,600	14,200	11,600
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	2.0 B	3.2 B	4.0 B	NA
Potassium	-	7440-09-7	17,700	22,500	17,500	18,500	16,500	18,600	17,700	14,900
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	2.1 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5								U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	5.5 B	3.7 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.6 B	2.3 B	2.0 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	71.1	U*	4.8 B	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-03S 11/14/2007 (ug/l)	MW-03S 2/11/2008 (ug/l)	MW-03S 5/15/2008 (ug/l)	MW-03S 8/5/2008 (ug/l)	MW-03S 11/5/2008 (ug/l)	MW-03S 2/25/2009 (ug/l)	MW-03S 8/14/2009 (ug/l)	MW-03S 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	183 B	277
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 B	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	166 B	NA	221	251
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	134 B	NA	183	160
Cadmium	5 ST	7440-43-9	0.32 U	1.4 B	0.41 B	0.27 U	0.35 U	0.35 U	0.80 B	0.34 U
Calcium	-	7440-70-2	73,600 J	67,300	76,100	69,500	66,200	73,600	93,600	75,700
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	1.3 B	NA	0.80 B	1.5 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	1.4 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.5 B	NA	2.0 B	0.83 U
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 U	1.4 U	2.3 B	2.3 U	1.3 U	1.3 U	17.9	2.4 B
Magnesium	35,000 GV	7439-95-4	11,200 J	10,400	11,900	11,400	10,300	11,100	13,800	11,800
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	1.4
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	2.1 B	NA	0.82 U	2.4 B
Potassium	-	7440-09-7	12,500	10,700	12,400	13,300	12,400	12,200	12,900	13,900
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.85 B	NA	0.33 B	0.83 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.2 B	NA	0.77 U	3.4 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	1.5 U	NA	30.4	39.3
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-03S 6/1/2011 (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)	MW-03S (ug/l)
Aluminum	-	7429-90-5	40.4							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	145 B							
Beryllium	3 GV	7440-41-7	0.24 B							
Boron	1,000 ST	7440-42-8	126							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	57,600							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.6 B							
Cobalt	-	7440-48-4	0.49 U							
Copper	200 ST	7440-50-8	0.55 U							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	6.3							
Magnesium	35,000 GV	7439-95-4	9,270							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UN							
Nickel	100 ST	7440-02-0	2.0 B							
Potassium	-	7440-09-7	12,500							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.54 BN							
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	1.8 B							
Zinc	2,000 ST	7440-66-6	18.0 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04D 10/28/1997 (ug/l)	MW-04D 12/6/2000 (ug/l)	MW-04D 2/1/2001 (ug/l)	MW-04D 8/23/2002 (ug/l)	MW-04D 11/21/2002 (ug/l)	MW-04D 3/7/2003 (ug/l)	MW-04D 6/3/2003 (ug/l)	MW-04D 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	52.9	17.7 B	15.7	NA	29.4 B	NA	NA	27.3 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	7.6	11.9	14.4	NA	7.2 B	NA	NA	13.7
Barium	1,000 ST	7440-39-3	186	249	224	NA	90.8 B	NA	NA	108 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.16	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	291	326	NA	170	NA	NA	120
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.37	0.1 B	0.5 U	0.1 U	0.10 U	0.30 U
Calcium	-	7440-70-2	56,100	60,000	59,100	30,800	24,700	24,000	27,500	30,900
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.4 U	3.5 U	0.6 U	NA	1.3 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	14.9	17.7 B	14.4	NA	4.3 B	NA	NA	4.4 B
Copper	200 ST	7440-50-8	0.7 U	1.5 U	1.5 U	NA	3.4 B	NA	NA	1.6 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1 U	4	3.6	0.88 B	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	8,830	11,500	11,100	5,380	4,060 B	4,080 B	4,550 B	4,840 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	7.4	7.1 B	5.4	NA	2.3 B	NA	NA	2.6 B
Potassium	-	7440-09-7	14,000	14,900	16,200	10,700	8,650	8,970	10,500	8,800
Selenium	10 ST	7782-49-2	2.8 U	2.2 B	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.3 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5				15,300	13,700	14,000	14,900	13,300
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.82 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	85.9	5.9 B	3.6 U	NA	16.7 B	NA	NA	22.8
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04D 11/11/2003 (ug/l)	MW-04D 3/1/2004 (ug/l)	MW-04D 5/24/2004 (ug/l)	MW-04D 8/23/2004 (ug/l)	MW-04D 11/9/2004 (ug/l)	MW-04D 3/1/2005 (ug/l)	MW-04D 5/27/2005 (ug/l)	MW-04D 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	30.3 B	NA	NA	94.5 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	16.8	NA	NA	20.3	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	135 B	NA	NA	172 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.35 B	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	96.7 B	NA	NA	161	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	1.5 B	0.30 U	0.84 B	2.6 B	1.3 B	0.65 U
Calcium	-	7440-70-2	34,000	43,400	45,500	63,500	62,500	60,600	58,300	56,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	4.7 B	NA	NA	5.0 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.9 U	NA	NA	1.3 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	1.6 U	0.7 U	2.6 B	1.1 U	1.1 U	1.2 U	4.4
Magnesium	35,000 GV	7439-95-4	5,720	7,110	7,730	9,970	9,860	9,350	8,950	8,050
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.5 B	NA	NA	2.0 B	NA	NA
Potassium	-	7440-09-7	11,000	10,500	10,400	13,400	12,500	13,200	10,800	8,460
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	13,900	16,400	15,000					
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	3.1 B	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	18 B	NA	NA	63.6	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04D 11/30/2005 (ug/l)	MW-04D 3/1/2006 (ug/l)	MW-04D 5/22/2006 (ug/l)	MW-04D 8/10/2006 (ug/l)	MW-04D 11/30/2006 (ug/l)	MW-04D 2/23/2007 (ug/l)	MW-04D 5/24/2007 (ug/l)	MW-04D 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	24.4 B	31.2 B	69.0 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	19.2	8.1 B	5.1 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	44.8 B	37.1 B	32.9 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	1.1 B	1.2 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	62.7 B	64.6 B	61.1 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.12 U	0.34 U	0.28 U	1.5 B	0.62 B	0.82 B
Calcium	-	7440-70-2	48,100	39,700	30,100	23,400	19,500	18,400	15,900	20,700
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	1.4 B	1.6 B	0.43 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.8 B	1.5 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.7 B	3.7 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.2 B	1.3 U	1.1 U	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	6,630	5,940	4370 B	3150 B	2900 B	2,820 B	2,410 B	3,100 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.79 B	NA
Potassium	-	7440-09-7	7,790	8,440	7,280	5,850	5000 B	5,410	4,650 B	5,280
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.59 B	1.1 B	NA
Sodium	20,000 ST	7440-23-5		20,000	15,900	10,900	8,900	9,160	7,970	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	4.9 B	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	62.0	38.5	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04D 11/13/2007 (ug/l)	MW-04D 02/1108 (ug/l)	MW-04D 5/15/2008 (ug/l)	MW-04D 8/4/2008 (ug/l)	MW-04D 11/3/2008 (ug/l)	MW-04D 2/23/2009 (ug/l)	MW-04D 8/12/2009 (ug/l)	MW-04D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	12.5 U	35.6 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.6 B	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	12.9	NA	12.5	3.1 B
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	21.6 B	NA	44.9 B	23.6 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	40.6 BN	NA	28.1 B	39.1 B
Cadmium	5 ST	7440-43-9	0.32 U	0.58 B	0.27 U	0.47 B	0.35 U	0.48 B	0.26 U	0.34 U
Calcium	-	7440-70-2	16,600	15,700	12,700	9,450	9,600	12,500	18,400	10,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.57 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.51 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88U	NA	1.6 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.6 B	NA	0.62 U	3.6 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3 U	4.0	1.3 U	13.2	1.8 U
Magnesium	35,000 GV	7439-95-4	2,570 B	2,350 B	1,950 B	1,490 B	1,460 B	1,850 B	2,380 B	1,490 B
Manganese	300 ST	7439-96-5	251							253
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	4,360 J	3,830 B	3,720 B	3,800 B	3870 B	3,720 B	4,680 B	3650 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	7,480	9,590	9,100	7,280	7,150	7,130	10,800	5,900
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	6.2 B	NA	11.2 B	24.5
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04D 5/26/2011 (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)	MW-04D (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	27.0 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	25.7 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	12,900							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	0.89 B							
Cobalt	-	7440-48-4	0.62 B							
Copper	200 ST	7440-50-8	1.6 B							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	1,870 B							
Manganese	300 ST	7439-96-5	81							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	8.5 B							
Potassium	-	7440-09-7	4520 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	9,120							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.56 U							
Zinc	2,000 ST	7440-66-6	51.2							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04I 10/29/1997 (ug/l)	MW-04I 12/6/2000 (ug/l)	MW-04I 2/1/2001 (ug/l)	MW-04I 8/23/2002 (ug/l)	MW-04I 11/22/2002 (ug/l)	MW-04I 3/6/2003 (ug/l)	MW-04I 6/3/2003 (ug/l)	MW-04I 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	365	19.9 B	18.7	NA	13.9 B	NA	NA	17.7 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA		NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	10.1	14.6	17.1	NA	11.5	NA	NA	17.5
Barium	1,000 ST	7440-39-3	128	175 B	107	NA	135 B	NA	NA	124 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.14	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	300	285	NA	231	NA	NA	211
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.25 B	0.50 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	53,200	92,000	62,200	41,700	85,700	85,500	101,000	90,100
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.3 U	3.5 U	0.6 U	NA	1 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	2.5	1.7 B	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	5.2	1.5 U	1.5 U	NA	2.8 B	NA	NA	2.2 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	3.7	1.9 B	1.9	0.8 U	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35,000 GV	7439-95-4	9,580	15,700	9,960	5,690	10,700	11,100	12,800	10,400
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	3.9	1.9 U	1.4 U	NA	3.5 B	NA	NA	5.0 B
Potassium	-	7440-09-7	69,400	21,700	19,400	10,100	14,800	15,400	18,900	13,600
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	3.9 B	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.5 U	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5				13,400				
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	4.4	0.7 U	1.7 U	NA	1.8 B	NA	NA	2.0 B
Zinc	2,000 ST	7440-66-6	96.1	6.8 B	3.6 U	NA	19.3 B	NA	NA	7.1 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04I 11/12/2003 (ug/l)	MW-04I 3/1/2004 (ug/l)	MW-04I 5/24/2004 (ug/l)	MW-04I 8/23/2004 (ug/l)	MW-04I 11/9/2004 (ug/l)	MW-04I 3/1/2005 (ug/l)	MW-04I 5/27/2005 (ug/l)	MW-04I 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	50.8 B	NA	NA	73.0 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	17.4	NA	NA	19.4	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	100 B	NA	NA	189 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.10 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	177 B	NA	NA	291	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	1.4 B	0.30 U	1.0 B	2.1 B	1.2 B	0.65 U
Calcium	-	7440-70-2	91,200	99,100	78,500	87,100	86,700	87,700	78,000	68,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	1.6 U	0.7 U	2.0 B	1.1 U	1.1 U	1.2 U	3.2
Magnesium	35,000 GV	7439-95-4	10,500	10,600	8,680	9,570	10,600	12,800	11,600	9,230
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.8 B	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	16,000	14,000	11,700	14,500	16,500	26,000	20,200	14,400
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	26.2 B	NA	NA	46.3	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04I 11/30/2005 (ug/l)	MW-04I 3/1/2006 (ug/l)	MW-04I 5/22/2006 (ug/l)	MW-04I 8/10/2006 (ug/l)	MW-04I 11/30/2006 (ug/l)	MW-04I 2/23/2007 (ug/l)	MW-04I 5/24/2007 (ug/l)	MW-04I 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	16.8 B	18.9 B	63.8 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.7 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	14.4	7.5 B	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	47.7 B	30.3 B	33.1 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.58 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	94.3 B	80.9 B	89.6 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.12 U	0.34 U	0.28 U	0.28 U	0.20 B	0.16 U
Calcium	-	7440-70-2	59,700	53,300	41,200	52,600	34,500	28,700	31,600	76,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	1.2 B	0.74 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.8 B	7.1 B	U*	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.0 B	1.3 U	1.1 U	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	7,470	7,060	5,140	5,890	3,630 B	3,020	3,240 B	9,030
Manganese	300 ST	7439-96-5							296	
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	13,400	15,400	12,400	11,700	7,770	7,360	7,310	14,600 J
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.48 B	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	19,500	18,200	15,800	18,600	13,400	11,500	13,900	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	45.3	37.0	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04I 11/13/2007 (ug/l)	MW-04I 02/1108 (ug/l)	MW-04I 5/15/2008 (ug/l)	MW-04I 8/5/2008 (ug/l)	MW-04I 11/3/2008 (ug/l)	MW-04I 2/23/2009 (ug/l)	MW-04I 8/12/2009 (ug/l)	MW-04I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	12.5	24.6 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	11.8	NA	12.5	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	33.6 B	NA	103 B	35.9 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	81.8 BN	NA	125	94.3 B
Cadmium	5 ST	7440-43-9	0.32 U	0.58 B	0.27 U	0.27 U	0.35 U	0.35 U	0.40 B	0.34 U
Calcium	-	7440-70-2	36,400	42,300	24,600	32,600	28,100	33,300	61,000	30,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.45 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.44 U
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.80 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.3B	NA	0.62 U	3.1 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	10.7	2.0 B
Magnesium	35,000 GV	7439-95-4	3,800 B	4,560	2,700 B	3,760 B	3,060 B	3,520 B	6,110	3,250 B
Manganese	300 ST	7439-96-5	75.1							
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	7,640 J	7,430	5,510	7,140	6600	8,460	9,960	8,490
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	14,600		14,400	19,600	17,500			
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	6.1 B	NA	15.2 B	16.0 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04I 5/26/2011 (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)	MW-04I (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	11.4							
Barium	1,000 ST	7440-39-3	24.3 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	113							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	16,200							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.8 B							
Cobalt	-	7440-48-4	.55 B							
Copper	200 ST	7440-50-8	1.6 B							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	5.1							
Magnesium	35,000 GV	7439-95-4	2,040 B							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	4510 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	19,600							
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2	1.0 B							
Zinc	2,000 ST	7440-66-6	17.6 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04S 10/29/1997 (ug/l)	MW-04S 12/6/2000 (ug/l)	MW-04S 2/1/2001 (ug/l)	MW-04S 8/23/2002 (ug/l)	MW-04S 11/22/2002 (ug/l)	MW-04S 3/6/2003 (ug/l)	MW-04S 6/3/2003 (ug/l)	MW-04S 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	574	28.8 B	32.4	NA	102 B	NA	NA	27.2 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	11.4	3.7 B	7.8	NA	4.5 U	NA	NA	8.1 B
Barium	1,000 ST	7440-39-3	441	278	285	NA	316	NA	NA	240
Beryllium	3 GV	7440-41-7	0.2	0.12 B	0.18	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	263	296	NA	320	NA	NA	273
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	152,000	99,400	109,000	115,000	123,000	139,000	138,000	109,000
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	1.6	3.5 U	0.6 U	NA	0.92 B	NA	NA	1.0 B
Cobalt	-	7440-48-4	2.1	0.9 U	1.7 U	NA	1 U	NA	NA	2.8 B
Copper	200 ST	7440-50-8	2.5	1.5 U	2.2	NA	6.7 B	NA	NA	2.7 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.0 U	1.4 U	2.8	2.8 B	1.4 U	1.5 U	1.6 B	0.80 U
Magnesium	35,000 GV	7439-95-4	22,600	14,400	15,300	14,000	13,700	16,300	16,100	11,900
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	4.3 B	NA	NA	4.7 B
Potassium	-	7440-09-7	30,800	19,800	21,800	17,900	17,500	20,300	21,800	14,300
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.3 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	3.2	1.1 B	1.7 U	NA	2.6 B	NA	NA	2.1 B
Zinc	2,000 ST	7440-66-6	32.3	2.2 U	3.6 U	NA	10 B	NA	NA	14.9 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04S 11/12/2003 (ug/l)	MW-04S 3/2/2004 (ug/l)	MW-04S 5/24/2004 (ug/l)	MW-04S 8/23/2004 (ug/l)	MW-04S 11/9/2004 (ug/l)	MW-04S 3/1/2005 (ug/l)	MW-04S 5/27/2005 (ug/l)	MW-04S 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	43.2 B	NA	NA	93.8 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	11.4	NA	NA	15.8	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	191 B	NA	NA	248	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	261 B	NA	NA	310	NA	NA
Cadmium	5 ST	7440-43-9	0.30 U	0.20 U	2.2 B	0.30 U	1.3 B	2.7 B	0.94 B	0.65 U
Calcium	-	7440-70-2	139,000	122,000	124,000	118,000	122,000	132,000	119,000	106,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	5 B	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	0.70 U	0.7 U	3.0 B	1.1 U	1.1 U	1.2 U	2.9 B
Magnesium	35,000 GV	7439-95-4	18,100	13,600	14,600	13,200	13,500	15,200	13,800	12,000
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	4.4 B	NA	NA	3.8 B	NA	NA
Potassium	-	7440-09-7	20,000	17,200	16,700	19,000	18,200	21,900	20,800	14,900
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	2.1 B	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	14.7 B	NA	NA	53.3	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04S 11/29/2005 (ug/l)	MW-04S 2/28/2006 (ug/l)	MW-04S 5/22/2006 (ug/l)	MW-04S 8/10/2006 (ug/l)	MW-04S 11/30/2006 (ug/l)	MW-04S 3/2/2007 (ug/l)	MW-04S 5/24/2007 (ug/l)	MW-04S 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	29.6 B	418	363	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	2.9 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	11.9	10.9	8.9 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	298	293	327	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.58 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	242 B	233 B	242	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.49 B	0.12 U	0.34 U	0.28 U	0.31 B	0.16 U	0.16 U
Calcium	-	7440-70-2	114,000	119,000	116,000	108,000	100,000	100,000	102,000	98,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.0 B	2.0 B	1.6 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	1.0 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.8 B	2.7 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	4.1	1.3 U	1.1 U	2.4 B	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	12,100	14,100	13,700	12,100	12,800	12,900	13,400	12,300
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 B	1.8 U	2.6 B	NA
Potassium	-	7440-09-7	16,900	20,100	21,800	20,500	21,300	23,000	22,100	20,600 J
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	3.0 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5								U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	4.9 B	2.6 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	3.0 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	50.8	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04S 11/13/2007 (ug/l)	MW-04S 2/11/2008 (ug/l)	MW-04S 2/11/2008 (ug/l)	MW-04S 8/4/2008 (ug/l)	MW-04S 11/3/2008 (ug/l)	MW-04S 2/23/2009 (ug/l)	MW-04S 8/12/2009 (ug/l)	MW-04S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	2630	NA	42.3 B	1540
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.6 B	NA	2.5 U	2.4 B
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	11.0	NA	6.5 B	7.5 B
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	306	NA	284	304
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.21 B	NA	0.13 U	0.32 B
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	195 BN	NA	154	179
Cadmium	5 ST	7440-43-9	0.32 U	1.0 B	0.27 U	0.73 B	0.63 B	0.35 U	0.50 B	0.34 U
Calcium	-	7440-70-2	98,000	93,300	91,900	94,900	95,400	96,400	93,800	92,200
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	5.1 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	2.3 B	3.7 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.4 B	NA	0.90 B	1.4 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	15.0 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	3.0 B	3.1	1.3 U	17.7	5.0
Magnesium	35,000 GV	7439-95-4	12,800	11,100	11,100	11,700	11,400	11,000	9,290	10,700
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	4.9 B	NA	0.82 U	3.7 B
Potassium	-	7440-09-7	1,880 J	16,300	17,600	18,600	18,200	16,600	15,500	16,200
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	2.7 BN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	3.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	10.5 B	NA	0.77 U	8.3 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	15.7 B	NA	13.5 B	17.6 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-04S 5/31/2011 (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)	MW-04S (ug/l)
Aluminum	-	7429-90-5	28.0 B							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	2.7 B							
Barium	1,000 ST	7440-39-3	298							
Beryllium	3 GV	7440-41-7	0.19 B							
Boron	1,000 ST	7440-42-8	181							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	90,100							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.7 B							
Cobalt	-	7440-48-4	1.1 B							
Copper	200 ST	7440-50-8	0.55 U							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	11.3							
Magnesium	35,000 GV	7439-95-4	10,700							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.19 BNU*							
Nickel	100 ST	7440-02-0	2.2 B							
Potassium	-	7440-09-7	18,400							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.75 BN							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	2.9 B							
Zinc	2,000 ST	7440-66-6	13.5							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05D 10/29/1997 (ug/l)	MW-05D 12/8/2000 (ug/l)	MW-05D 2/2/2001 (ug/l)	MW-05D 8/23/2002 (ug/l)	MW-05D 11/22/2002 (ug/l)	MW-05D 3/7/2003 (ug/l)	MW-05D 6/3/2003 (ug/l)	MW-05D 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	241	12.2 U	11.8 U	NA	365	NA	NA	20.8 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	117	206	190	NA	53.9 B	NA	NA	28.3 B
Beryllium	3 GV	7440-41-7	0.17	0.1 U	0.17	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	324	292	NA	83.1 B	NA	NA	57.8 B
Cadmium	5 ST	7440-43-9	0.3	0.77	0.69	0.30 B	0.5 U	0.10 U	0.25 B	0.30 U
Calcium	-	7440-70-2	47,300	107,000	99,900	39,500	36,900	33,700	27,800	21,600
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	2.9	3.5 U	0.85	NA	2.3 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	4.6	5.3	4.6	NA	1.6 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	4.8	6.3	4.6	NA	4.9 B	NA	NA	1.2 B
Iron	300 ST	7439-89-6		101	23.2			122	60.6 B	53.8 B
Lead	25 ST	7439-92-1	1.2	2.1	1.1 U	0.80 U	8.1	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	12,400	26,200	23,300	7,740	7,250	8,000	6,820	4800 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	5.1	7.7	6.7	NA	3.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	20,200	33,100	33,000	13,500	11,100	9,080	8,860	5,700
Selenium	10 ST	7782-49-2	2.8 U	9.3	7.4	NA	3.6 B	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	5.5	2.9	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5							19,400	13,700
Thallium	0.5 GV	7440-28-0	2.6 U	4.6 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	1.1 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	283	18.7	6	NA	193	NA	NA	12 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05D 11/12/2003 (ug/l)	MW-05D 3/2/2004 (ug/l)	MW-05D 5/25/2004 (ug/l)	MW-05D 8/23/2004 (ug/l)	MW-05D 11/10/2004 (ug/l)	MW-05D 3/2/2005 (ug/l)	MW-05D 5/31/2005 (ug/l)	MW-05D 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	32 B	NA	NA	80.8 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	2.1 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	24.3 B	NA	NA	28.7 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.14 B	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	38 B	NA	NA	49.8 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.25 B	0.5 B	0.30 B	0.23 B	0.32 B	0.37 U	0.65 U
Calcium	-	7440-70-2	20,400	26,000	17,600	19,900	20,800	21,800	19,400	20,100
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.9 B	NA	NA	1.4 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 B	NA	NA	1.8 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	1.3 B	NA	NA	1.9 B	NA	NA
Iron	300 ST	7439-89-6	257		99.9 B	35.6 B	32.8 B	43.6 B	6.7 B	61.2 B
Lead	25 ST	7439-92-1	2.5 B	1.5 B	1.1 B	1.2 U	1.4 B	1.1 U	1.2 U	1.7 U
Magnesium	35,000 GV	7439-95-4	4,110 B	5,030	3,630 B	3,700 B	4,040 B	4,190 B	3,730 B	3,610 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	2.1 B	NA	NA	1.7 B	NA	NA
Potassium	-	7440-09-7	6,410	8,980	5,710	6,430	6,870	6,490	5,640	4,490 B
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.88 B	NA	NA
Sodium	20,000 ST	7440-23-5	12,500		12,800	14,200	14,100	14,800	13,500	13,300
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	14.7 B	NA	NA	45.3	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05D 11/30/2005 (ug/l)	MW-05D 3/1/2006 (ug/l)	MW-05D 5/18/2006 (ug/l)	MW-05D 8/9/2006 (ug/l)	MW-05D 11/30/2006 (ug/l)	MW-05D 2/21/2007 (ug/l)	MW-05D 5/25/2007 (ug/l)	MW-05D 8/14/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	56.6 B	50.9 B	110 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.5 B	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	3.4 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	79.6 B	10.3 B	74.6 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.55 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	61.3 B	67.2 B	69.9 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.31 B	0.35 B	1.1 B	1.1 B	0.45 B	1.0 B	0.91 B
Calcium	-	7440-70-2	19,700	21,600	22,000	52,000	45,700	42,100	41,900	36,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.0 B	1.1 B	0.94 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	3.4 B	1.3 U	3.2 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.8 B	3.2 B	0.44 U	NA
Iron	300 ST	7439-89-6	10 U	34.9 B	24.0 B	56.4 B	122	150	32.4 B	21.7 B
Lead	25 ST	7439-92-1	1.6 U	1.3 U	1.9 U	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	3,560 B	4,200 B	4,020 B	9,300	10,100	10,100	10,500	9,410
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	7.7 B	1.9 B	9.9 B	NA
Potassium	-	7440-09-7	4660 B	6,370	5,510	9,040	9,330	9,790	7,600	6,880
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	2.9 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	12,900	13,900	15,300					U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	4.0 B	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	71.2	30.6	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05D 8/14/2007 (ug/l)	MW-05D 2/11/2008 (ug/l)	MW-05D 5/15/2008 (ug/l)	MW-05D 8/5/2008 (ug/l)	MW-05D 11/5/2008 (ug/l)	MW-05D 2/26/2009 (ug/l)	MW-05D 8/17/2009 (ug/l)	MW-05D 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	43.2 B	NA	108 B	1700
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	48.4 B	NA	42.9 B	25.4 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	46.1 B	NA	36.6 B	42.0 B
Cadmium	5 ST	7440-43-9	0.99 B	0.88 B	0.52 B	0.62 B	0.43 B	0.72 B	0.70 B	4.8 B
Calcium	-	7440-70-2	24,700	41,500	32,000	32,500	28,600	28,200	27,500	17,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.96 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.90 B	4.3 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	2.2 B	NA	2.1 B	1.4 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.7 B	NA	1.4 B	7.4 B
Iron	300 ST	7439-89-6	315	85.0 B		12.5 B	48.6 B	10.2 B	21.2 B	
Lead	25 ST	7439-92-1	1.4 UJ	2.2 B	8.0	2.3 U	1.3 U	1.5 B	20.6	21.1
Magnesium	35,000 GV	7439-95-4	6,890	12,800	10,500	10,500	8,930	7,600	7,760	7,960
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	6.5 B	NA	7.9 B	6.1 B
Potassium	-	7440-09-7	5,710 J	5,920	5,840	6,170	5,100	4,600 B	3,940 B	3,050 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	1.3 B	NA	0.81 B	0.83 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	4.2 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	4.3 B	NA	8.0 B	206
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05D 6/1/2011 (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)	MW-05D (ug/l)
Aluminum	-	7429-90-5	196 B							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	27.0 B							
Beryllium	3 GV	7440-41-7	0.17 B							
Boron	1,000 ST	7440-42-8	31.4 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	14,900							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.2 B							
Cobalt	-	7440-48-4	1..2 B							
Copper	200 ST	7440-50-8	1.8 B							
Iron	300 ST	7439-89-6	295							
Lead	25 ST	7439-92-1	5.6							
Magnesium	35,000 GV	7439-95-4	7,380							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UNU*J*							
Nickel	100 ST	7440-02-0	19.0 B							
Potassium	-	7440-09-7	2850 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UN							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.68 B							
Zinc	2,000 ST	7440-66-6	40.6							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05I 10/29/1997 (ug/l)	MW-05I 12/8/2000 (ug/l)	MW-05I 2/2/2001 (ug/l)	MW-05I 8/23/2002 (ug/l)	MW-05I 11/22/2002 (ug/l)	MW-05I 3/7/2003 (ug/l)	MW-05I 6/3/2003 (ug/l)	MW-05I 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	330	12.2 U	15.8	NA	287	NA	NA	143 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	4.3	3.5	5.5	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	17.8	50.4	57.7	NA	43.2 B	NA	NA	50.5 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	176	138	NA	86 B	NA	NA	99.8 B
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.36	0.1 U	0.5 U	0.1 U	0.10 U	0.30 U
Calcium	-	7440-70-2	8,280	39,200	45,300	28,100	34,500	36,700	36,000	34,500
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	3.3	3.5 U	0.6 U	NA	2.1 B	NA	NA	1.4 B
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	2.5	1.5 U	1.5 U	NA	2.3 B	NA	NA	3.8 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	3	1.4 U	1.1 U	3.5	2.9 B	1.5 U	1.5 U	1.6 B
Magnesium	35,000 GV	7439-95-4	1,260	6,780	8,460	5000 B	5,940	6,570	6,110	5,460
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	3.6	1.9 U	1.4 U	NA	1.8 B	NA	NA	1.6 B
Potassium	-	7440-09-7	4,820	14,900	15,300	9,360	8,270	14,400	15,400	12,900
Selenium	10 ST	7782-49-2	2.8 U	2.1	1.6	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.1	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	12,500			17,500				
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.67 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	95.3	4.6	3.6 U	NA	57.4	NA	NA	149
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05I 11/12/2003 (ug/l)	MW-05I 3/2/2004 (ug/l)	MW-05I 5/25/2004 (ug/l)	MW-05I 8/23/2004 (ug/l)	MW-05I 11/10/2004 (ug/l)	MW-05I 3/2/2005 (ug/l)	MW-05I 5/31/2005 (ug/l)	MW-05I 8/29/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	49 B	NA	NA	98.6 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.3 B	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	7 B	NA	NA	5.6 B	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	83.3 B	NA	NA	85.6 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	139 B	NA	NA	132	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.56 B	0.30 U	0.23 U	0.46 B	0.37 U	0.65 U
Calcium	-	7440-70-2	43,700	48,100	49,000	40,200	55,000	53,400	51,600	59,200
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	0.9 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	0.70 U	0.7 U	1.2 U	1.1 U	1.1 U	1.2 U	2.7 B
Magnesium	35,000 GV	7439-95-4	7,340	8,540	9,360	6,720	9,750	9,810	9,170	8,740
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.1 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	22,300	25,500	21,500	20,300	23,900	22,300	19,600	16,300
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	24.9 B	NA	NA	52.8	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05I 11/30/2005 (ug/l)	MW-05I 3/1/2006 (ug/l)	MW-05I 5/18/2006 (ug/l)	MW-05I 8/9/2006 (ug/l)	MW-05I 11/30/2006 (ug/l)	MW-05I 2/21/2007 (ug/l)	MW-05I 5/25/2007 (ug/l)	MW-05I 8/14/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	51.9 B	27.5 B	230	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	2.4 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	7.0 B	4.6 B	8.4 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	44.5 B	41.2 B	52.2 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.52 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	85.2 B	95.3 B	94.9 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.32 B	0.16 U	0.16 U
Calcium	-	7440-70-2	73,800	49,200	61,700	66,600	41,200	44,000	41,600	39,100
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.87 B	1.3 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.70 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.0 B	20.2	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.6 U	1.3 U	1.9 U	1.9 U	1.5 U	2.4 B	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	9,560	7,510	7,360	8,960	5,770	6,620	6,280	5,700
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	17,500	18,300	19,500	20,900	12,700	14,500	14,600	13,200
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	2.3 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5								U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	4.5 B	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	61.2	35.4	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05I 11/13/2007 (ug/l)	MW-05I 2/11/2008 (ug/l)	MW-05I 5/15/2008 (ug/l)	MW-05I 8/5/2008 (ug/l)	MW-05I 11/5/2008 (ug/l)	MW-05I 2/26/2009 (ug/l)	MW-05I 8/17/2009 (ug/l)	MW-05I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	105 B	2680
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	4.3 B	NA	3.2 B	3.5 B
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	20.4 B	NA	21.9 B	46.8 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	84.5 B	NA	52.7 B	69.6 B
Cadmium	5 ST	7440-43-9	0.38 B	0.35 B	0.27 U	0.27 U	0.35 U	0.35 U	0.50 B	3.0 B
Calcium	-	7440-70-2	41,100	30,000	34,300	28,600	16,300	22,300	22,800	19,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.57 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.60 B	5.0 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.3 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.2 B	NA	0.80 B	7.7 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	6.9	14.8
Magnesium	35,000 GV	7439-95-4	6,340	4,350 B	5,350	4,580 B	2,480 B	3,360 B	3,660	3450 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.28	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	3.1 B
Potassium	-	7440-09-7	12,400 J	13,300	12,100	13,800	9250	7,510	7,650	9,130 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.44 B	0.83 U
Sodium	20,000 ST	7440-23-5							17,000	16,700
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	5.7 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	5.0 B	NA	9.5 B	386
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05I 5/31/2011 (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)	MW-05I (ug/l)
Aluminum	-	7429-90-5	36.4 B							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	34.1 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	54.4 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	20,500							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.5 B							
Cobalt	-	7440-48-4	.49 U							
Copper	200 ST	7440-50-8	0.55 U							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	4.9							
Magnesium	35,000 GV	7439-95-4	3,830 B							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.16 BNU*							
Nickel	100 ST	7440-02-0	1.7 B							
Potassium	-	7440-09-7	10,600							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UN							
Sodium	20,000 ST	7440-23-5	19,300							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.98 B							
Zinc	2,000 ST	7440-66-6	7.1 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05S 10/29/1997 (ug/l)	MW-05S 12/8/2000 (ug/l)	MW-05S 2/2/2001 (ug/l)	MW-05S 8/23/2002 (ug/l)	MW-05S 11/22/2002 (ug/l)	MW-05S 3/7/2003 (ug/l)	MW-05S 6/5/2003 (ug/l)	MW-05S 8/25/2003 (ug/l)
Aluminum	-	7429-90-5	121	234	313	NA	540	NA	NA	534
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	[redacted]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	6.0 B
Barium	1,000 ST	7440-39-3	296	214	206	NA	164 B	NA	NA	326
Beryllium	3 GV	7440-41-7	0.13	0.23	0.3	NA	0.4 U	NA	NA	0.59 B
Boron	1,000 ST	7440-42-8	NA	254	226	NA	153	NA	NA	376
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	105,000	93,500	90,500	71,800	74,500	74,600	78,100	102,000
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	6.5	3.5 U	1.7	NA	6 U	NA	NA	1.5 B
Cobalt	-	7440-48-4	1.3	0.9 U	1.7 U	NA	1 U	NA	NA	7.4 B
Copper	200 ST	7440-50-8	0.7 U	1.5 U	1.5 U	NA	5.4 B	NA	NA	2.9 B
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	1.0 U	2.9	2.5	0.80 U	1.7 B	1.5 U	1.6 B	1.1 B
Magnesium	35,000 GV	7439-95-4	17,900	13,300	12,900	8,580	7,910	9,790	10,100	14,700
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	4.6	1.9 U	1.4 U	NA	8.0 B	NA	NA	5.3 B
Potassium	-	7440-09-7	20,600	14,000	14,300	10,600	9,940	11,500	11,900	13,000
Selenium	10 ST	7782-49-2	2.8 U	3.1	2.4	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	2.1	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.8	2.5	2.6	NA	3.6 B	NA	NA	1.9 B
Zinc	2,000 ST	7440-66-6	25	2.2 U	3.6 U	NA	33.9	NA	NA	112
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05S 11/12/2003 (ug/l)	MW-05S 3/2/2004 (ug/l)	MW-05S 5/25/2004 (ug/l)	MW-05S 8/23/2004 (ug/l)	MW-05S 11/10/2004 (ug/l)	MW-05S 3/2/2005 (ug/l)	MW-05S 5/31/2005 (ug/l)	MW-05S 8/29/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	721	NA	NA	214	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	5 B	NA	NA	5.1 B	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	163 B	NA	NA	251	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.68 B	NA	NA	0.41 B	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	122 B	NA	NA	158	NA	NA
Cadmium	5 ST	7440-43-9	0.30 U	0.20 U	1.2 B	0.30 U	0.54 B	1.5 B	1.0 B	0.65 U
Calcium	-	7440-70-2	102,000	69,500	49,800	95,800	86,300	66,900	88,000	110,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	2.5 B	NA	NA	0.91 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	14.7 B	NA	NA	11.3 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.96 B	NA	NA	1.2 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	0.70 U	0.7 U	2.1 B	1.1 U	1.1 U	1.2 U	3.4
Magnesium	35,000 GV	7439-95-4	14,200	9,650	7,280	12,100	10,900	9,740	12,200	14,400
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	7.7 B	NA	NA	7.4 B	NA	NA
Potassium	-	7440-09-7	14,900	12,500	8,370	17,000	14,600	11,900	16,500	14,400
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5		18,600	14,600					
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	2 B	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	25 B	NA	NA	62.9	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

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Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05S 11/30/2005 (ug/l)	MW-05S 3/1/2006 (ug/l)	MW-05S 5/18/2006 (ug/l)	MW-05S 8/9/2006 (ug/l)	MW-05S 11/30/2006 (ug/l)	MW-05S 2/21/2007 (ug/l)	MW-05S 6/1/2007 (ug/l)	MW-05S 8/14/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	55.8 B	554	10.4 U	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	4.0 B	5.4 B	7.7 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	336	347	345	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.33 B	0.087 U	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	268 B	286 B	301 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	2.1 B	1.2 B	0.16 U
Calcium	-	7440-70-2	129,000	141,000	125,000	122,000	112,000	109,000	109,000	11,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.4 B	1.3 B	0.43 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	5.9 B	6.9 B	3.3 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.0 B	4.0 B	2.2 B	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.6 U	1.3 U	3.4	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	16,900	20,300	15,700	14,600	14,000	14,600	14,100	14,900
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	4.5 B	4.2 B	4.8 B	NA
Potassium	-	7440-09-7	17,700	23,700	18,600	17,800	18,200	20,900	17,800	18,400
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.71 B	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5								U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	5.3 B	6.6 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.7 B	2.7 B	2.4 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	17.3 B	20.7	9.6 B	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05S 11/13/2007 (ug/l)	MW-05S 2/11/2008 (ug/l)	MW-05S 5/15/2008 (ug/l)	MW-05S 8/5/2008 (ug/l)	MW-05S 11/5/2008 (ug/l)	MW-05S 2/26/2009 (ug/l)	MW-05S 8/17/2009 (ug/l)	MW-05S 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	85.0 B	NA	214	541
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	3.4 B	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	300	NA	322	199 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.55 B
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	223 B	NA	279	146
Cadmium	5 ST	7440-43-9	0.32 U	1.2 B	0.27 U	0.78 B	0.35 U	0.35 U	0.90 B	0.34 U
Calcium	-	7440-70-2	96,400	97,500	83,500	97,300	91500	89,400	103,000	62,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	1.8 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.3 B	2.6 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	3.4 B	NA	1.4 B	5.5 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	4.5 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3 B	1.3 U	1.3 U	18.5	4.5
Magnesium	35,000 GV	7439-95-4	12,500	12,300	10,900	12,800	11,700	11,400	13,000	8,300
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	5.9 B	NA	0.82 U	4.4 B
Potassium	-	7440-09-7	15,300 J	14,300	13,400	15,400	14900	12,900	13,800	10,800 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.65 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5								2,400
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	4.4 B	NA	3,9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	3.4 B	NA	0.77 U	3.8 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	1.5 U	NA	14.3 B	22.7
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

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U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-05S 5/31/2011 (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)	MW-05S (ug/l)
Aluminum	-	7429-90-5	39.8 B							
Antimony	3 GV	7440-36-0	2.1 B							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	283							
Beryllium	3 GV	7440-41-7	0.26 B							
Boron	1,000 ST	7440-42-8	197							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	79,500							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.1 B							
Cobalt	-	7440-48-4	1.0 B							
Copper	200 ST	7440-50-8	0.55 U							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	9.5							
Magnesium	35,000 GV	7439-95-4	10,600							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UN							
Nickel	100 ST	7440-02-0	4.6 B							
Potassium	-	7440-09-7	15,400							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UN							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	2.7 B							
Zinc	2,000 ST	7440-66-6	13..9 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06D 10/28/1997 (ug/l)	MW-06D 12/5/2000 (ug/l)	MW-06D 1/31/2001 (ug/l)	MW-06D 8/22/2002 (ug/l)	MW-06D 11/20/2002 (ug/l)	MW-06D 3/5/2003 (ug/l)	MW-06D 6/5/2003 (ug/l)	MW-06D 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	320	12.2 U	14.9	NA	19.3 B	NA	NA	17.2 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA		NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	3.2	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	15.1	23.8 B	20.1	NA	19 B	NA	NA	20.4 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	44.7 B	63.6	NA	63.2 B	NA	NA	54.9 B
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.16 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	5,070	4,640 B	4,290	7,740	6,460	7,600	6,200	5,050
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	1.3	3.5 U	0.6 U	NA	1.5 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	6.6	5.7 B	5.3	NA	6.2 B	NA	NA	5.3 B
Copper	200 ST	7440-50-8	2.5	2.1 B	1.5 U	NA	6.6 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.0 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	2.6 B	0.80 U
Magnesium	35,000 GV	7439-95-4	2,040	1,930 B	1,800	4,020 B	3,300 B	3,580 B	2,740 B	2,080 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	3.3	2.3 B	2	NA	5.2 B	NA	NA	2.8 B
Potassium	-	7440-09-7	1,140	1,220 B	1,260	1,560 B	1,180 B	1,540 B	1,680 B	1,140 B
Selenium	10 ST	7782-49-2	2.8 U	4.3 B	2.9	NA	5.2	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	2.4 B	1.8	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	11,600		17,700	11,800	11,000	11,400	10,900	8,960
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.63 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	75.1	3.8 B	3.6 U	NA	31.8	NA	NA	8.8 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

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U*: Result qualified as non-detect based on validation criteria

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ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06D 11/11/2003 (ug/l)	MW-06D 2/27/2004 (ug/l)	MW-06D 5/24/2004 (ug/l)	MW-06D 8/20/2004 (ug/l)	MW-06D 11/9/2004 (ug/l)	MW-06D 3/1/2005 (ug/l)	MW-06D 5/27/2005 (ug/l)	MW-06D 8/26/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	87.6 B	NA	NA	105 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.4 B	NA	NA	3.0 B	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	4 B	NA	NA	23.6 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.34 B	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	55.8 B	NA	NA	57.8 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.23 B	0.30 U	0.23 U	0.56 B	0.37 U	0.65 U
Calcium	-	7440-70-2	5,600	5,820	6,590	5,290	5,950	5,600	5,050	4,940 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.96 B	NA	NA	2.2 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	0.9 B	NA	NA	5.9 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	5.8 B	NA	NA	1.3 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.4 B	1.6 U	1.8 B	1.2 U	2.2 B	1.1 U	1.2 U	1.7 U
Magnesium	35,000 GV	7439-95-4	2,390 B	2,470 B	2,530 B	2,380 B	2,490 B	2,520 B	2,440 B	2,110 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	5.7 B	NA	NA	4.2 B	NA	NA
Potassium	-	7440-09-7	1930 B	1340 B	1570 B	1440 B	1660 B	1590 B	1610 B	1180 B
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 B	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	1.2 B	NA	NA
Sodium	20,000 ST	7440-23-5	8,940	9,980	7,930	10,100	9,390	10,100	10,100	10,200
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	45.8	NA	NA	69.2	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06D 11/29/2005 (ug/l)	MW-06D 2/28/2006 (ug/l)	MW-06D 5/18/2006 (ug/l)	MW-06D 8/9/2006 (ug/l)	MW-06D 12/1/2006 (ug/l)	MW-06D 2/22/2007 (ug/l)	MW-06D 5/24/2007 (ug/l)	MW-06D 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	17.5 B	22.0 B	82.3 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	2.7 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	25.9 B	6.4 U	2.2 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.52 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	146 B	150 B	147	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.28 U	0.16 U	0.25 B
Calcium	-	7440-70-2	4,360 B	4,920 B	4,870 B	4,870 B	5,120	5,260	5,150	4,700 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.92 B	0.50 U	0.53 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	5.8 B	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.3 B	2.8 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.1 B	1.3 U	2.4 B	1.9 U	1.5 U	2.0 B	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	1870 B	2340 B	2110 B	2060 B	2420 B	2,490 B	2,410 B	2,210 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	4.6 B	2.8 B	0.78 U	NA
Potassium	-	7440-09-7	2,050 B	1,580 B	1,200 B	1,820 B	1,440 B	1,600 B	1,400 B	1,280 JB
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.99 B	NA
Sodium	20,000 ST	7440-23-5	9,940	11,300	10,600	8,750	10,300	10,400	10,400	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	44.0	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06D 11/9/2007 (ug/l)	MW-06D 2/11/2008 (ug/l)	MW-06D 5/15/2008 (ug/l)	MW-06D 8/4/2008 (ug/l)	MW-06D 11/3/2008 (ug/l)	MW-06D 2/23/2009 (ug/l)	MW-06D 8/11/2009 (ug/l)	MW-06D 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	38.6 B	26.4 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	40.5 B	NA	49.5	3.5 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	151 BN	NA	186	157
Cadmium	5 ST	7440-43-9	0.32 U	0.33 B	0.27 U	0.39 B	0.35U	0.35 U	0.30 B	0.34 U
Calcium	-	7440-70-2	5,670	7,010	6,330	8,040	7920	8,540	8,130	7,860
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	2.3B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.60 B	0.72 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	9.5 B	NA	11.1 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.7 B	NA	0.62 U	2.2 B
Iron	300 ST	7439-89-6								232 J*
Lead	25 ST	7439-92-1	6.5 J	1.4 U	2.7 B	2.3 U	1.3 U	1.3 U	14.9	1.8 U
Magnesium	35,000 GV	7439-95-4	2,340 B	3,410 B	3,070 B	4,540 B	4,270 B	4,580 B	4,250 B	4,430 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	6.8 B	NA	7.2 B	1.4 U
Potassium	-	7440-09-7	1,580 J	1,290 B	1,400 B	1,910 B	1,780 B	1,800 B	2,030 B	1,910 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.5	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	1.7 B	NA	0.34 B	0.83 U
Sodium	20,000 ST	7440-23-5	9,930	10,500	11,300	15,200	17,300	16,100	18,100	15,600
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.4 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	1.5 U	NA	10.8 B	9.6 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)	MW-06D (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	31.6 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	105							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	5,960							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.8 B							
Cobalt	-	7440-48-4	10.7 B							
Copper	200 ST	7440-50-8	1.6 B							
Iron	300 ST	7439-89-6	159							
Lead	25 ST	7439-92-1	1.6 B							
Magnesium	35,000 GV	7439-95-4	3,580 B							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	4.8 B							
Potassium	-	7440-09-7	2,000 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	18,500							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.56 U							
Zinc	2,000 ST	7440-66-6	7.4 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06I 10/28/1997 (ug/l)	MW-06I 12/5/2000 (ug/l)	MW-06I 2/1/2001 (ug/l)	MW-06I 8/21/2002 (ug/l)	MW-06I 11/21/2002 (ug/l)	MW-06I 3/5/2003 (ug/l)	MW-06I 6/5/2003 (ug/l)	MW-06I 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	140	17.6 B	16.4	NA	38.8 B	NA	NA	14.2 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	4.3	2.5 U	2.6	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	107	88.4 B	91.4	NA	39.9 B	NA	NA	51.5 B
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.14	NA	0.4 U	NA	NA	0.2 U
Boron	1,000 ST	7440-42-8	NA	149	186	NA	209	NA	NA	357
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.29 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	33,300	36,900	36,000	19,700	19,100	20,500	20,300	22,400
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.73	3.5 U	0.6 U	NA	1.5 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	6.4	3 B	2.3	NA	1.1 B	NA	NA	2.5 B
Copper	200 ST	7440-50-8	3.9	2.6 B	1.5 U	NA	9.6 B	NA	NA	2.2 B
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1	1.4 U	1.1 U	1.9 B	1.4 U	1.5 U	1.9 B	0.80 U
Magnesium	35,000 GV	7439-95-4	3,810	4,020 B	3,680	1,890 B	1,980 B	1,790 B	1,970 B	2,000 B
Manganese	300 ST	7439-96-5					277		278	
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	2	1.9 U	1.4 U	NA	2.7 B	NA	NA	1.5 B
Potassium	-	7440-09-7	7,680	8,540	9,670	5,500	4,310 B	5,080	5,200	5,290
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.75 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	14,000	19,600	17,400	10,700	9,230	9,870	10,000	11,400
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.62 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	61.4	5 B	3.6 U	NA	36.6	NA	NA	9.3 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06I 11/11/2003 (ug/l)	MW-06I 2/27/2004 (ug/l)	MW-06I 5/24/2004 (ug/l)	MW-06I 8/20/2004 (ug/l)	MW-06I 11/9/2004 (ug/l)	MW-06I 3/1/2005 (ug/l)	MW-06I 5/27/2005 (ug/l)	MW-06I 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	59 B	NA	NA	88.6 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.7 B	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	32.7 B	NA	NA	65.7 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	398 B	NA	NA	223	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.2 U	0.30 U	0.23 U	0.23 U	0.37 U	0.65 U
Calcium	-	7440-70-2	21,600	19,700	18,700	19,600	29,600	28,600	24,400	20,100
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.69 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.2 B	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	9.3 B	NA	NA	7.2 B	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	1.6 U	0.7 U	1.2 U	1.7 B	1.1 U	1.2 U	1.7 U
Magnesium	35,000 GV	7439-95-4	2,100 B	1,930 B	2,200 B	2,020 B	3,370 B	3,770 B	2,480 B	1,680 B
Manganese	300 ST	7439-96-5				229		248		262
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	4.5 B	NA	NA	2.5 B	NA	NA
Potassium	-	7440-09-7	5,990	4,200 B	4,520 B	4,420 B	5,450	5,830	3,870 B	3,730 B
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	1.4 B	NA	NA
Sodium	20,000 ST	7440-23-5	9,000	9,820	8,590	13,600	19,500		11,700	13,300
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	26.8 B	NA	NA	43.5	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

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J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06I 11/29/2005 (ug/l)	MW-06I 2/28/2006 (ug/l)	MW-06I 5/18/2006 (ug/l)	MW-06I 8/9/2006 (ug/l)	MW-06I 12/1/2006 (ug/l)	MW-06I 2/22/2007 (ug/l)	MW-06I 5/24/2007 (ug/l)	MW-06I 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	12.4 B	33.2 B	72.8 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	104 B	81.5 B	76.0 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.51 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	276 B	302 B	277	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.28 U	0.16 U	0.16 U
Calcium	-	7440-70-2	32,000	45,300	30,000	28,900	28,400	27,500	24,800	21,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.80 B	0.50 U	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	2.1 B	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.91 B	5.8 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.3 B	1.3 U	1.9 U	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	2260 B	3000 B	1800 B	1790 B	2030 B	2,030 B	1,830 B	1,730 B
Manganese	300 ST	7439-96-5						147	114	247
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	5,930	12,700	10,200	11,000	10,900	11,300	9,190	6,670 J
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	15,100		13,900	13,500	14,200	14,000	13,600	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.3 B	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	9.4 B	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06I 11/9/2007 (ug/l)	MW-06I 2/11/2008 (ug/l)	MW-06I 5/15/2008 (ug/l)	MW-06I 8/4/2008 (ug/l)	MW-06I 11/3/2008 (ug/l)	MW-06I 2/23/2009 (ug/l)	MW-06I 8/11/2009 (ug/l)	MW-06I 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	22.5 B	29.5 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.3 B
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	34.1 B	NA	39.1 B	40.2 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	91.8 BN	NA	99.2 B	74.6 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	22,800	20,600	17,600	20,800	18,300	16,000	17,100	14,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.2 B	0.67 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	1.2 B	1.2 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	10.9 B	NA	11.8 B	14.2 B
Iron	300 ST	7439-89-6	[redacted]	[redacted]	[redacted]	124	146	20.0 B	[redacted]	[redacted]
Lead	25 ST	7439-92-1	1.8 JB	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	7.0	1.8 U
Magnesium	35,000 GV	7439-95-4	1,940 B	1,870 B	1,680 B	2,120 B	1,850 B	1,610 B	1,580 B	1,560 B
Manganese	300 ST	7439-96-5	190	224	172	198	198	180	202	182
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.16 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	7,120 J	4,010 B	3,400 B	4,120 B	4,470 B	3,760 B	4,020 B	3,520 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	3.1 B
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	18,000	16,900	13,600	14,500	17,000	13,800	14,800	12,700
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	5.9 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	8.0 B	NA	19.7 B	22.8
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	[redacted]	[redacted]	[redacted]	322	344	200	222	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06I 5/26/2011 (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)	MW-06I (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	53.0 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	32.3 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	23,900							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.0 B							
Cobalt	-	7440-48-4	.49 U							
Copper	200 ST	7440-50-8	1.9 B							
Iron	300 ST	7439-89-6	90.1 B							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	4,030 B							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	3,610 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	[redacted]							
Vanadium	-	7440-62-2	.56 U							
Zinc	2,000 ST	7440-66-6	13.3 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06S 10/28/1997 (ug/l)	MW-06S 12/5/2000 (ug/l)	MW-06S 2/1/2001 (ug/l)	MW-06S 8/21/2002 (ug/l)	MW-06S 11/20/2002 (ug/l)	MW-06S 3/5/2003 (ug/l)	MW-06S 6/5/2003 (ug/l)	MW-06S 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	96.2	45.5 B	12.1	NA	143 B	NA	NA	77.2 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	[redacted]	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	9.6	3.2 B	8	NA	5.2 B	NA	NA	6.0 B
Barium	1,000 ST	7440-39-3	306	121 B	101	NA	121 B	NA	NA	219
Beryllium	3 GV	7440-41-7	0.1	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	162	183	NA	167	NA	NA	362
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.17 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	131,000	64,500	53,100	61,000	59,500	571,000	62,400	114,000
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	1.3	3.5 U	0.6 U	NA	1.9 B	NA	NA	1.8 B
Cobalt	-	7440-48-4	2.2	0.9 U	1.7 U	NA	2.9 B	NA	NA	5.0 B
Copper	200 ST	7440-50-8	0.7 U	1.5 U	1.5 U	NA	2.9 B	NA	NA	2.9 B
Iron	300 ST	7439-89-6	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead	25 ST	7439-92-1	1.0 U	1.4 B	1.9	1.3 B	1.4 U	1.5 U	1.5 U	0.86 B
Magnesium	35,000 GV	7439-95-4	16,400	6,280	4,680	5,550	5,080	5,480	6,040	12,300
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	2.9 B	NA	NA	4.8 B
Potassium	-	7440-09-7	18,200	8250	8050	7,460	6,980	7,490	8,980	10,900
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.63 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	18,900	12,800	13,200	14,900	13,500	10,300	13,900	19,100
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	2 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	14.2	2.2 U	3.6 U	NA	6.1 B	NA	NA	67.6
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06S 11/11/2003 (ug/l)	MW-06S 2/27/2004 (ug/l)	MW-06S 5/24/2004 (ug/l)	MW-06S 8/20/2004 (ug/l)	MW-06S 11/9/2004 (ug/l)	MW-06S 3/1/2005 (ug/l)	MW-06S 5/25/2005 (ug/l)	MW-06S 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	34.7 B	NA	NA	69.1 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	1.6 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	6.4 B	NA	NA	7.3 B	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	125 B	NA	NA	137 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.1 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	279 B	NA	NA	203	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.61 B	0.30 U	0.57 B	1.1 B	0.65 U	0.65 U
Calcium	-	7440-70-2	78,800	96,000	69,000	107,000	63,700	58,500	71,580	96,900
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.2 B	NA	NA	0.63 U	NA	NA
Cobalt	-	7440-48-4	NA	NA	3 B	NA	NA	2.3 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	0.9 U	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.1 U	1.6 U	0.7 U	1.5 B	1.1 U	1.1 U	1.9 B	1.7 U
Magnesium	35,000 GV	7439-95-4	8,330	10,800	9,770	12,800	6,250	6,490	11,390	11,800
Manganese	300 ST	7439-96-5							213	
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.6 B	NA	NA	1.5 B	NA	NA
Potassium	-	7440-09-7	9,660	13,400	13,200	15,100	11,200	11,800	15,740	11,800
Selenium	10 ST	7782-49-2	NA	NA	1.8 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.84 B	NA	NA
Sodium	20,000 ST	7440-23-5		17,700	10,400				8,140	
Thallium	0.5 GV	7440-28-0	NA	NA	1.9 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	8.4 B	NA	NA	49.9	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

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Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06S 11/29/2005 (ug/l)	MW-06S 2/28/2006 (ug/l)	MW-06S 5/22/2006 (ug/l)	MW-06S 8/9/2006 (ug/l)	MW-06S 12/1/2006 (ug/l)	MW-06S 2/22/2007 (ug/l)	MW-06S 5/24/2007 (ug/l)	MW-06S 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	32.6 B	218	747	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	8.0 B	6.1 B	4.6 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	256	189 B	231	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.70 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	408 B	281 B	304	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.32 B	0.12 U	0.34 U	0.28 U	0.91 B	0.16 U	0.16 U
Calcium	-	7440-70-2	87,400	99,700	140,000	128,000	100,000	66,800	78,000	49,200
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.0 B	1.8 B	4.9 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	1.2 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.6 B	5.3 B	0.44 U	NA
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	4.6	1.3 U	1.1 U	2.4 B	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	10,100	13,000	18,200	15,900	13,900	8,800	10,100	5,770
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	3.0 B	NA
Potassium	-	7440-09-7	12,100	15,600	21,900	17,800	16,700	13,100	12,100	8,180
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.51 B	0.38 U	0.74 B	NA
Sodium	20,000 ST	7440-23-5				20,000		18,000		U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	4.9 B	2.2 U	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	3.5 B	6.7 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	75.7	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06S 11/9/2007 (ug/l)	MW-06S 2/11/2008 (ug/l)	MW-06S 5/15/2008 (ug/l)	MW-06S 8/4/2008 (ug/l)	MW-06S 11/3/2008 (ug/l)	MW-06S 2/23/2009 (ug/l)	MW-06S 8/11/2009 (ug/l)	MW-06S 2/4/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	157 B	NA	165 B	40.5 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA		2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	6.8 B	NA	35.0 J*	6.3 B
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	320	NA	261	246
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	273 BN	NA	184	162
Cadmium	5 ST	7440-43-9	0.32 U	1.4 B	0.27 U	0.67 B	1.0 B	0.35 U	1.1 B	0.34 U
Calcium	-	7440-70-2	78,900	91,000	77,600	64,000	97,600	79,700	68,500	58,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	1.9 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	2.3 B	2.3 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	1.7 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	7.4 B	NA	0.62 U	0.83 U
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.4 UJ	1.4 U	2.3 U	2.3	1.3 U	1.3 U	13.8	2.5 B
Magnesium	35,000 GV	7439-95-4	10,200	10,500	8,810	6 ,950	10,700	8,570	6,440	5,920
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82U	2.5 B
Potassium	-	7440-09-7	11,200 J	10,100	10,500	8,880	12,200	9,410	8,210	9650
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 UN	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	20,000						18,700	16,300
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	7.2 B	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	3.5 B	NA	5.9 B	4.6 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	8.0 B	NA	23.0	11.8 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-06S 5/26/2011 (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)	MW-06S (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	372							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	244							
Cadmium	5 ST	7440-43-9	0.38 B							
Calcium	-	7440-70-2	74,800							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	3.0 B							
Cobalt	-	7440-48-4	0.62 B							
Copper	200 ST	7440-50-8	0.55 U							
Iron	300 ST	7439-89-6	[redacted]							
Lead	25 ST	7439-92-1	8.7							
Magnesium	35,000 GV	7439-95-4	9,920							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	11,900							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	2.7 B							
Zinc	2,000 ST	7440-66-6	17.7 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-07I 10/28/1997 (ug/l)	MW-07I 12/1/2000 (ug/l)	MW-07I 1/31/2001 (ug/l)	MW-07I 8/21/2002 (ug/l)	MW-07I 11/20/2002 (ug/l)	MW-07I 3/5/2003 (ug/l)	MW-07I 6/3/2003 (ug/l)	MW-07I 8/22/2003 (ug/l)
Aluminum	-	7429-90-5	90.1	16 B	23.6	NA	37.1 B	NA	NA	13.9
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	32.2	39.6 B	29.3	NA	15.4 B	NA	NA	21.6 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	33 B	45.4	NA	30.1 B	NA	NA	38.1 B
Cadmium	5 ST	7440-43-9	0.47	0.4 U	0.2 U	0.29 B	0.5 U	0.12 B	0.10 U	0.30 U
Calcium	-	7440-70-2	8,890	20,000	14,700	9,820	7,360	8,670	8,420	8,160
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.8	3.5 U	0.6 U	NA	0.8 U	NA	NA	0.70 U
Cobalt	-	7440-48-4	2.3	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	1.6	1.5 U	1.5 U	NA	3.9 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6		26.2 B	35.2		172	53.9 B	41.4 B	45.0 B
Lead	25 ST	7439-92-1	2.8	1.4 U	1.1 U	1.6 B	1.5 B	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	1,300	4,310 B	3,080	1,630 B	1,150 B	1,470	1,410 B	1,060 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.8	1.9 U	1.4 U	NA	1.1 U	NA	NA	1.5 U
Potassium	-	7440-09-7	3,840	2,590 B	2,460	2,330 B	2,000 B	2,020 B	2,580 B	2,100 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.8	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1 B	1.6 U	NA	1 U	NA	NA	1.0 U
Sodium	20,000 ST	7440-23-5	6,950		19,600	10,700	7,960	9,570		10,200
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	51.7	3.8 B	3.6 U	NA	27.9	NA	NA	8.4 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-07I 11/11/2003 (ug/l)	MW-07I 2/27/2004 (ug/l)	MW-07I 5/20/2004 (ug/l)	MW-07I 8/20/2004 (ug/l)	MW-07I 11/9/2004 (ug/l)	MW-07I 2/28/2005 (ug/l)	MW-07I 5/27/2005 (ug/l)	MW-07I 8/24/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	16.3 U	NA	NA	77.4 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	34.3 B	NA	NA	29.3 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	28.9 B	NA	NA	41.6 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.36 B	0.3 U	0.30 U	0.24 B	0.26 B	0.37 U	0.65 U
Calcium	-	7440-70-2	7,020	12,400	13,300	10,800	12,200	12,600	13,900	17,300
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	1.2 B	NA	NA	2.5 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	4.2 B	NA	NA	1.4 B	NA	NA
Iron	300 ST	7439-89-6	172	55.0 B	65.2 B	78.6 B	85.5 B	68.8 B	51.6 B	136
Lead	25 ST	7439-92-1	1.1 U	1.6 U	1.2 U	1.2 U	1.3 B	1.1 B	1.2 U	2.2 B
Magnesium	35,000 GV	7439-95-4	1,290 B	1,960 B	2,150 B	1,660 B	1,940 B	2,040 B	2,310 B	2,340 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	1,730 B	2,600 B	2,450 B	3,470 B	3,100 B	2,790 B	2,660 B	2,080 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 B	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	7,950	13,200	15,700	18,200	16,500	16,600	16,500	15,700
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	20.4 B	NA	NA	47.7	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-07I 11/29/2005 (ug/l)	MW-07I 2/28/2006 (ug/l)	MW-07I 5/22/2006 (ug/l)	MW-07I 8/10/2006 (ug/l)	MW-07I 11/28/2006 (ug/l)	MW-07I 2/22/2007 (ug/l)	MW-07I 5/24/2007 (ug/l)	MW-07I 8/10/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	10.2 U	15.6 B	72.2 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	32.6 B	31.3 B	53.0 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.54 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	33.4 B	39.1 B	41.0 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.53 B	0.34 U	0.28 U	0.28 U	0.16 U	0.28 B
Calcium	-	7440-70-2	17,700	13,600	43,000	30,100	22,300	19,000	18,100	18,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	0.92 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.2 B	5.1 B	0.44 U	NA
Iron	300 ST	7439-89-6	72.3 B	87.0 B	41.3 B	46.7 B	24.3 B	81.0 B	74.6 B	47.7 B
Lead	25 ST	7439-92-1	3.1	1.3 U	1.1 U	1.9 U	1.5 U	1.5 U	1.1 U	1.1 U
Magnesium	35,000 GV	7439-95-4	2,490 B	2,130 B	6,680	3,820 B	2,480 B	2,140 B	2,120 B	2,500 B
Manganese	300 ST	7439-96-5						142		
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	2,510 B	4,210 B	5,440	3,830 B	2,770 B	4,330 B	4,920 B	4,530 JB
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.90 B	NA
Sodium	20,000 ST	7440-23-5	15,200	14,000						U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.0 B	3.1 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	45.5	U*	U*	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-						223.0	384.6	

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-07I 11/9/2007 (ug/l)	MW-07I 2/11/2008 (ug/l)	MW-07I 5/19/2008 (ug/l)	MW-07I 8/5/2008 (ug/l)	MW-07I 11/5/2008 (ug/l)	MW-07I 2/24/2009 (ug/l)	MW-07I 8/14/2009 (ug/l)	MW-07I 2/8/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	40.6 B	28.8 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA		2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	33.5 B	NA	75.0 B	57.5 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	33.7 B	NA	51.9 B	23.2 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.40 B	0.34 U
Calcium	-	7440-70-2	73,600 J	18,700	20,900	21,600	28,400	19,800	24,800	14,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.52 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	5.3 B	0.58 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.0 B	NA	0.62 U	2.4 B
Iron	300 ST	7439-89-6		24.2 U	13.2 B	30.8 B	7.6 B	9.4 B	26.6 B	62.6 B
Lead	25 ST	7439-92-1	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	2.1 U	2.1 B
Magnesium	35,000 GV	7439-95-4	11,200 J	2,350 B	2,230 B	2,070 B	1,730 B	1,050 B	1,760 B	1,550 B
Manganese	300 ST	7439-96-5					282	212	347	
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	3.0 B	1.4 U
Potassium	-	7440-09-7	12,500	3,770 B	2,930 B	3,330 B	3,460 B	6,790	8,840	5630 J*
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA		2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	20.0	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	7.8 B	NA	7.6 B	14.9 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-			447.2	458.8	289.6	221.4	356.4	476.6

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

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U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

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GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-07I 5/26/2011 (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)	MW-07I (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	46.3 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	51.0 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	38,000							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.6 B							
Cobalt	-	7440-48-4	.49 U							
Copper	200 ST	7440-50-8	1.9 B							
Iron	300 ST	7439-89-6	31.8 B							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	6,020							
Manganese	300 ST	7439-96-5	[redacted]							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U*J*							
Potassium	-	7440-09-7	3440 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	[redacted]							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.56 U							
Zinc	2,000 ST	7440-66-6	8.1 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	[redacted]							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11D 10/31/1997 (ug/l)	MW-11D 12/13/2000 (ug/l)	MW-11D 2/7/2001 (ug/l)	MW-11D 8/22/2002 (ug/l)	MW-11D 11/21/2002 (ug/l)	MW-11D 3/6/2003 (ug/l)	MW-11D 6/4/2003 (ug/l)	MW-11D 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	473	578	581	NA	717	NA	NA	629
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	27.8	34	31.9	NA	37.1 B	NA	NA	38.4 B
Beryllium	3 GV	7440-41-7	0.1 U	0.22	0.13	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	42.2	32.6	NA	311	NA	NA	144
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.22	0.28 B	0.5 U	0.10 U	0.11 B	0.30 U
Calcium	-	7440-70-2	7,300	4,290	5,130	7,280	6,940	5,900	6,120	6,990
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.43	3.5 U	1.6	NA	1.6 B	NA	NA	1.3 B
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	0.7 U	2.3	1.5 U	NA	1.9 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	153	16.7	30.6	[redacted]	261	155	59.9 B	43.5 B
Lead	25 ST	7439-92-1	1 U	1.4 U	1.1 U	2.0 B	1.4 B	1.5 U	1.5 U	0.8 U
Magnesium	35,000 GV	7439-95-4	1,330	1,340	1,440	1,480 B	1,810 B	1,580 B	1,650 B	1,940 B
Manganese	300 ST	7439-96-5	74.6	76.7	83.5	[redacted]	188	143	144	178
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	2.1	5.3	5.8	NA	12 B	NA	NA	12.4 B
Potassium	-	7440-09-7	10,000	6,950	1,720	2,530 B	5,190	5,200	6,460	5,530
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	2	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.2	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	8,050	7,840	7,610	6,010	9,640	9,940	10,900	10,500
Thallium	0.5 GV	7440-28-0	[redacted]	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.4	0.7 U	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	19	2.8	13.6	NA	21	NA	NA	6.0 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	227.6	93.4	114.1	[redacted]	449	298	203.9	221.5

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11D 11/13/2003 (ug/l)	MW-11D 3/1/2004 (ug/l)	MW-11D 5/21/2004 (ug/l)	MW-11D 8/24/2004 (ug/l)	MW-11D 11/11/2004 (ug/l)	MW-11D 2/24/2005 (ug/l)	MW-11D 5/26/2005 (ug/l)	MW-11D 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	1250	NA	NA	1420	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	47.4 B	NA	NA	55.2 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.22 B	NA	NA	0.29 B	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	61 B	NA	NA	65.4 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.22 B	0.3 U	0.57 B	0.23 U	2.8 B	0.65 U	0.65 U
Calcium	-	7440-70-2	7,920	8,560	11,800	14,100	8,100	11,200	8,680	7570
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	2.7 B	NA	NA	2.6 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3.3 B	NA	NA	2.4 B	NA	NA
Iron	300 ST	7439-89-6	162	38.0 B	[redacted]	[redacted]	97.7 B	[redacted]	268	145
Lead	25 ST	7439-92-1	1.2 B	1.6 U	4.2	8.8	1.1 U	3.4	2.0 B	1.7 U
Magnesium	35,000 GV	7439-95-4	2,140 B	2,330 B	2,080 B	2,650 B	2,050 B	2,700 B	2150 B	1940 B
Manganese	300 ST	7439-96-5	171	227	233	218	220	290	269	261
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	14 B	NA	NA	17.1 B	NA	NA
Potassium	-	7440-09-7	7,020	7,170	6,450	8,810	8,390	6,750	5,690	4900 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.76 B	NA	NA
Sodium	20,000 ST	7440-23-5	11,000	13,300	10,600	11,700	13,000	15,800	11,000	11200
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	2.1 B	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	13 B	NA	NA	94	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	333	265	[redacted]	[redacted]	317.7	[redacted]	[redacted]	406

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11D 11/28/2005 (ug/l)	MW-11D 2/27/2006 (ug/l)	MW-11D 5/19/2006 (ug/l)	MW-11D 8/11/2006 (ug/l)	MW-11D 11/29/2006 (ug/l)	MW-11D 2/28/2007 (ug/l)	MW-11D 6/1/2007 (ug/l)	MW-11D 8/17/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	2,420	1,090	2,130	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	2.4 B	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 U	3.8 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	56.0 B	45.8 B	55.6 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.20 B	1.0 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	36.6 B	37.9 B	45.4 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	1.8 B	0.40 B	0.34 U	0.28 U	0.32 B	0.95 B	0.51 B
Calcium	-	7440-70-2	8,870	16,700	9,320	8,670	10,900	13,500	18,500	13,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	2.0 B	1.5 B	3.8 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	1.2 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	4.4 B	1.6 B	3.7 B	NA
Iron	300 ST	7439-89-6	177	[redacted]	300	242	[redacted]	128	[redacted]	56.0 B
Lead	25 ST	7439-92-1	1.6 B	15.1	1.9 U	2.3 B	7.1	1.5 U	8.6	1.7 U
Magnesium	35,000 GV	7439-95-4	2,370 B	3,400 B	2,290 B	2,150 B	3,030 B	3,490 B	3,940 B	3,830 B
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	21.1 B	21.2 B	27.1 B	NA
Potassium	-	7440-09-7	5,580	6,330	5,340	5,880	4,850 B	4,260 B	3,850 B	2,860 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	12,600	13,500	14,300	13,700	13,200	14,600	14,900	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	2.5 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	3.2 B	1.4 U	5.1 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	51.4	U*	37.3	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11D 11/14/2007 (ug/l)	MW-11D 2/12/2008 (ug/l)	MW-11D 5/14/2008 (ug/l)	MW-11D 8/6/2008 (ug/l)	MW-11D 11/5/2008 (ug/l)	MW-11D 2/25/2009 (ug/l)	MW-11D 8/13/2009 (ug/l)	MW-11D 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	659	NA	494	16700
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	10.5
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	36.5 B	NA	20.0 B	120 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.21 B	NA	0.20 B	0.72 B
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	64.9 B	NA	57.8 B	42.6 B
Cadmium	5 ST	7440-43-9	0.41 B	0.45 B	0.27 U	0.50 B	0.35 U	0.35 U	0.26 U	0.82 B
Calcium	-	7440-70-2	11,300 J	9,390	7,730	7,600	7,350	6,450	8,020	43,500
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	1.6 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.5 B	38.5
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	9.9 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.98 B	NA	0.80 B	42.8
Iron	300 ST	7439-89-6	[redacted]	264	116	107	27.7 B	42.0 B	128	[redacted]
Lead	25 ST	7439-92-1	4.3	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	21.1	65.6
Magnesium	35,000 GV	7439-95-4	3,390 JB	2,740 B	2,510 B	2,730 B	2,530 B	2,130 B	1,900	6950
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	240	240	242	180	118	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	16.4 B	NA	9.2 B	23.3 B
Potassium	-	7440-09-7	3,450	2,550 B	2,260 B	2,600 B	2,260 B	2,090 B	2,440 B	14,900
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	5.3 U	3.0 B
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	17,400 J	17,800	17,700	17,800	18,300	16,700	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	20.0	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	39.8 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	11.2 B	NA	7.6 B	209
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	[redacted]	[redacted]	356	347	270	222	160	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11D 5/27/2011 (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)	MW-11D (ug/l)
Aluminum	-	7429-90-5	29,600							
Antimony	3 GV	7440-36-0								
Arsenic	25 ST	7440-38-2	18.3							
Barium	1,000 ST	7440-39-3	261							
Beryllium	3 GV	7440-41-7	1.0 B							
Boron	1,000 ST	7440-42-8	30.0 B							
Cadmium	5 ST	7440-43-9	1.8 B							
Calcium	-	7440-70-2	75,500							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3								
Cobalt	-	7440-48-4	18.5 B							
Copper	200 ST	7440-50-8	124							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1								
Magnesium	35,000 GV	7439-95-4	17,000							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.22 J*							
Nickel	100 ST	7440-02-0	57.7							
Potassium	-	7440-09-7	13,700							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	15,900							
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2	74.7							
Zinc	2,000 ST	7440-66-6	535							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11I 10/31/1997 (ug/l)	MW-11I 12/13/2000 (ug/l)	MW-11I 2/7/2001 (ug/l)	MW-11I 8/22/2002 (ug/l)	MW-11I 11/21/2002 (ug/l)	MW-11I 3/6/2003 (ug/l)	MW-11I 6/4/2003 (ug/l)	MW-11I 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	113	22.3	11.8 U	NA	32.8 B	NA	NA	23.8 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	22.2	13.1	10.3	NA	12.3 B	NA	NA	46.1 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	98.2	84	NA	207	NA	NA	124
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.23	0.20 B	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	10,200	9,570	9,150	8,810	15,000	15,400	16,400	77,300
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.4 U	3.5 U	0.6 U	NA	2.2 B	NA	NA	
Cobalt	-	7440-48-4	4.7	4	3.2	NA	5 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	3.1	2.4	1.5 U	NA	2.8 B	NA	NA	7.7 B
Iron	300 ST	7439-89-6	191	24.1	10.2		130	63.3 B	58 B	
Lead	25 ST	7439-92-1	1.7 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	6,510	2,670	2,670	2,620 B	3,740 B	3,120 B	3,180 B	6750
Manganese	300 ST	7439-96-5	245							248
Mercury	0.7 ST	7439-97-6	0.3 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	4.3	3.5	2.5	NA	8.4 B	NA	NA	14.7 B
Potassium	-	7440-09-7	3,870	2,690	2,270	1,640 B	1,740 B	1,830 B	2,050 B	14700
Selenium	10 ST	7782-49-2	8.4 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	2.8 U	1.7	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	11,100	13,200	10,400	6,680	9,510	11,400	12,600	
Thallium	0.5 GV	7440-28-0	2.3 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	2.6 U	0.95	1.7 U	NA	0.6 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	100	5.4	4.1	NA	51.4	NA	NA	8.6
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	436				457			

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11I 11/13/2003 (ug/l)	MW-11I 3/1/2004 (ug/l)	MW-11I 5/21/2004 (ug/l)	MW-11I 8/24/2004 (ug/l)	MW-11I 11/11/2004 (ug/l)	MW-11I 2/24/2005 (ug/l)	MW-11I 5/26/2005 (ug/l)	MW-11I 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	16.3 U	NA	NA	384	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	8.8 B	NA	NA	9.8 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	148 B	NA	NA	327	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.29 B	0.3 U	0.23 B	0.26 B	0.78 B	0.65 U	0.65 U
Calcium	-	7440-70-2	7,960	16,400	14,000	12,000	12,400	15,000	15,200	10,900
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.6 U	NA	NA	1.9 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	25.9 B	NA	NA	26.9 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3.8 B	NA	NA	3.1 B	NA	NA
Iron	300 ST	7439-89-6	56.5 B	31.2 B	29.7 B	26.2 B	30 B		25.6 B	53.4 B
Lead	25 ST	7439-92-1	1.2 B	1.6 U	1.2 U	0.70 U	1.1 U	2.2 B	2.4 B	1.7 U
Magnesium	35,000 GV	7439-95-4	1,400 B	2,840 B	2,480 B	2,300 B	2,250 B	2,550 B	2,860 B	2,140 B
Manganese	300 ST	7439-96-5	247							
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	33.8 B	NA	NA	15.4 B	NA	NA
Potassium	-	7440-09-7	1,420 B	1,690 B	1,300 B	1,720 B	1,510 B	1,490 B	1,500 B	1,160 B
Selenium	10 ST	7782-49-2	NA	NA	2.6 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.8 B	NA	NA
Sodium	20,000 ST	7440-23-5	13,900	14,400	6,370	7,180	8,760	9,660	12,300	11,900
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	4.7 B	NA	NA	76.9	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	303.5							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11I 11/28/2005 (ug/l)	MW-11I 2/27/2006 (ug/l)	MW-11I 5/19/2006 (ug/l)	MW-11I 8/11/2006 (ug/l)	MW-11I 11/29/2006 (ug/l)	MW-11I 2/28/2007 (ug/l)	MW-11I 6/1/2007 (ug/l)	MW-11I 8/16/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	45.0 B	35.3 B	50.8 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	2.9 B	2.0 U	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	7.1 B	6.4 U	5.8 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.32 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	53.8 B	55.8 B	53.7 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.75 B	0.16 U	0.99 B
Calcium	-	7440-70-2	9,880	13,100	8,580	6,530	4,950 B	3,660 B	5,350	5,370
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	0.57 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.2 B	1.5 B	0.44 U	NA
Iron	300 ST	7439-89-6	12.6 B	28.2 B	22.1 B	28.6 B	140	69.0 B	18.8 B	18.2 B
Lead	25 ST	7439-92-1	1.6 U	1.3 U	1.9 U	1.9 U	1.5 U	1.5 U	1.5 B	2.7 B
Magnesium	35,000 GV	7439-95-4	1,960 B	2,780 B	1,590 B	1,190 B	996 B	752 B	1,050 B	1,090 B
Manganese	300 ST	7439-96-5						138		286
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	1.8 U	0.78 U	NA
Potassium	-	7440-09-7	1,170 B	1,910 B	1,350 B	2,100 B	1,230 B	1,470 B	1,420 B	1,400 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	10,400	14,500	13,700	10,500	8,020	8,330	6,180	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.9 B	3.5 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	177	U*	9.3 B	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-						207		304.2

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11I 11/14/2007 (ug/l)	MW-11I 2/12/2008 (ug/l)	MW-11I 5/14/2008 (ug/l)	MW-11I 8/6/2008 (ug/l)	MW-11I 11/5/2008 (ug/l)	MW-11I 2/25/2009 (ug/l)	MW-111 8/13/2009 (ug/l)	MW-11I 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	70.4 B	86.2 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	7.6 B	NA	2.9 U	6.2 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	28.2 B	NA	4.3 U	22.7 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.39 B
Calcium	-	7440-70-2	5,980 J	5,370	9,040	5,030	5,030	4,340 B	49.0 B	3,260 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.80 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.49 U	0.88 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.65 U	NA	0.90 B	2.0 B
Iron	300 ST	7439-89-6	25.1	24.2 U	280	6.6 U	10 B	13.7 B	10.9 B	125 J*
Lead	25 ST	7439-92-1	1.4	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	2.1 U	1.8 U
Magnesium	35,000 GV	7439-95-4	1,420 J	1,260 B	2,440 B	1,450 B	1,700 B	1,390 B	43 U	895 B
Manganese	300 ST	7439-96-5	100 J	47.0	92.2	28.3	11.8 B	8.6 B	0.40 B	111
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	1.9 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	1,410	1,410 B	1,970 B	1,890 B	1,600 B	1,420 B	57 U	1,480 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	0.54 U	NA	4.6 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	1.9 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	5,510 J	5,430	7,860	6,770	5,500	4,960 B	55 U	4,510 B
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	0.74 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	6.0 B	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	0.13 U	NA	6.7 U	16.8 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10 U	10.0U
Iron + Manganese	500 ST*	-	125.1	71.2	372.2	34.9	21.8	22.3	11.3	236

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11I 3/25/1900 (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)	MW-11I (ug/l)
Aluminum	-	7429-90-5	8.2 U							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	1.9 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	10.9 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	968 B							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	1.6 B							
Cobalt	-	7440-48-4	.49 U							
Copper	200 ST	7440-50-8	1.6 B							
Iron	300 ST	7439-89-6	37.9 B							
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	242 B							
Manganese	300 ST	7439-96-5	25.8							
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	1050 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	7,660							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	0.56 U							
Zinc	2,000 ST	7440-66-6	10.3 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-	63.7							

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11S 10/31/1997 (ug/l)	MW-11S 12/13/2000 (ug/l)	MW-11S 2/7/2001 (ug/l)	MW-11S 8/22/2002 (ug/l)	MW-11S 11/21/2002 (ug/l)	MW-11S 3/6/2003 (ug/l)	MW-11S 6/4/2003 (ug/l)	MW-11S 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	703	31.7	47.7	NA	127 B	NA	NA	17.4 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	30.5	27.3	24.1	NA	28.3 B	NA	NA	8.8 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	635	630	NA	206	NA	NA	160
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	39,100	58,600	53,800	46,600	51,800	51,500	78,300	9,900
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.73	3.5 U	9.8	NA	38.9	NA	NA	0.70 U
Cobalt	-	7440-48-4	2.1	1.4	1.8	NA	1.8 B	NA	NA	18.2 B
Copper	200 ST	7440-50-8	3.2	3.2	3	NA	2.9 B	NA	NA	1.8 B
Iron	300 ST	7439-89-6		45.6	65.1			271	193	107
Lead	25 ST	7439-92-1	1 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 B	0.80 U
Magnesium	35,000 GV	7439-95-4	4,000	6,250	5,770	4090 B	5,250	5,880	7,590	1750 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	2.6	3.1	3.3	NA	3.9 B	NA	NA	39.3 B
Potassium	-	7440-09-7	8,620	9,070	7,980	6,970	6,570	9,540	15,100	1390 B
Selenium	10 ST	7782-49-2	2.8 U	3	3	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	3.6	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5				15,000	16,700			13,800
Thallium	0.5 GV	7440-28-0		2.3 U	2.8 U	NA	4.2 U	NA	NA	
Vanadium	-	7440-62-2	1.8	0.98	1.7 U	NA	0.97 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	12.7	2.2 U	3.6 U	NA	15.2 B	NA	NA	6.6 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11S 11/13/2003 (ug/l)	MW-11S 3/1/2004 (ug/l)	MW-11S 5/21/2004 (ug/l)	MW-11S 8/24/2004 (ug/l)	MW-11S 11/11/2004 (ug/l)	MW-11S 2/24/2005 (ug/l)	MW-11S 5/26/2005 (ug/l)	MW-11S 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	39.9 B	NA	NA	153 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	31.4 B	NA	NA	28.8 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	176 B	NA	NA	324	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.3 U	0.20 U	0.23 U	0.23 B	0.65 U	0.65 U
Calcium	-	7440-70-2	66,600	94,900	53,300	63,600	72,800	73,000	63,500	58,000
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	[redacted]	NA	NA	36.5	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.8 B	NA	NA	2.8 B	NA	NA
Copper	200 ST	7440-50-8	NA	NA	8 B	NA	NA	5.9 B	NA	NA
Iron	300 ST	7439-89-6	[redacted]	[redacted]	[redacted]	40.4 B	67.9 B	[redacted]	[redacted]	160
Lead	25 ST	7439-92-1	1.1 U	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	3.4	1.7 U
Magnesium	35,000 GV	7439-95-4	5,100	7,510	5,430	5,180	5,330	6,110	5,590	4,930 B
Manganese	300 ST	7439-96-5	207	172	[redacted]	239	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	10.2 B	NA	NA	5.5 B	NA	NA
Potassium	-	7440-09-7	15,100	13,700	12,000	15,100	13,000	12,700	9,800	9,520
Selenium	10 ST	7782-49-2	NA	NA	2.3 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	3.9 B	NA	NA	46.3	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	[redacted]	[redacted]	[redacted]	279.4	386.9	[redacted]	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11S 11/28/2005 (ug/l)	MW-11S 2/27/2006 (ug/l)	MW-11S 5/19/2006 (ug/l)	MW-11S 8/11/2006 (ug/l)	MW-11S 11/29/2006 (ug/l)	MW-11S 2/23/2007 (ug/l)	MW-11S 6/1/2007 (ug/l)	MW-11S 8/16/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	22.7 B	3,680	2,400	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	3.0 B	4.3 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	27.4 B	60.7 B	72.4 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17	0.19 B	0.46 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	86.3 B	82.4 B	83.3 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.28 U	0.25 B	0.32 B
Calcium	-	7440-70-2	87,000	77,600	54,800	65,900	41,500	45,000	58,600	49,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	1.2 B		46.5	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	7.9 B	4.6 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	3.1 B	15.7 B	15.8 B	NA
Iron	300 ST	7439-89-6	37.2 B	150	85.3 B	286	90.0 B			30.3 B
Lead	25 ST	7439-92-1	1.6 U	1.3 U	1.9 U	1.9 U	1.5 U	6.4	19.6	1.7 U
Magnesium	35,000 GV	7439-95-4	8,110	7,360	5,590	6,800	5,310	6,290	7,860	4,810 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.12 B	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	22.0 B	12.3 B	NA
Potassium	-	7440-09-7	14,600	16,100	14,000	17,200	13,600	17,000	21,200	31,700
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	2.9 U	4.9 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	8.9 B	7.8 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	39.7	52.5	45.8	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11S 11/14/2007 (ug/l)	MW-11S 2/12/2008 (ug/l)	MW-11S 5/14/2008 (ug/l)	MW-11S 8/6/2008 (ug/l)	MW-11S 11/5/2008 (ug/l)	MW-11S 2/25/2009 (ug/l)	MW-11S 8/13/2009 (ug/l)	MW-11S 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	2730	NA	52.0 B	47.6 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 B	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	57.4 B	NA	32.3 B	41.4 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.14 B	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	68.6 B	NA	55.5 B	73.9 B
Cadmium	5 ST	7440-43-9	0.32	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	44,000 J	45,600	55,600	58,100	46,500	43,000	44,300	60,800
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	[redacted]	NA	6.8 B	47.9
Cobalt	-	7440-48-4	NA	NA	NA	NA	3.6 B	NA	0.80 B	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	12.6 B	NA	1.9 B	3.6 B
Iron	300 ST	7439-89-6	36.0 B	111	[redacted]	[redacted]	[redacted]	[redacted]	111	172 J*
Lead	25 ST	7439-92-1	1.4 U	1.4 U	8.40	6.9	7.7	3.2	12.4	1.8 U
Magnesium	35,000 GV	7439-95-4	4,990 J	5,050	6,440	6,160	5,880	4,900 B	4,490 B	6,900
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	7.3 B	NA	1.8 B	3.1 B
Potassium	-	7440-09-7	29,900	19,900	17,100	25,200	25,300	12,900	15,700	19000
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.55 B	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	7.6 B	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	17.2 B	NA	12.0 B	5.0 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-11S 5/27/2011 (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)	MW-11S (ug/l)
Aluminum	-	7429-90-5	133 B							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	28.5 B							
Beryllium	3 GV	7440-41-7	.13 U							
Boron	1,000 ST	7440-42-8	38.5 B							
Cadmium	5 ST	7440-43-9	.27 U							
Calcium	-	7440-70-2	39,500							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	9.1 B							
Cobalt	-	7440-48-4	.68 B							
Copper	200 ST	7440-50-8	3.9 B							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	1.5 U							
Magnesium	35,000 GV	7439-95-4	5,940							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	14,600							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	.72 B							
Zinc	2,000 ST	7440-66-6	12.5 B							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12D 10/31/1997 (ug/l)	MW-12D 12/8/2000 (ug/l)	MW-12D 2/7/2001 (ug/l)	MW-12D 8/22/2002 (ug/l)	MW-12D 11/21/2002 (ug/l)	MW-12D 3/6/2003 (ug/l)	MW-12D 6/4/2003 (ug/l)	MW-12D 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	288	14.9	18.6	NA	43.5 B	NA	NA	19.9 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	6.5	1.5	2.9 U	NA	3.4 B	NA	NA	2.2 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	29.4	25.2	NA	16.1 B	NA	NA	24.8 B
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	8,460	3,180	3,660	2,580 B	3,860 B	5,990	6,940	6,600
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.87	3.5 U	1	NA	2 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	2.4	1.5 U	1.5 U	NA	1.8 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	[redacted]	20.9	16.5	129	132	12.4 B	33.2 B	23.6 U
Lead	25 ST	7439-92-1	1 U	1.4 U	1.1 U	0.80 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	2,330	1,520	1,760	1,000 B	1,590 B	2,630 B	3,080 B	2,900 B
Manganese	300 ST	7439-96-5	82.5	1.8	1.4	11.6 B	4.7 B	3.9 B	1.9 B	1.3 B
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	0.1 U	NA	NA	0.10 U
Nickel	100 ST	7440-02-0	1.3 U	1.9 U	1.4 U	NA	1.5 B	NA	NA	1.5 U
Potassium	-	7440-09-7	837	554	673	552 B	438 B	551 B	833 B	481 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	1.4	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	8,400	8,610	9,340	6,450	6,010	5,770	6,120	5,490
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2	0.7 U	1.7 U	NA	0.60 U	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	311	2.2 U	3.6 U	NA	24.1	NA	NA	2.4 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	394.5	22.7	17.9	129	136.7	16.3	35.1	24.9

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12D 11/13/2003 (ug/l)	MW-12D 3/1/2004 (ug/l)	MW-12D 5/21/2004 (ug/l)	MW-12D 8/24/2004 (ug/l)	MW-12D 11/11/2004 (ug/l)	MW-12D 2/24/2005 (ug/l)	MW-12D 5/26/2005 (ug/l)	MW-12D 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	16.3 U	NA	NA	73.7 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	4 U	NA	NA	1.7 U	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	19.4 B	NA	NA	30.6 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.57 B	0.3 U	0.20 U	0.23 U	0.23 U	0.65 U	0.68 B
Calcium	-	7440-70-2	5,460	4,550 B	3.540 B	3,870 B	3,910 B	3,870 B	3,050 B	2,870 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.89 B	NA	NA	1.1 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	2 B	NA	NA	1.1 U	NA	NA
Iron	300 ST	7439-89-6	21.9 B	58.3 B	33 B	98.1 B	4.0 B	30.8 B	20.2 B	57.3 B
Lead	25 ST	7439-92-1	1.3 B	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	1.7	2.4 B
Magnesium	35,000 GV	7439-95-4	2,340 B	1,940 B	1,530 B	1,720 B	1,660 B	1,640 B	1,250 B	1,210 B
Manganese	300 ST	7439-96-5	1.8 B	3.1 B	2.6 B	1.4 B	0.58 B	1.0 B	1.2 U	1.9 B
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.6 U	NA	NA	1.2 U	NA	NA
Potassium	-	7440-09-7	440 B	474 B	403 B	692 B	597 B	591 B	446 B	415 B
Selenium	10 ST	7782-49-2	NA	NA	2.1 U	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	5,090	5,530	4,890 B	5,690	6,310	6,750	5,950	6,750
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	3 B	NA	NA	56.6	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	23.7	61.4	35.6	99.5	4.58	31.8	21.4	59.2

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12D 11/28/2005 (ug/l)	MW-12D 2/27/2006 (ug/l)	MW-12D 5/19/2006 (ug/l)	MW-12D 8/11/2006 (ug/l)	MW-12D 11/29/2006 (ug/l)	MW-12D 2/23/2007 (ug/l)	MW-12D 6/1/2007 (ug/l)	MW-12D 8/16/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	37.4 B	795	61.1 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	3.0 B	3.9 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	6.4 U	71.3 B	3.1 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.37 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	16.8 B	22.2 B	19.3 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.28 U	0.16 U	0.28 U
Calcium	-	7440-70-2	3,790 B	4,650 B	5,070	4,950 B	5,790	13,000	7,220	9,130
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	3.2 B	0.44 B	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 B	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.88 U	7.2 B	0.44 U	NA
Iron	300 ST	7439-89-6	59.5 B	55.0 B	67.0 B	14.2 B	66.3 B	[redacted]	29.1 B	9.6 B
Lead	25 ST	7439-92-1	1.6 U	1.3 B	2.6 B	1.9 U	1.5 U	12.1	1.1 U	1.7 U
Magnesium	35,000 GV	7439-95-4	1,610 B	2,110 B	2,130 B	2,170 B	2,790 B	3,830 B	3,650 B	4,160 B
Manganese	300 ST	7439-96-5	2.9 B	2.5 B	3.6 B	1.6 B	3.0 U	35.5	3.2 B	1.8 B
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.12 B	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	2.1 B	0.78 U	NA
Potassium	-	7440-09-7	513 B	736 B	559 B	1640 B	651 B	1,100 B	740 B	810 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	7,180	7,230	7,200	6,930	6,290	7,200	6,370	7,780
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.5 B	5.6 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	2.5 B	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	40.3	63.5	8.4 B	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	62.4	57.5	69.6	15.8	66.3	[redacted]	32.3	11.4

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12D 11/14/2007 (ug/l)	MW-12D 2/12/2008 (ug/l)	MW-12D 5/14/2008 (ug/l)	MW-12D 8/6/2008 (ug/l)	MW-12D 11/5/2008 (ug/l)	MW-12D 2/25/2009 (ug/l)	MW-12D 8/13/2009 (ug/l)	MW-12D 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	12.5 U	101 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	4.7 B	NA	6.6 B	7.5 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	19.5 B	NA	9.5 B	19.0 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	11,500 J	11,100	12,000	11,200	11,600	12,500	11,500	9,410
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.80 B	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	1.1 B	0.65 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.65 U	NA	0.90 B	2.9 B
Iron	300 ST	7439-89-6	28.8 B	24.2 U	37.4 B	6.6 U	9.2 B	12.6 B	12.4 B	139 J*
Lead	25 ST	7439-92-1	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	12.3	1.8 U
Magnesium	35,000 GV	7439-95-4	5,770 J	5,480	6,130	6,260	6,100	6,560	5,420	5190
Manganese	300 ST	7439-96-5	1.9 JB	2.7 B	4.7 B	3.0 B	3.1 B	3.6 B	2.6 B	8.9 B
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.4 U
Potassium	-	7440-09-7	878 B	945 B	1,030 B	1,340 U	1,060 B	1,150 B	1,210 B	1,400 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	9,580 J	12,000	11,900	13,400	11,700	13,600	15,300	14,800
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	5.2 B	NA	22.3	13.7 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	30.7	26.9	42.1	9.6	12.3	16.2	15.0	147.9

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12D 5/27/2011 (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)	MW-12D (ug/l)
Aluminum	-	7429-90-5	290							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	8.0 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	9.0 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	6,990							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.4 B							
Cobalt	-	7440-48-4	0.49 U							
Copper	200 ST	7440-50-8	4.1 B							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	2.8 B							
Magnesium	35,000 GV	7439-95-4	3,520 B							
Manganese	300 ST	7439-96-5	14.8 B							
Mercury	0.7 ST	7439-97-6	0.10U U*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	1,590 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	12,000							
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	1.1 B							
Zinc	2,000 ST	7440-66-6	25.1							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12I 1031/1997 (ug/l)	MW-12I 12/7/2000 (ug/l)	MW-12I 2/8/2001 (ug/l)	MW-12I 8/22/2002 (ug/l)	MW-12I 11/21/2002 (ug/l)	MW-12I 3/6/2003 (ug/l)	MW-12I 6/4/2003 (ug/l)	MW-12I 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	281	38.1 B	13.5	NA	88.5 B	NA	NA	23.4 B
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	25.1	20.2 B	12.6	NA	16.8 B	NA	NA	4.9 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	865	423	NA	47.6 B	NA	NA	42.4 B
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	13,000	13,500	9,680	4,240 B	6,480	4,390 B	6,470	4,020 B
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	0.4 U	3.5 U	0.6 U	NA	2.7 B	NA	NA	0.70 U
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	1.2 B	NA	NA	2.1 U
Copper	200 ST	7440-50-8	1	2.4 B	1.5 U	NA	2.8 B	NA	NA	1.1 U
Iron	300 ST	7439-89-6	213	20.9 B	12.4	257	[redacted]	37.3 B	48.5 B	25.8 B
Lead	25 ST	7439-92-1	1 U	1.4 U	1.1 U	0.80 U	1.9 B	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	4,930	3,600 B	2,400	1,220 B	1,680 B	1,250 B	2,120 B	1,260 B
Manganese	300 ST	7439-96-5	[redacted]	[redacted]	[redacted]	[redacted]	289	153	233	132
Mercury	0.7 ST	7439-97-6	0.1 U	NA	0.1 U	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	1.5	1.9 U	1.4 U	NA	3 B	NA	NA	1.5 U
Potassium	-	7440-09-7	1520	2110 B	1810	915 B	1330 B	796 B	1180 B	692 B
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.65 B	1.6 U	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	10,800	[redacted]	13900	5,820	6,080	5,320	8,590	5,990
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.7 U	1.7 U	NA	1.4 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	39.2	13.7 B	9	NA	44.9	NA	NA	8.2 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	190.3	281.5	157.8

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12I 11/13/2003 (ug/l)	MW-12I 3/1/2004 (ug/l)	MW-12I 5/21/2004 (ug/l)	MW-12I 8/24/2004 (ug/l)	MW-12I 11/11/2004 (ug/l)	MW-12I 2/24/2005 (ug/l)	MW-12I 5/26/2005 (ug/l)	MW-12I 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	18.2 B	NA	NA	1240	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	6 B	NA	NA	54.7 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	36.8 B	NA	NA	69.9 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.21 B	0.3 U	0.39 B	0.32 B	1.2 B	0.65 U	0.65 U
Calcium	-	7440-70-2	4,040 B	3,880 B	3,270 B	5,770	8,850	21,700	4,200 B	6,480
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	0.7 B	NA	NA	6.1 B	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3 B	NA	NA	8.2 B	NA	NA
Iron	300 ST	7439-89-6	30.1 B	63.3 B	61.8 B	23.2 B	50.8 B	[redacted]	148	122
Lead	25 ST	7439-92-1	1.5 B	1.6 U	1.2 U	0.70 U	1.1 U	12.4	3.4	1.7 U
Magnesium	35,000 GV	7439-95-4	1,280 B	1,160 B	982 B	1,840 B	2,470 B	2,980 B	1,030 B	1810 B
Manganese	300 ST	7439-96-5	125	127	86.4	222	[redacted]	213	133	214
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	1.6 U	NA	NA	6.1 B	NA	NA
Potassium	-	7440-09-7	688 B	7,571	658 B	1,280 B	1,750 B	3,620 B	973 B	1,090 B
Selenium	10 ST	7782-49-2	NA	NA	2.5 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	0.75 U	NA	NA
Sodium	20,000 ST	7440-23-5	5,900	5,350	4,700 B	7,400	9,940	[redacted]	6,960	9,820
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	4.9 B	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	19 B	NA	NA	298	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	155.1	190.3	148.2	245.2	442.8	[redacted]	281	336

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an approximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12I 11/28/2005 (ug/l)	MW-12I 2/27/2006 (ug/l)	MW-12I 5/19/2006 (ug/l)	MW-12I 8/11/2006 (ug/l)	MW-12I 11/29/2006 (ug/l)	MW-12I 2/23/2007 (ug/l)	MW-12I 6/1/2007 (ug/l)	MW-12I 8/16/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	29.9 B	120 B	52.6 B	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	4.1 B	2.8 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	20.2 B	25.0 B	12.8 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.17 U	0.30 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	142 B	88.2 B	67.8 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.73 B	0.34 U	0.34 U	0.28 U	3.9 B	0.16 U	0.28 U
Calcium	-	7440-70-2	12,600	21,900	19,000	11,100	7,900	22,900	4,420 B	4,490 B
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.50 U	1.3 B	0.33 U	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	1.3 U	0.40 U	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	2.6 B	10.8 B	9.8 B	NA
Iron	300 ST	7439-89-6	13.4 B	249	69.1 B	7.5 B	67.3 B	165	31.7 B	17.5 B
Lead	25 ST	7439-92-1	1.6 U	5.3	2.0 B	1.9 U	1.5 U	2.3 B	1.1 U	1.7 U
Magnesium	35,000 GV	7439-95-4	3,390 B	3,860 B	3,710 B	2,180 B	1,670 B	2,680 B	707 B	686 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.12 B	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.8 U	3.2 B	0.78 U	NA
Potassium	-	7440-09-7	2,250 B	4,080 B	4,030 B	3,710 B	3,180 B	10,100	2,920 B	2,890 B
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	1.7 U	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	18,600	17,900	19,700	16,800	16,500	16,100	16,900	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	3.5 B	3.6 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	1.4 U	1.1 U	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	48.5	136	16.6 B	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	456.4				462.3		399.7	391.5

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12I 11/14/2007 (ug/l)	MW-12I 2/12/2008 (ug/l)	MW-12I 5/14/2008 (ug/l)	MW-12I 8/6/2008 (ug/l)	MW-12I 11/5/2008 (ug/l)	MW-12I 2/25/2009 (ug/l)	MW-12I 8/13/2009 (ug/l)	MW-12I 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	8.7 U	NA	12.5 U	190 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	1.8 U	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	13.0 B	NA	28.5 B	23.4 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.096 U	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	30.7 B	NA	23.9 B	22.4 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.97 B
Calcium	-	7440-70-2	5,780 J	6,480	7,190	7,480	6,570	11,800	9,260	8,260
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.41 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	0.02 U	NA	0.49 U	1.0 B
Cobalt	-	7440-48-4	NA	NA	NA	NA	0.88 U	NA	0.76 U	1.2 U
Copper	200 ST	7440-50-8	NA	NA	NA	NA	0.65 U	NA	0.70 B	4.1 B
Iron	300 ST	7439-89-6	24.2 U	264	66.6 B	12.0 B	7.8 B	9.2 B	14.9 B	161 J*
Lead	25 ST	7439-92-1	1.4 U	1.4 U	2.3 U	2.3 U	1.3 U	1.3 U	9.1	1.8 U
Magnesium	35,000 GV	7439-95-4	889 JB	960 B	1,120 B	1,040 B	899 B	1,530 B	1,070 B	984 B
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	1.2 U	NA	0.82 U	1.6 B
Potassium	-	7440-09-7	2,150 B	2,750 B	3,300 B	3,950 B	3,320 B	3,870 B	5,630	5020
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	10,700 J	11,400	12,400	11,700	10,700	14,900	14,500	9,940
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	0.74 U	NA	0.77 U	1.4 U
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	2.8 B	NA	29	65.5
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12I 5/27/2011 (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)	MW-12I (ug/l)
Aluminum	-	7429-90-5	562							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	18.8 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	13.0 B							
Cadmium	5 ST	7440-43-9	2.5 B							
Calcium	-	7440-70-2	6,930							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3	2.6 B							
Cobalt	-	7440-48-4	0.49 U							
Copper	200 ST	7440-50-8	6.4 B							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	5.0							
Magnesium	35,000 GV	7439-95-4	1210 B							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	1.2 U							
Potassium	-	7440-09-7	4050 B							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5	8,910							
Thallium	0.5 GV	7440-28-0								
Vanadium	-	7440-62-2	2.3 B							
Zinc	2,000 ST	7440-66-6	53.4							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12S 10/31/1997 (ug/l)	MW-12S 12/7/2000 (ug/l)	MW-12S 2/5/2001 (ug/l)	MW-12S 8/22/2002 (ug/l)	MW-12S "F" 8/22/2002 (ug/l)	MW-12S 11/21/2002 (ug/l)	MW-12S 3/6/2003 (ug/l)	MW-12S 6/4/2003 (ug/l)	MW-12S 8/21/2003 (ug/l)
Aluminum	-	7429-90-5	275	135 B	109	NA	NA	182 B	NA	NA	13.9 U
Antimony	3 GV	7440-36-0	3 U	1.7 U	12.3 U	NA	NA	3.1 U	NA	NA	3.5 U
Arsenic	25 ST	7440-38-2	2.4 U	2.5 U	1.9 U	NA	NA	4.5 U	NA	NA	3.2 U
Barium	1,000 ST	7440-39-3	24.7	35.5 B	32.6	NA	NA	32.7 B	NA	NA	29.1 B
Beryllium	3 GV	7440-41-7	0.1 U	0.1 U	0.1 U	NA	NA	0.4 U	NA	NA	0.20 U
Boron	1,000 ST	7440-42-8	NA	102	108	NA	NA	94.5 B	NA	NA	103
Cadmium	5 ST	7440-43-9	0.3 U	0.4 U	0.2 U	0.10 U	0.10 U	0.5 U	0.10 U	0.10 U	0.30 U
Calcium	-	7440-70-2	32,500	33,500	38,700	45,800	45,600	42,500	40,400	28,700	46,600
Chromium Hexavalent	50 ST	18540-29-9	20 U	20 U	20 U	NA	NA	20 U	NA	NA	20 U
Chromium Total	50 ST	7440-47-3	8.3	8.7 B	3	NA	NA	[redacted]	NA	NA	9.5 B
Cobalt	-	7440-48-4	1.1 U	0.9 U	1.7 U	NA	NA	1 U	NA	NA	2.1 U
Copper	200 ST	7440-50-8	0.7 U	3.2 B	1.5 U	NA	NA	2.8 B	NA	NA	1.3 B
Iron	300 ST	7439-89-6	[redacted]	170	88.4	[redacted]	[redacted]	[redacted]	231	81.8 B	63.5 B
Lead	25 ST	7439-92-1	1.0 U	1.4 U	1.1 U	2.9 B	0.8 U	1.4 U	1.5 U	1.5 U	0.80 U
Magnesium	35,000 GV	7439-95-4	1,730	1,990 B	2,280	2,530 B	2,430 B	2,080 B	2,070 B	1,720 B	2,470 B
Manganese	300 ST	7439-96-5	29.2	45	14.1	247	36.2	20.3	45.8	4.8 B	3.4 B
Mercury	0.7 ST	7439-97-6	0.1 U	0.1 U	0.1 U	NA	NA	0.1 U	NA	NA	0.1 U
Nickel	100 ST	7440-02-0	1.3 U	3.5 B	1.4 U	NA	NA	2.7 B	NA	NA	2.6 B
Potassium	-	7440-09-7	14,700	14,900	15,400	14,400	14,200	10,700	13,500	9,400	10,700
Selenium	10 ST	7782-49-2	2.8 U	1.7 U	1.5 U	NA	NA	2.4 U	NA	NA	3.8 U
Silver	50 ST	7440-22-4	0.9 U	0.5 U	1.6 U	NA	NA	1 U	NA	NA	1 U
Sodium	20,000 ST	7440-23-5	17,800	18,000	[redacted]	[redacted]	[redacted]	14,300	[redacted]	[redacted]	16,200
Thallium	0.5 GV	7440-28-0	2.6 U	2.3 U	2.8 U	NA	NA	4.2 U	NA	NA	2.5 U
Vanadium	-	7440-62-2	1.2 U	0.98 B	1.7 U	NA	NA	1.6 B	NA	NA	1.8 U
Zinc	2,000 ST	7440-66-6	15	2.2 U	3.6 U	NA	NA	13.9 B	NA	NA	5.3 B
Cyanide	200 ST	0057-12-5	10 U	10 U	5 U	NA	NA	10 U	NA	NA	10 U
Iron + Manganese	500 ST	-	355.2	215	102.5	[redacted]	[redacted]	[redacted]	276.8	86.6	66.9

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determined

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12S 11/13/2003 (ug/l)	MW-12S 3/1/2004 (ug/l)	MW-12S 5/21/2004 (ug/l)	MW-12S 8/24/2004 (ug/l)	MW-12S 11/11/2004 (ug/l)	MW-12S 2/24/2005 (ug/l)	MW-12S 5/26/2005 (ug/l)	MW-12S 8/25/2005 (ug/l)
Aluminum	-	7429-90-5	NA	NA	22.3 B	NA	NA	79.2 B	NA	NA
Antimony	3 GV	7440-36-0	NA	NA	2.4 U	NA	NA	3.6 U	NA	NA
Arsenic	25 ST	7440-38-2	NA	NA	3.6 U	NA	NA	2.5 U	NA	NA
Barium	1,000 ST	7440-39-3	NA	NA	26.8 B	NA	NA	40 B	NA	NA
Beryllium	3 GV	7440-41-7	NA	NA	0.2 U	NA	NA	0.19 U	NA	NA
Boron	1,000 ST	7440-42-8	NA	NA	57.3 B	NA	NA	66.5 B	NA	NA
Cadmium	5 ST	7440-43-9	0.3 U	0.20 U	0.3 U	0.20 U	0.23 U	0.23 U	0.65 U	0.65 U
Calcium	-	7440-70-2	43,000	46,700	36,300	46,000	22,700	63,700	34,700	32,900
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	20 U	NA	NA	20 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	41.6	NA	NA	36.8	NA	NA
Cobalt	-	7440-48-4	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA
Copper	200 ST	7440-50-8	NA	NA	3.9 B	NA	NA	3.5 B	NA	NA
Iron	300 ST	7439-89-6	40.6 B	[redacted]	[redacted]	203	[redacted]	287	[redacted]	[redacted]
Lead	25 ST	7439-92-1	1.6 B	1.6 U	1.2 U	0.70 U	1.1 U	1.1 U	2.8 B	1.7 U
Magnesium	35,000 GV	7439-95-4	2,260 B	2,580 B	1,880 B	2,820 B	1,180 B	3,990 B	1,840 B	1,660 B
Manganese	300 ST	7439-96-5	6.2 B	33.7	22.8	6.0 B	7.4 B	10.4 B	9.2 B	30.4
Mercury	0.7 ST	7439-97-6	NA	NA	0.1 U	NA	NA	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	10.6 B	NA	NA	16.1 B	NA	NA
Potassium	-	7440-09-7	26,900	17,500	15,000	12,600	7,410	21,500	13,100	8,730
Selenium	10 ST	7782-49-2	NA	NA	3.1 B	NA	NA	3.0 U	NA	NA
Silver	50 ST	7440-22-4	NA	NA	0.5 U	NA	NA	1.2 B	NA	NA
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	11,800	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	NA	NA	2.8 U	NA	NA	2.7 U	NA	NA
Vanadium	-	7440-62-2	NA	NA	1.7 U	NA	NA	1.8 U	NA	NA
Zinc	2,000 ST	7440-66-6	NA	NA	6 B	NA	NA	34	NA	NA
Cyanide	200 ST	0057-12-5	NA	NA	10 U	NA	NA	10 U	NA	NA
Iron + Manganese	500 ST*	-	46.8	357.7	352.8	209	317.4	297.4	[redacted]	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*: Value is an apporximate concentration of the analyte in the sample as determinec

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12S 11/28/2005 (ug/l)	MW-12S 2/27/2006 (ug/l)	MW-12S 5/19/2006 (ug/l)	MW-12S 8/11/2006 (ug/l)	MW-12S 11/29/2006 (ug/l)	MW-12S 2/23/2007 (ug/l)	MW-12S 6/1/2007 (ug/l)	MW-12S 8/16/2007 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	10.2 U	5,050	3,530	NA
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	3.2 U	3.2 U	1.6 U	NA
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	2.9 U	8.0 B	7.1 B	NA
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	26.1 B	39.8 B	30.4 B	NA
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.17 U	0.27 B	0.59 B	NA
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	57.0 B	46.8 B	37.6 B	NA
Cadmium	5 ST	7440-43-9	0.43 U	0.26 U	0.34 U	0.34 U	0.28 U	0.29 B	0.21 B	0.28 U
Calcium	-	7440-70-2	31,100	35,100	21,800	15,500	26,500	27,400	22,700	24,600
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	7.6 B	[redacted]	72.4	NA
Cobalt	-	7440-48-4	NA	NA	NA	NA	1.3 U	5.5 B	3.5 B	NA
Copper	200 ST	7440-50-8	NA	NA	NA	NA	1.6 B	12.9 B	6.0 B	NA
Iron	300 ST	7439-89-6	87.3 B	[redacted]	97.3 B	[redacted]	203	[redacted]	[redacted]	21.2 B
Lead	25 ST	7439-92-1	1.6 U	1.8 B	1.9 U	1.9 U	1.5 U	4.8	3.0 B	1.7 U
Magnesium	35,000 GV	7439-95-4	1,710 B	2,550 B	1,430 B	1,040 B	1,920 B	2,290 B	2,290 B	2,000 B
Manganese	300 ST	7439-96-5	5.6 B	13.3 B	6.8 B	35	4.0 B	[redacted]	295	2.2 B
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.1U	0.10 U	NA	NA
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	6.8 B	29.1 B	16.6 B	NA
Potassium	-	7440-09-7	12,400	13,400	21,000	29,800	20,800	17,500	11,400	17,900
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.7 U	2.4 B	3.0 U	NA
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.38 U	0.38 U	0.51 U	NA
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	18,600	U*
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	2.9 U	5.0 B	5.5 B	NA
Vanadium	-	7440-62-2	NA	NA	NA	NA	1.4 U	14.0 B	9.3 B	NA
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	36.0	52.2	23.9	NA
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA
Iron + Manganese	500 ST*	-	92.9	482.3	100.1	[redacted]	207	[redacted]	[redacted]	23.4

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12S 11/14/2007 (ug/l)	MW-12S 2/12/2008 (ug/l)	MW-12S 5/14/2008 (ug/l)	MW-12S 8/6/2008 (ug/l)	MW-12S 11/5/2008 (ug/l)	MW-12S 2/25/2009 (ug/l)	MW-12S 8/13/2009 (ug/l)	MW-12S 2/5/2010 (ug/l)
Aluminum	-	7429-90-5	NA	NA	NA	NA	6710	NA	12.5 U	157 B
Antimony	3 GV	7440-36-0	NA	NA	NA	NA	2.3 U	NA	2.5 U	2.1 U
Arsenic	25 ST	7440-38-2	NA	NA	NA	NA	6.0 B	NA	3.0 U	2.3 U
Barium	1,000 ST	7440-39-3	NA	NA	NA	NA	47.1 B	NA	26.7 B	25.1 B
Beryllium	3 GV	7440-41-7	NA	NA	NA	NA	0.38 B	NA	0.13 U	0.26 U
Boron	1,000 ST	7440-42-8	NA	NA	NA	NA	55.4 B	NA	38.1 B	42.9 B
Cadmium	5 ST	7440-43-9	0.32 U	0.32 U	0.27 U	0.27 U	0.35 U	0.35 U	0.26 U	0.34 U
Calcium	-	7440-70-2	27,000 J	30,400	26,900	29,200	29,900	28,200	30,800	28,900
Chromium Hexavalent	50 ST	18540-29-9	NA	NA	NA	NA	0.02 U	NA	0.02 U	0.02 U
Chromium Total	50 ST	7440-47-3	NA	NA	NA	NA	[redacted]	NA	3.2 B	[redacted]
Cobalt	-	7440-48-4	NA	NA	NA	NA	5.4 B	NA	0.76 U	2.4 B
Copper	200 ST	7440-50-8	NA	NA	NA	NA	12.8 B	NA	0.90 B	3.2 B
Iron	300 ST	7439-89-6	132	[redacted]	[redacted]	[redacted]	[redacted]	110	64.6 B	[redacted]
Lead	25 ST	7439-92-1	1.4 U	1.4 U	2.3 U	2.8 B	5.0	1.3 U	7.9	1.8 U
Magnesium	35,000 GV	7439-95-4	1,720 JB	1,860 B	2,210 B	2,490 B	2,770	2,440 B	2,410 B	2,620 B
Manganese	300 ST	7439-96-5	2.8 JB	17.7	28.5	139	[redacted]	24.4	10.0 B	136
Mercury	0.7 ST	7439-97-6	NA	NA	NA	NA	0.13 U	NA	0.10 U	0.10 U
Nickel	100 ST	7440-02-0	NA	NA	NA	NA	19.7 B	NA	2.1 B	7.9 B
Potassium	-	7440-09-7	17,600	14,400	11,200	19,900	20,100	15,300	15,400	19500
Selenium	10 ST	7782-49-2	NA	NA	NA	NA	1.9 U	NA	5.3 U	2.5 U
Silver	50 ST	7440-22-4	NA	NA	NA	NA	0.54 U	NA	0.33 U	0.83 U
Sodium	20,000 ST	7440-23-5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	0.5 GV	7440-28-0	NA	NA	NA	NA	1.9 U	NA	3.9 U	3.2 U
Vanadium	-	7440-62-2	NA	NA	NA	NA	15.9 B	NA	0.77 U	2.6 B
Zinc	2,000 ST	7440-66-6	NA	NA	NA	NA	23.9	NA	8.3 B	11.6 B
Cyanide	200 ST	0057-12-5	NA	NA	NA	NA	10.0 U	NA	10.0 U	10.0 U
Iron + Manganese	500 ST*	-	134.8	[redacted]	[redacted]	[redacted]	[redacted]	134.4	74.6	[redacted]

NOTES:

J: Estimated due to data validation criteria.

[redacted] Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

Appendix A-2

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
INORGANIC PARAMETERS

CONSTITUENT	NYSDEC Class GA Groundwater Standards/ Guidance Values	CAS #	MW-12S 5/27/2011 (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)	MW-12S (ug/l)
Aluminum	-	7429-90-5	1480							
Antimony	3 GV	7440-36-0	2.1 U							
Arsenic	25 ST	7440-38-2	1.9 U							
Barium	1,000 ST	7440-39-3	52.0 B							
Beryllium	3 GV	7440-41-7	0.13 U							
Boron	1,000 ST	7440-42-8	26.5 B							
Cadmium	5 ST	7440-43-9	0.27 U							
Calcium	-	7440-70-2	35,200							
Chromium Hexavalent	50 ST	18540-29-9	20 U							
Chromium Total	50 ST	7440-47-3								
Cobalt	-	7440-48-4	10.1 B							
Copper	200 ST	7440-50-8	35.6							
Iron	300 ST	7439-89-6								
Lead	25 ST	7439-92-1	9.7							
Magnesium	35,000 GV	7439-95-4	3,980 B							
Manganese	300 ST	7439-96-5								
Mercury	0.7 ST	7439-97-6	0.10 UU*J*							
Nickel	100 ST	7440-02-0	74.7							
Potassium	-	7440-09-7	18,300							
Selenium	10 ST	7782-49-2	2.6 UNU*J*							
Silver	50 ST	7440-22-4	0.52 UU*J*							
Sodium	20,000 ST	7440-23-5								
Thallium	0.5 GV	7440-28-0	2.7 U							
Vanadium	-	7440-62-2	16.9 B							
Zinc	2,000 ST	7440-66-6	42.9							
Cyanide	200 ST	0057-12-5	10.0 U							
Iron + Manganese	500 ST*	-								

NOTES:

J: Estimated due to data validation criteria.

Concentration exceeds Standard/Guidance Value.

U: Analyzed for but not detected, value shown is instrument detection limit.

NA: Not analyzed.

B: Concentration is above instrument detection limit but below contract required detection

U*: Result qualified as non-detect based on validation criteria

J*:Value is an apporximate concentration of the analyte in the sample as determinec

N: Matrix spike sampe recovery not within control limits.

"F": Filterd by lab for dissolved metals

ST: Standard.

GV: Guidance value.

APPENDIX A-3

Volatile Organic Compounds

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	MW-01D	NYSDEC Class GA
Date of Collection		10/24/1997	1/28/1998	11/30/2000	1/30/2001	11/20/2002	8/21/2003	5/20/2004	2/28/2005	11/29/2006	2/21/2007	11/3/2008	8/12/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	[redacted]	[redacted]	5 U	1.1 J	5 U	3 J	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	[redacted]	3 J	3.3 J	3 J	[redacted]	[redacted]	3 J	1 J	5 U	3 J*	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	5 J	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J*	3 J	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	U*	U*	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]	[redacted]	5 U	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		84	227	15	13.1	3	26	17	3	4	11	6	3 J	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	4 J	3.7 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	MW-01I	NYSDEC Class GA
Date of Collection		10/24/1997	1/28/1998	11/30/2000	1/30/2001	11/20/2002	8/21/2003	5/20/2004	2/28/2005	11/29/2006	2/21/2007	11/3/2008	8/12/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	[redacted]	[redacted]	[redacted]	[redacted]	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	2 J	5 U	2 J	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloroethene	000075-35-4	2 J	10.0 U	2 J	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 J*	5 U	5 UJ*	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 J*	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 J*	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J*	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
TOTAL VOCs		38	18.1	29	16.5	53	2	U	2	U	U	U	U	5 UJ*	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 J*	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	MW-01S	NYSDEC Class GA
Date of Collection		10/24/1997	1/28/1998	11/30/2000	1/29/2001	11/20/2002	8/21/2003	5/20/2004	2/28/2005	11/29/2006	2/21/2007	11/3/2008	8/12/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	[redacted]	3 J	2.2 J	2 J	3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]	[redacted]	5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		8	12	12	13.5	2	3	U	2	U	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	2 J	3.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	MW-02D	NYSDEC Class GA
Date of Collection		10/27/1997	1/28/1998	12/1/2000	1/30/2001	11/20/2002	8/22/2003	5/20/2004	02/28/05	11/30/06	02/22/07	11/3/2008	8/14/2009	2/8/2010	5/31/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J*	1 J	1 J	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		U	U	U	U	1	U	U	U	U	U	1 J*	1 J	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	MW-02I	NYSDEC Class GA
Date of Collection		10/27/1997	1/28/1998	12/1/2000	1/30/2001	11/20/2002	8/21/2003	5/20/2004	02/28/05	11/30/06	02/22/07	11/3/2008	8/14/2009	2/8/2010	5/31/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		U	U	U	1.8	U	U	4	U	U	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	1.8 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-02S	MW-02S	MW-02S	MW-02S										NYSDEC Class GA
Date of Collection		10/27/1997	1/28/1998	11/30/2000	1/31/2001										GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)										STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U										5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U										5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U										5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U										5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U										3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U										0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U										5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U										1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U										3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U										50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U										50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U										-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U										50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U										5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U										1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U										5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U										50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U										50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U										5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U										60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U										5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U										7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U										5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U										5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U										0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U										50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U										5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U										5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U										5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U										5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U										5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U										5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U										5 ST
TOTAL VOCs		U	U	U	U										
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U										5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U										0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U										5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U										5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U										5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U										-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U										2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U										5 ST

QUALIFIERS
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D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
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[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-03D	MW-03D	MW-03D	MW-03D										NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/7/2000	2/2/2001										GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)										STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U										5 ST
1,1,1-Trichloroethane	000071-55-6			2 J	2.1 J										5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U										0.4 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U										0.4 ST
1,1-Dichloroethane	000075-34-3		3.5 J	4 J	3.5 J										3 ST
1,1-Dichloroethene	000075-35-4		2.9 J	5 U	10 U										5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U										0.6 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	2.1 J										5 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U										-
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U										-
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U										5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U										5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U										5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U										50 GV
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U										5 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U										5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U										5 ST
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U										5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U										5 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U										5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U										50 GV
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U										5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U										50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U										7 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U										1 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U										5 ST
Carbon tetrachloride	000056-23-5	1.80 U	3.0 J	5 U	10 U										5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U										5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U										5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U										5 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U										50 GV
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U										5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U										2 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U										5 ST
Dibromomethane	000074-95-3	NA	NA	5 U	10 U										60 GV
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U										50 GV
Iodomethane	000074-88-4	NA	NA	5 U	10 U										5 ST
Methylene chloride	000075-09-2	1.40 U	2.5 J	5 U	10 U										5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U										5 ST
Tetrachloroethene	000127-18-4	1.40 U	2.0 J	5 U	10 U										5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U										1 ST
TOTAL VOCs		81	31.9	6	8.8										50 GV
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U										5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U										5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U										5 ST
Trichloroethene	000079-01-6	1 J	10.0 U	5 U	1.1 J										3 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U										0.04 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U										0.04 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U										5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U										

QUALIFIERS
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-03I	MW-03I	MW-03I	MW-03I											NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/7/2000	2/2/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	[redacted]	[redacted]	2 J	1.9 J											0.4 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											0.4 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											3 ST
1,1-Dichloroethane	000075-34-3	[redacted]	[redacted]	2 J	2.4 J											5 ST
1,1-Dichloroethene	000075-35-4	5 J	3.6 J	5 U	10 U											0.6 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	1.5 J											-
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											-
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											5 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											5 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U											50 GV
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											5 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											5 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											5 ST
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											5 ST
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											5 ST
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U											5 ST
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											50 GV
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U											5 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											50 GV
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											7 ST
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											1 ST
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											5 ST
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											50 GV
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											2 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											5 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											60 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											50 GV
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											1 ST
TOTAL VOCs		66	52.4	4	6.8											50 GV
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											5 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	3 J	3.0 J	5 U	1.0 J											3 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											0.04 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											0.04 ST
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U											5 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											

QUALIFIERS
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NOTES
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	MW-03S	NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/6/2000	2/2/2001	11/22/2002	8/25/2003	5/24/2004	3/2/2005	11/29/2006	2/22/2007	11/5/2008	8/14/2009	2/4/2010	6/1/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	4 J	10.0 U	3 J	2.8 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		4	U	3	2.8	U	U	U	U	U	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	MW-04D	NYSDEC Class GA
Date of Collection		10/28/1997	1/28/1998	12/6/2000	2/1/2001	11/21/2002	8/25/2003	5/24/2004	03/01/05	11/30/06	02/23/07	11/3/2008	8/12/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0		3.0 J	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1 J	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3			4 J	2.5 J	5 U	3 J	3 J	4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	4 J	2.5 J	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		23	32.5	4	2.5	1	3	4	4	U	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
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U: Compound was analyzed for but not detected at the detection limit shown.
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NOTES
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	MW-04I	NYSDEC Class GA
Date of Collection		10/29/1997	1/28/1998	12/6/2000	2/1/2001	11/22/2002	8/22/2003	5/24/2004	03/01/05	11/30/06	02/23/07	11/4/2008	8/12/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U	1 J	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	3 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	5 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	2 J	1.4 J	2 J	3 J	1 J	3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	5	[redacted]	[redacted]	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		29	8.6	65	30.4	13	8	59	15	1	U	U	1 J	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	MW-04S	NYSDEC Class GA
Date of Collection		10/29/1997	2/2/1998	12/6/2000	2/1/2001	11/22/2002	8/25/2003	5/24/2004	3/1/2005	11/30/2006	3/2/2007	11/3/2008	8/12/2009	2/4/2010	5/31/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	[redacted]	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	3.4 J	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	4 J	3.0 J	3 J	2.9 J	[redacted]	3 J	2 J	2 J	2 J	2 J	2 J*	5 U	2 J	2 J	5 ST
Chloroethane	000075-00-3	[redacted]	[redacted]	5 J	3.8 J	5 U	3 J	5 U	5 U	3 J	2 J	5 U	5 U	1 J	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		12	13.6	8	6.7	11.2	7	2	2	5	4	2 J*	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	MW-05D	NYSDEC Class GA
Date of Collection		10/29/1997	2/3/1998	12/8/2000	2/2/2001	11/22/2002	8/25/2003	5/25/2004	03/02/05	11/30/06	02/21/07	11/5/2008	8/17/2009	2/8/2010	6/1/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	1 J	2.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	2 J	3.9 J	2 J	3.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	3 J	10.0 U	5 U	1.2 J	1 J	2 J	2 J	5 U	5 U	5 U	1 J*	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	5 U	5 U	1 J*	5 U	5 U	5 U	5 ST
TOTAL VOCs		6	3.9	3	7	2	2	2	U	U	U	2	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	MW-05I	NYSDEC Class GA
Date of Collection		10/29/1997	2/2/1998	12/8/2000	2/2/2001	11/22/2002	8/25/2003	5/25/2004	03/02/05	11/30/06	02/21/07	11/5/2008	8/17/2009	2/8/2010	5/31/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	4 J	4.2 J	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	-
Acetone	000067-64-1	0.4 U	3.5 J	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		8	9.9	U	U	1	U	U	U	U	U	U	1 J	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Trichloroethene	000079-01-6	4 J	2.2 J	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	MW-05S	NYSDEC Class GA
Date of Collection		10/29/1997	2/3/1998	12/8/2000	2/2/2001	11/22/2002	8/25/2003	5/25/2004	03/02/05	11/30/06	02/21/07	11/5/2008	8/17/2009	2/8/2010	5/31/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	1.2 J	5 U	1 J	1 J	5 U	1 J	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	5 J	2.4 J	3 J	4.9 J	5 U	1 J	2 J	1 J	4 J	5 U	3 J*	5 U	2 J	2 J	5 ST
Chloroethane	000075-00-3			3 J			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	NA	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		14	7.5	6	13.3	6.6	2	3	1	5	U	3	U	5 U	2	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	NA	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-6D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	MW-06D	NYSDEC Class GA
Date of Collection		10/28/1997	1/28/1998	12/5/2000	1/31/2001	11/20/2002	8/22/2003	5/24/2004	03/01/05	12/01/06	02/22/07	11/3/2008	8/11/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6			5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0			NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	1 J	1	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4					5	2 J	5 U	5 U	5 U	5 U	1 J*	5 U	5 U	1 J	5 ST
Toluene	000108-88-3	1 J	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		1,776	2,032	18	12	8	2	U	U	U	U	1	U	5 U	1	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6			2 J	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4			5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
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D: Result taken from analysis at a secondary dilution.
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NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
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J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	MW-06I	NYSDEC Class GA
Date of Collection		10/28/1997	1/28/1998	12/5/2000	2/1/2001	11/21/2002	8/22/2003	5/24/2004	03/01/05	12/01/06	02/22/07	11/4/2008	8/11/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	4 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	5 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	4 J	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	3 J	10.0 U	2 J	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
TOTAL VOCs		12	U	29	3.1	U	U	U	U	U	U	U	UJ*	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	[redacted]	3.1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	MW-06S	NYSDEC Class GA
Date of Collection		10/28/1997	1/28/1998	12/5/2000	2/1/2001	11/20/2002	8/22/2003	5/24/2004	03/01/05	12/01/06	02/22/07	11/4/2008	8/11/2009	2/4/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	5 UJ*	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J*	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	1 J	5 U	5 U	2 J	5 U	4 J*	5 U	5 UJ*	2 J	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ*	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Benzene	000071-43-2	[redacted]	[redacted]	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Chlorobenzene	000108-90-7	4 J	[redacted]	5 U	1.1 J	2 J	2 J	1 J	5 U	3 J	1 J	4 J*	5 U	2 J*	3 J	5 ST
Chloroethane	000075-00-3	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	1 J	[redacted]	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UJ*	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
TOTAL VOCs		9	10.3	1	9.7	3	3	1	U	5	1	8	U	5 UJ*	5	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	[redacted]	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
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D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-07D	MW-07D	MW-07D	MW-07D										NYSDEC Class GA
Date of Collection		10/27/1997	1/28/1998	12/1/2000	1/31/2001										GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)										STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U										5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U										5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U										5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U										5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U										3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U										0.6 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	[redacted]	NA	10 U										5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U										1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U										3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U										50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U										50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U										-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U										50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U										5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U										1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U										5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U										50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U										50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U										5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U										60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U										5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U										7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U										5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U										5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U										0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U										50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U										5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U										5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U										5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U										5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U										5 ST
Tetrachloroethene	000127-18-4	[redacted]	[redacted]	4 J	3.5 J										5 ST
Toluene	000108-88-3	1 J	10.0 U	5 U	10 U										5 ST
TOTAL VOCs		38	467.7	4	3.5										
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U										5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U										0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U										5 ST
Trichloroethene	000079-01-6	3 J	[redacted]	5 U	10 U										5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U										5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U										-
Vinyl chloride	000075-01-4	1 J	[redacted]	5 U	10 U										2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U										5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
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NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	MW-07I	NYSDEC Class GA
Date of Collection		10/28/1997	1/28/1998	12/1/2000	1/31/2001	11/20/2002	8/22/2003	5/20/2004	02/28/05	11/28/06	02/22/07	11/4/2008	8/14/2009	2/8/2010	5/26/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	[redacted]	2.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	[redacted]	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 U	5 U	4 J*	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U	3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		U	U	6	2.6	3	U	1	U	U	U	23	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-07S	MW-07S	MW-07S	MW-07S										NYSDEC Class GA
Date of Collection		10/27/1997	1/28/1998	12/5/2000	1/31/2001										GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)										STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U										5 ST
1,1,1-Trichloroethane	000071-55-6	0.6 U	10.0 U	5 U	10 U										5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1,2-Trichloroethane	000079-00-5	0.2 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethane	000075-34-3	0.4 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethene	000075-35-4	0.6 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U										5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U										5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U										3 ST
1,2-Dichloroethane	000107-06-2	0.2 U	10.0 U	5 U	10 U										0.6 ST
1,2-Dichloroethene (total)	000540-59-0	0.4 U	10.0 U	NA	10 U										5 ST
1,2-Dichloropropane	000078-87-5	0.4 U	10.0 U	5 U	10 U										1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U										3 ST
2-Butanone	000078-93-3	0.2 U	10.0 U	5 U	10 U										50 GV
2-Hexanone	000591-78-6	0.2 U	10.0 U	5 U	10 U										50 GV
4-Methyl-2-pentanone	000108-10-1	0.2 U	10.0 U	5 U	10 U										-
Acetone	000067-64-1	0.4 U	10.0 U	5 U	10 U										50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U										5 ST
Benzene	000071-43-2	0.4 U	10.0 U	5 U	10 U										1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U										5 ST
Bromodichloromethane	000075-27-4	0.2 U	10.0 U	5 U	10 U										50 GV
Bromoform	000075-25-2	0.6 U	10.0 U	5 U	10 U										50 GV
Bromomethane	000074-83-9	0.4 U	10.0 U	5 U	10 U										5 ST
Carbon disulfide	000075-15-0	0.4 U	10.0 U	5 U	10 U										60 GV
Carbon tetrachloride	000056-23-5	0.4 U	10.0 U	5 U	10 U										5 ST
Chlorobenzene	000108-90-7	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroethane	000075-00-3	0.4 U	10.0 U	5 U	10 U										5 ST
Chloroform	000067-66-3	0.2 U	10.0 U	5 U	10 U										7 ST
Chloromethane	000074-87-3	0.6 U	10.0 U	5 U	10 U										5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U										5 ST
cis-1,3-Dichloropropene	010061-01-5	0.2 U	10.0 U	5 U	10 U										0.4 ST
Dibromochloromethane	000124-48-1	0.2 U	10.0 U	5 U	10 U										50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U										5 ST
Ethylbenzene	000100-41-4	0.4 U	10.0 U	5 U	10 U										5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U										5 ST
Methylene chloride	000075-09-2	0.4 U	10.0 U	5 U	10 U										5 ST
Styrene	000100-42-5	0.4 U	10.0 U	5 U	10 U										5 ST
Tetrachloroethene	000127-18-4	0.4 U	10.0 U	5 U	10 U										5 ST
Toluene	000108-88-3	0.4 U	10.0 U	5 U	10 U										5 ST
TOTAL VOCs		U	U	U	U										
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U										5 ST
trans-1,3-Dichloropropene	010061-02-6	0.2 U	10.0 U	5 U	10 U										0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U										5 ST
Trichloroethene	000079-01-6	0.4 U	10.0 U	5 U	10 U										5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U										5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U										-
Vinyl chloride	000075-01-4	0.6 U	10.0 U	5 U	10 U										2 ST
Xylene (total)	001330-20-7	0.6 U	10.0 U	5 U	10 U										5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-10D	MW-10D	MW-10D	MW-10D											NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/1/2000	2/5/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	3 J	10 U	5 U	1.2 J											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.2	3.4 J	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2 U	10 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	8 J	3.4 J	1 J	1.7 J											5 ST
1,1-Dichloroethene	000075-35-4	1.4 U	10 U	5 U	10 U											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.4 U	10 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.6 U	10 U	NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.4 U	10 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											3 ST
2-Butanone	000078-93-3	2.2 U	7.8 J	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.4 U	7.0 J	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.4 U	6.5 J	5 U	10 U											-
Acetone	000067-64-1	3.4 U	9.6 J	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.4 U	10 U	5 U	10 U											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.8 U	10 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.8 U	10 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.4 U	10 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.2 U	10 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.8 U	10 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.4 U	10 U	5 U	10 U											5 ST
Chloroethane	000075-00-3	1.4 U	10 U	5 U	10 U											5 ST
Chloroform	000067-66-3	1.4 U	10 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.4 U	10 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											5 ST
cis-1,3-Dichloropropene	010061-01-5	1.4 U	10 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.2 U	10 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.4 U	10 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.4 U	10 U	5 U	10 U											5 ST
Styrene	000100-42-5	1.4 U	10 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.4 U	10 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.2 U	10 U	5 U	10 U											5 ST
TOTAL VOCs		11	39.8	1	2.9											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.8 U	10 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	1.4 U	2.1 J	5 U	10 U											5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	1.4 U	10 U	5 U	10 U											2 ST
Xylene (total)	001330-20-7	1.6 U	10 U	5 U	10 U											5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range, value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-10I	MW-10I	MW-10I	MW-10I											NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/1/2000	2/5/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	1 J	10 U											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	2.8 J	1 J	1.0 J											5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloroprupane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	4.8 J	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											5 ST
TOTAL VOCs		11	7.6	2	1											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U											5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U											2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

QUALIFIERS
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E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
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SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-10S	MW-10S	MW-10S	MW-10S											NYSDEC Class GA
Date of Collection		10/30/1997	2/2/1998	12/1/2000	2/5/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	[redacted]	4.0 J	[redacted]	4.2 J											5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	4.4 J	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroethane	000075-00-3	2 J	10.0 U	5 U	10 U											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	2.1 J	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											5 ST
TOTAL VOCs		26	10.5	6	4.2											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U											5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U											2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	NYSDEC Class GA
Date of Collection		10/31/1997	1/28/1998	12/13/2000	2/7/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/28/07	11/5/2008	8/13/2009	2/5/2010	5/27/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	2 J	5	3 J*	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	1 J	5 U	5 U	5 U	2 J	5	3 J*	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	2 J	3 J*	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	2 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 BJ	5 U*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	1 J*	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		2	U	U	U	1	U	U	U	4	12	12	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J*	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	NYSDEC Class GA
Date of Collection		10/31/1997	1/28/1998	12/13/2000	2/7/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/28/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	2 J	10.0 U			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3		3.2 J			5 U	2 J		1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	1.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J*	5 U	2 J	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J*	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		9	3.2	62	120.6	U	2	12	1	0	U	4	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	MW-11S	NYSDEC Class GA
Date of Collection		10/31/1997	1/28/1998	12/13/2000	2/7/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	3 J	[redacted]	5 U	2.0 J	2 J	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	[redacted]	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	4 J*	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	[redacted]	5 J	5 U	5 U	[redacted]	3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UI*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		39	29.7	31	9.2	2	2	11	3	U	U	4	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	[redacted]	[redacted]	[redacted]	2.2 J	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
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NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
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J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	NYSDEC Class GA
Date of Collection		10/31/1997	1/28/1998	12/8/2000	2/7/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	1 J	5 U	1 J	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		U	U	U	U	2	U	1	U	1	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	MW-12I	NYSDEC Class GA
Date of Collection		10/31/1997	1/30/1998	12/7/2000	2/8/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/23/07	11/4/2008	8/13/2009	2/5/2010	5/27/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1 J	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	[redacted]	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 BJ	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	2 J	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		1	U	U	U	U	2	1	U	4	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range, value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	NYSDEC Class GA
Date of Collection		10/31/1997	1/30/1998	12/7/2000	2/5/2001	11/21/2002	8/21/2003	5/21/2004	02/24/05	11/29/06	02/23/07	11/4/2008	8/13/2009	2/5/2010	527/2011	GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*	50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UU*J*	5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ*	5 U	5 U	5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
TOTAL VOCs		U	U	U	U	2	U	U	U	U	U	U	U	5 U	5 U	
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-13D	MW-13D	MW-13D	MW-13D											NYSDEC Class GA
Date of Collection		11/3/1997	2/3/1998	12/12/2000	2/6/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	NA	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	1.2 J											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	4 J	3.6 J													5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	2.0 J	2 J	1.8 J											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0			NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	1.3 J											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U		5 U	1.0 J											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	2 J	4.1 J	5 U	1.7 J											5 ST
Chloroethane	000075-00-3	3 J	10.0 U	2 J	2.6 J											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA													5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1 J	10.0 U													5 ST
Toluene	000108-88-3	1.20 U	2.5 J	5 U	10 U											5 ST
TOTAL VOCs		44	51.8	896	1,208.7											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	1 J											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	NA	10 U											5 ST
Trichloroethene	000079-01-6	1 J	2.9 J													5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	2 J	10.0 U													2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-13I	MW-13I	MW-13I	MW-13I											NYSDEC Class GA
Date of Collection		11/3/1997	2/3/1998	12/12/2000	2/6/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	4 J	3.1 J													5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	3.7 J											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0			NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	1.5 J											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U												1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	2.6 J											5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	1.4 J											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA													5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	2.3 J	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4															5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											5 ST
TOTAL VOCs		97	78.9	1,068	1,608.1											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	2 J											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	4 J	4.8 J													5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4															2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

APPENDIX A-3

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-14D	MW-14D	MW-14D	MW-14D										NYSDEC Class GA GROUNDWATER STANDARD/GUIDANCE VALUE
Date of Collection		11/3/1997	2/3/1998	12/11/2000	2/7/2001										
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)										
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U										5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U										5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U										5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethane	000075-34-3	1 J	10.0 U	5 U	10 U										5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U										5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U										5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U										0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U										5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U										3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U										0.6 ST
1,2-Dichloroethene (total)	000540-59-0	[redacted]	10.0 U	NA	10 U										5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U										1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U										3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U										50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U										50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U										-
Acetone	000067-64-1	2 J	10.0 U	5 U	10 U										50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U										5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U										1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U										5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U										50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U										50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U										5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U										60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U										5 ST
Chlorobenzene	000108-90-7	1 J	10.0 U	2 J	2.4 J										5 ST
Chloroethane	000075-00-3	5 J	10.0 U	[redacted]	[redacted]										5 ST
Chloroform	000067-66-3	1.40 U	2.1 J	5 U	10 U										7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U										5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	2 J	4 J										5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U										0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U										50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U										5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U										5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U										5 ST
Methylene chloride	000075-09-2	1.40 U	2.9 J	5 U	10 U										5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U										5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U										5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U										5 ST
TOTAL VOCs		44	5	12	15.3										
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U										5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U										0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U										5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U										5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U										5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U										-
Vinyl chloride	000075-01-4	[redacted]	10.0 U	2 J	[redacted]										2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U										5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range, value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-14I	MW-14I	MW-14I	MW-14I											NYSDEC Class GA
Date of Collection		11/3/1997	2/3/1998	12/11/2000	2/6/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	5.5 J	5 U	2 J											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	2.8 J											5 ST
Chloroethane	000075-00-3	[redacted]	[redacted]	3 J	4.3 J											5 ST
Chloroform	000067-66-3	1.40 U	10.0 U	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	10.0 U	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											5 ST
TOTAL VOCs		8	12.4	3	9.1											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U											5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U											2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range, value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

SONIA ROAD LANDFILL
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORIC AND CURRENT SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-14S	MW-14S	MW-14S	MW-14S											NYSDEC Class GA
Date of Collection		11/3/1997	2/3/1998	12/11/2000	2/6/2001											GROUNDWATER
Volatile Organic Compounds	CAS #	(ug/l)	(ug/l)	(ug/l)	(ug/l)											STANDARD/GUIDANCE VALUE
1,1,1,2-Tetrachloroethane	000630-20-6	NA	NA	5 U	10 U											5 ST
1,1,1-Trichloroethane	000071-55-6	1.80 U	10.0 U	5 U	10 U											5 ST
1,1,2,2-Tetrachloroethane	000079-34-5	2.20 U	10.0 U	5 U	10 U											5 ST
1,1,2-Trichloroethane	000079-00-5	2.00 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethane	000075-34-3	1.20 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloroethene	000075-35-4	1.40 U	10.0 U	5 U	10 U											5 ST
1,1-Dichloropropene	000563-58-6	NA	NA	NA	10 U											5 ST
1,2,3-Trichloropropane	000096-18-4	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromo-3-chloropropane	000096-12-8	NA	NA	5 U	10 U											0.04 ST
1,2-Dibromoethane	000106-93-4	NA	NA	5 U	10 U											5 ST
1,2-Dichlorobenzene	000095-50-1	NA	NA	5 U	10 U											3 ST
1,2-Dichloroethane	000107-06-2	1.40 U	10.0 U	5 U	10 U											0.6 ST
1,2-Dichloroethene (total)	000540-59-0	2.60 U	10.0 U	NA	10 U											5 ST
1,2-Dichloropropane	000078-87-5	1.40 U	10.0 U	5 U	10 U											1 ST
1,4-Dichlorobenzene	000106-46-7	NA	NA	5 U	10 U											3 ST
2-Butanone	000078-93-3	2.20 U	10.0 U	5 U	10 U											50 GV
2-Hexanone	000591-78-6	1.40 U	10.0 U	5 U	10 U											50 GV
4-Methyl-2-pentanone	000108-10-1	1.40 U	10.0 U	5 U	10 U											-
Acetone	000067-64-1	3.40 U	10.0 U	5 U	10 U											50 GV
Acrylonitrile	000107-13-1	NA	NA	5 U	50 U											5 ST
Benzene	000071-43-2	1.40 U	10.0 U	5 U	10 U											1 ST
Bromochloromethane	000074-97-5	NA	NA	5 U	10 U											5 ST
Bromodichloromethane	000075-27-4	1.80 U	10.0 U	5 U	10 U											50 GV
Bromoform	000075-25-2	1.80 U	10.0 U	5 U	10 U											50 GV
Bromomethane	000074-83-9	1.40 U	10.0 U	5 U	10 U											5 ST
Carbon disulfide	000075-15-0	1.20 U	10.0 U	5 U	10 U											60 GV
Carbon tetrachloride	000056-23-5	1.80 U	10.0 U	5 U	10 U											5 ST
Chlorobenzene	000108-90-7	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroethane	000075-00-3	1.40 U	10.0 U	5 U	10 U											5 ST
Chloroform	000067-66-3	1.40 U	2.1 J	5 U	10 U											7 ST
Chloromethane	000074-87-3	1.40 U	10.0 U	5 U	10 U											5 ST
cis-1,2-Dichloroethene	000156-59-2	NA	NA	5 U	10 U											5 ST
cis-1,3-Dichloropropene	010061-01-5	1.40 U	10.0 U	5 U	10 U											0.4 ST
Dibromochloromethane	000124-48-1	2.20 U	10.0 U	5 U	10 U											50 GV
Dibromomethane	000074-95-3	NA	NA	5 U	10 U											5 ST
Ethylbenzene	000100-41-4	1.40 U	10.0 U	5 U	10 U											5 ST
Iodomethane	000074-88-4	NA	NA	5 U	10 U											5 ST
Methylene chloride	000075-09-2	1.40 U	2.0 J	5 U	10 U											5 ST
Styrene	000100-42-5	1.40 U	10.0 U	5 U	10 U											5 ST
Tetrachloroethene	000127-18-4	1.40 U	10.0 U	5 U	10 U											5 ST
Toluene	000108-88-3	1.20 U	10.0 U	5 U	10 U											5 ST
TOTAL VOCs		U	4.1	U	U											
trans-1,2-Dichloroethene	000156-60-5	NA	NA	5 U	10 U											5 ST
trans-1,3-Dichloropropene	010061-02-6	1.80 U	10.0 U	5 U	10 U											0.4 ST
trans-1,4-Dichloro-2-butene	000110-57-6	NA	NA	5 U	10 U											5 ST
Trichloroethene	000079-01-6	1.40 U	10.0 U	5 U	10 U											5 ST
Trichlorofluoromethane	000075-69-4	NA	NA	5 U	10 U											5 ST
Vinyl Acetate	000108-05-4	NA	NA	5 U	10 U											-
Vinyl chloride	000075-01-4	1.40 U	10.0 U	5 U	10 U											2 ST
Xylene (total)	001330-20-7	1.60 U	10.0 U	5 U	10 U											5 ST

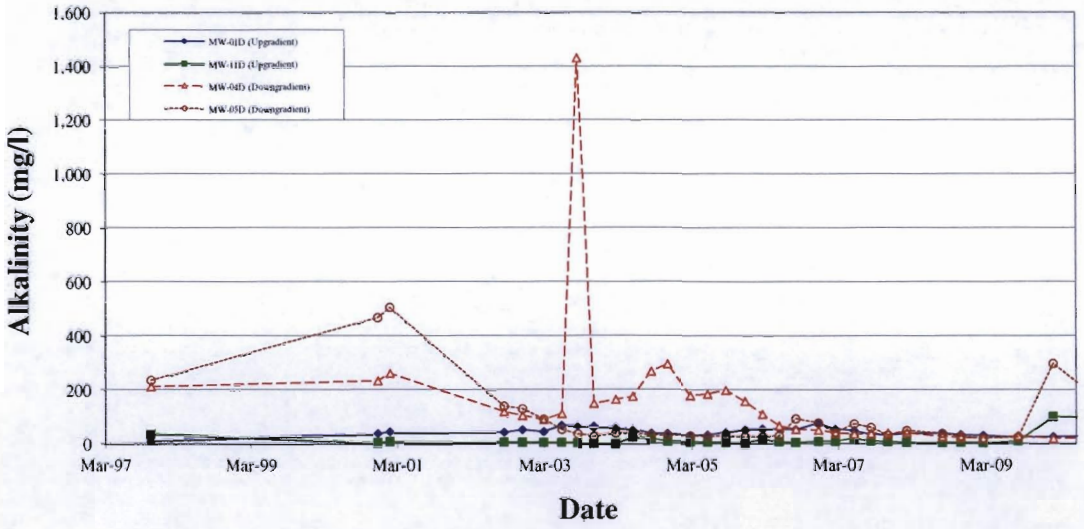
QUALIFIERS
B: Compound was found in the method blank as well as the sample
U: Compound was analyzed for but not detected at the detection limit shown.
J: Compound was found at a concentration below the detection limit, value estimated
E: Concentration exceeds instrument calibration range; value estimated.
D: Result taken from analysis at a secondary dilution.
U*: Result qualified as non-detect based on validation criteria

NOTES
GV: Guidance Value
ST: Standard
NA: Not Analyzed
[redacted]: Parameter exceeds Standard/Guidance Value
NS: Not Sampled
J*: Result qualified as estimated based on validation criteria

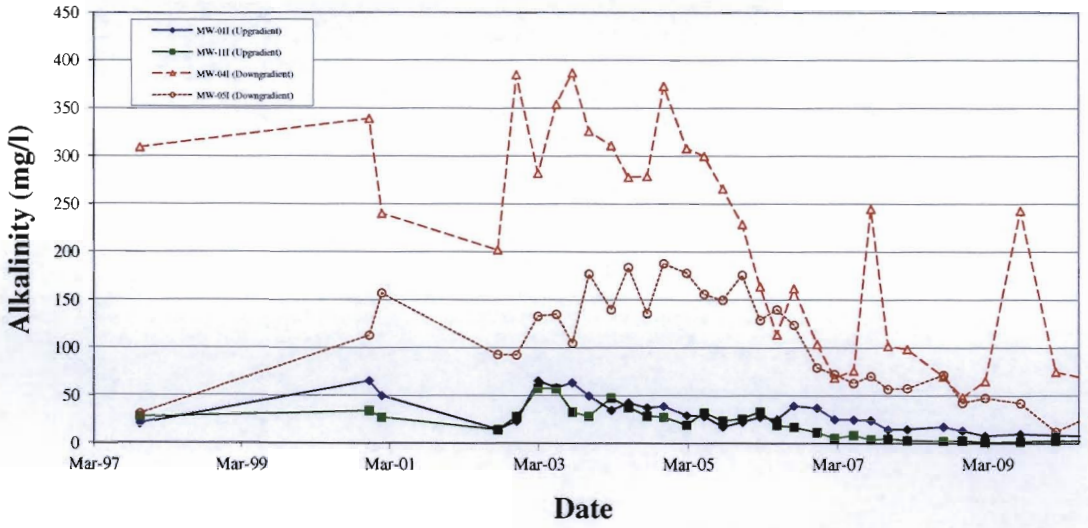
APPENDIX A-4

Water Quality Graphs

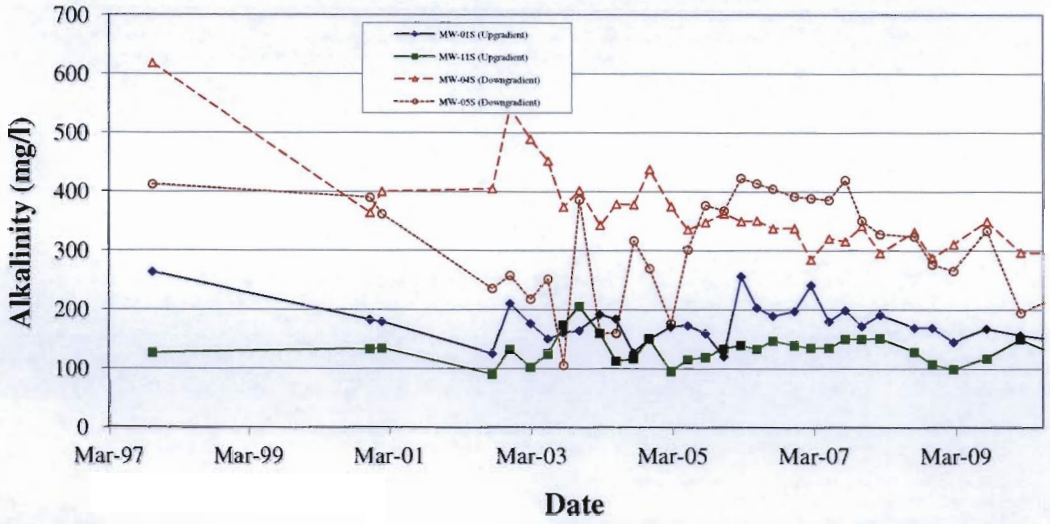
Alkalinity in Deep Wells



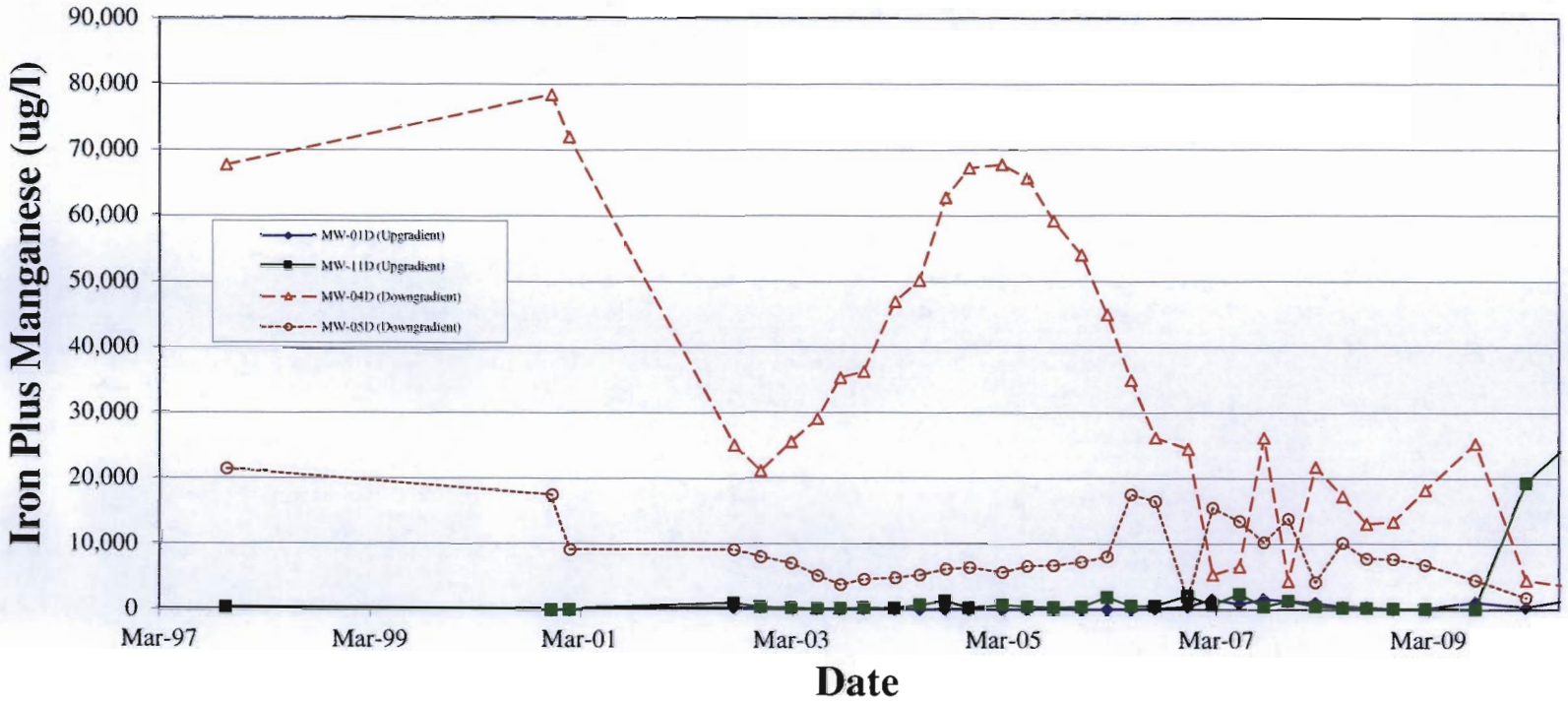
Alkalinity in Intermediate Wells



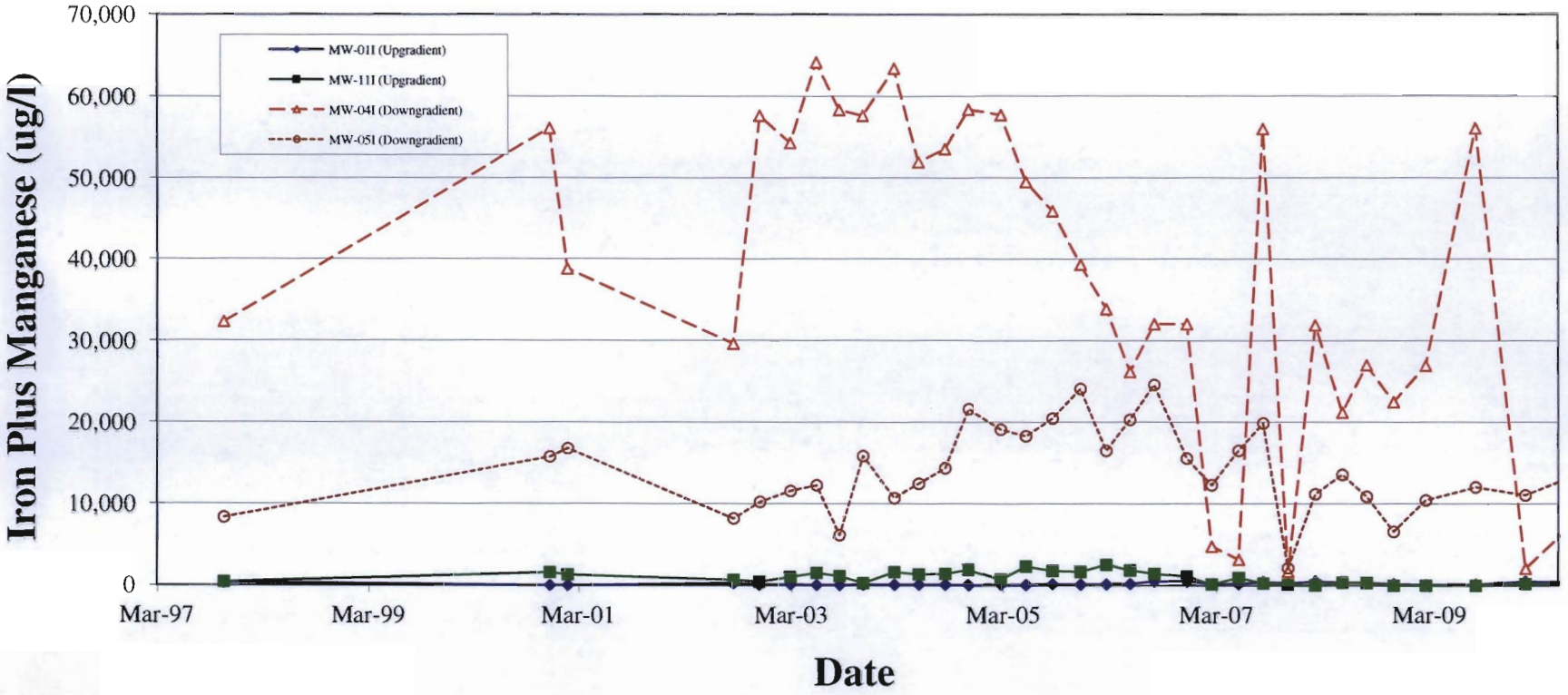
Alkalinity in Shallow Wells



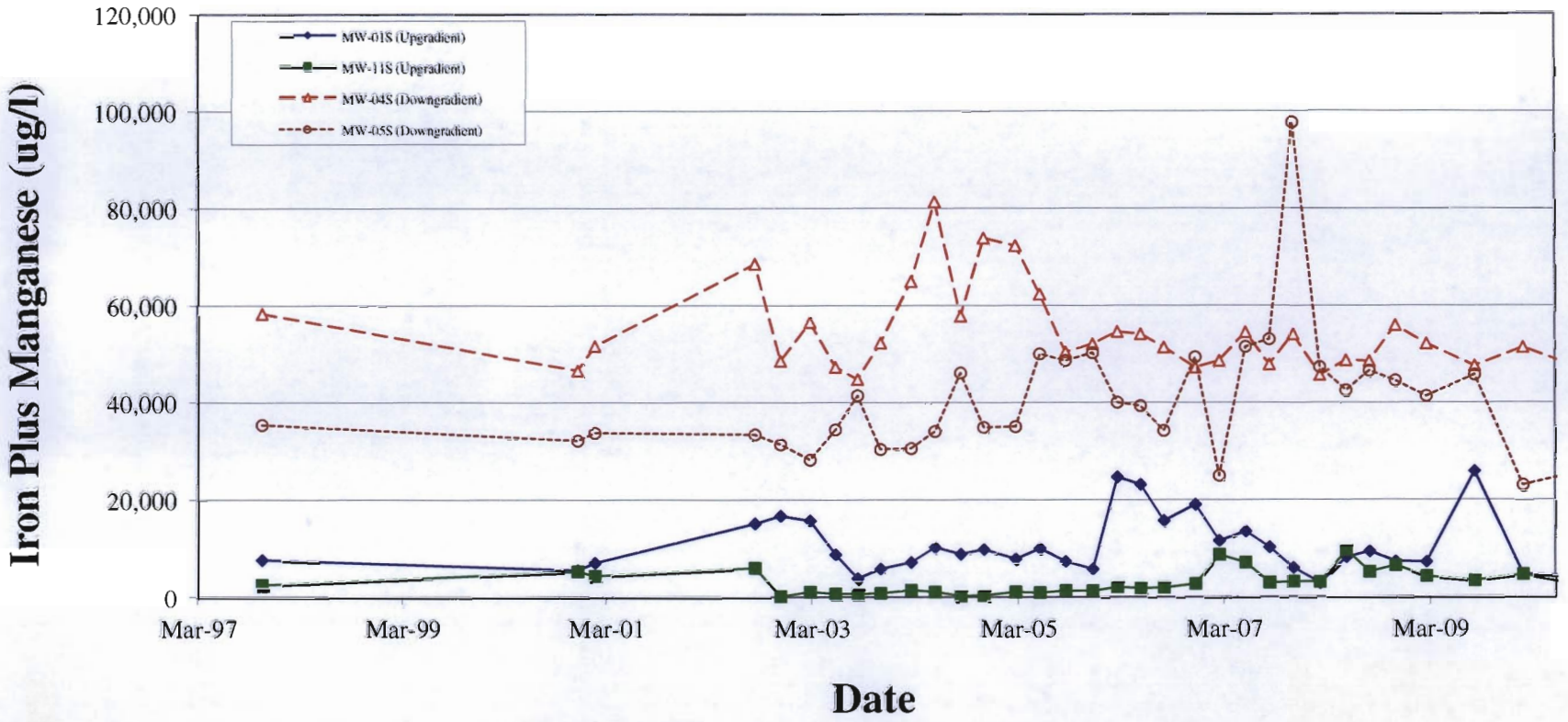
Iron Plus Manganese in Deep Wells



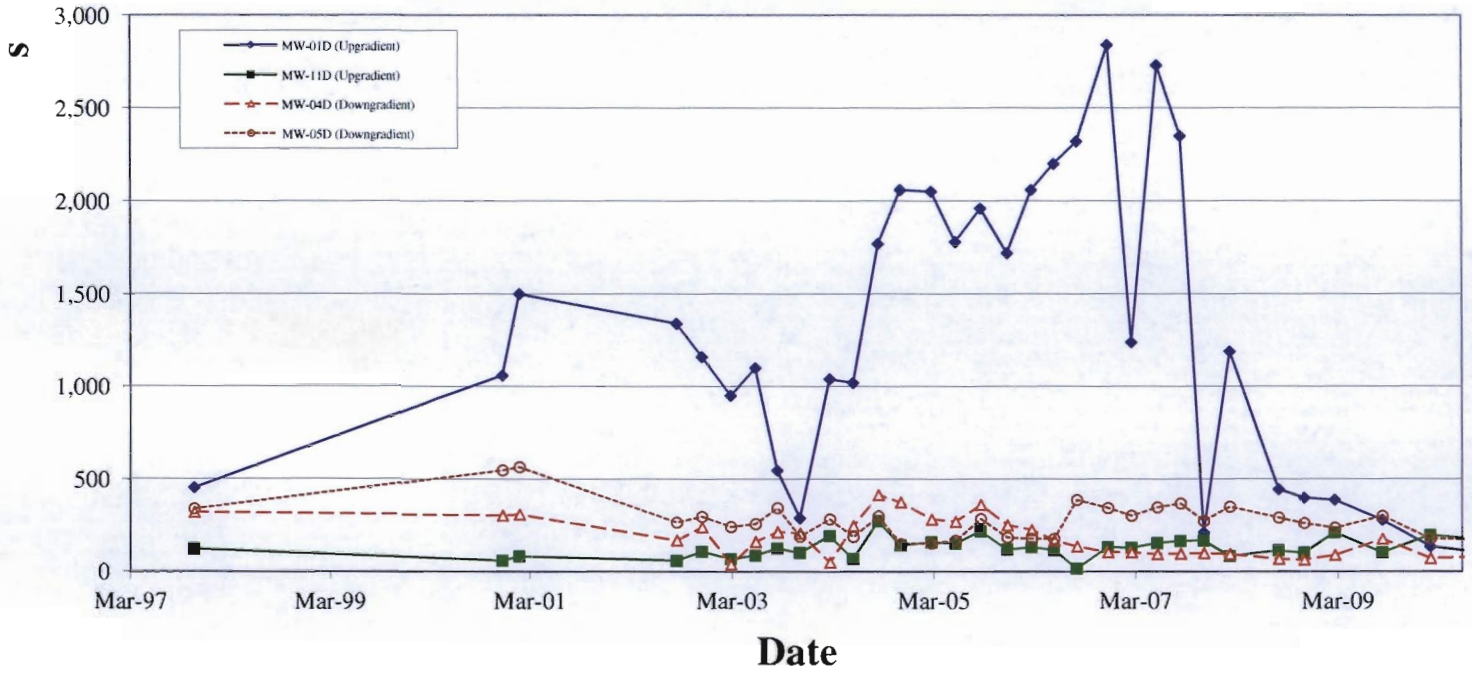
Iron Plus Manganese in Intermediate Wells



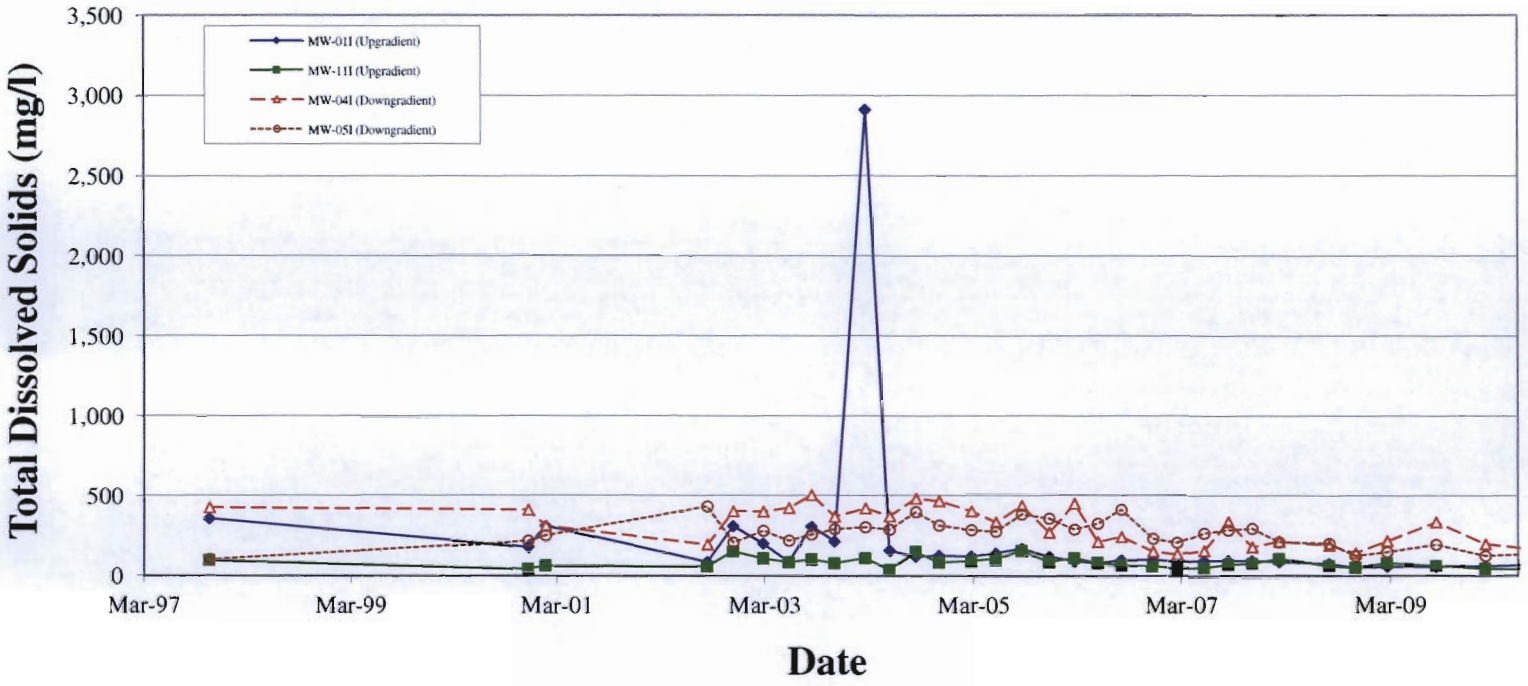
Iron Plus Manganese in Shallow Wells



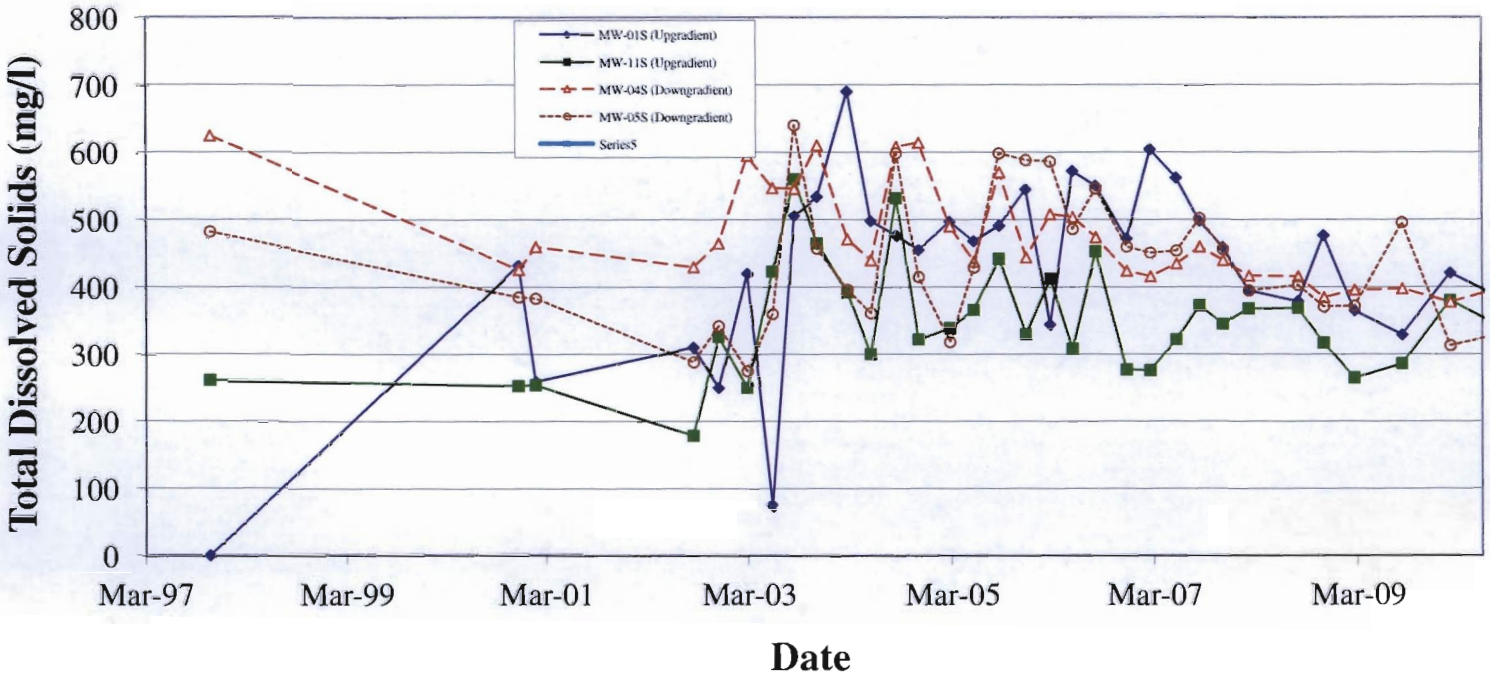
Total Dissolved Solids in Deep Wells



Total Dissolved Solids in Intermediate Wells



Total Dissolved Solids in Shallow Wells



APPENDIX B

DATA VALIDATION REPORT

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

July 18, 2011

Chris Flynn
H2M Group
575 Broad Hollow Rd.
Melville, NY 11747

RE: Validation of ISLIP Sonia Road Landfill Site Data Packages
H2M SDG Nos. IRS073 and IRS074

Dear Mr. Flynn:

Review has been completed for the data packages generated by H2M Laboratories that pertain to samples collected between 05/26/11 and 06/01/11 at the ISLIP Sonia Road Landfill Site. Twenty-two aqueous samples and two field duplicates were analyzed by H2M Labs for 6 NYCRR Part 360 Baseline parameters. Volatile Tentatively Identified Compounds (TICs) were also reported. Field and trip blanks and matrix spikes/duplicates were processed. For this sampling event, full validation was performed on 10% of the samples. Those reviewed are: MW-1S, MW-5I, MW-12I, field and trip blanks, and matrix spikes. Methodologies utilized are those of the 1995 NYSDEC ASP/SW846.

Data validation was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for (In)organic Data Review and the USEPA SOPs HW-2 and HW-24, as applicable for the methodology. The following items were reviewed:

* Data Completeness
* Laboratory Narrative
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Responses
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Calibration/Low-Level Standards
* ICP Serial Dilutions
* Instrument IDLs
* Method Compliance
* Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results of the fully validated samples are substantiated by the raw data, and generated in compliance with protocol requirements.

In summary, sample processing was conducted with compliance to protocol requirements and with adherence to quality criteria. Sample results are usable as reported, or with minor qualification as estimated. The issues requiring validation are discussed in the following analytical sections. Although only 10% of the samples underwent full validation review, recommended qualifications below are stated to include all project samples as pertains to general quality issues, and where evident.

Copies of laboratory case narratives are attached to this text, and should be reviewed in conjunction with this report. Laboratory NYSDEC Sample Preparation and Analysis Summary Forms are also included with this report.

Chain-of-Custody/Sample Receipt

There were grass clippings present within and on the exterior of three of the wet chemistry bottles (MW-12D, MW-12I, and MW-12S). The effect of those clippings on analyte results is not known, but may have produced elevated concentrations or false positive results for nitrogen related and other analytes, as well as possibly affecting the analysis outcome of some of the parameters. Those data should be used with caution.

Down-arrows were omitted from the collection date and/or matrix fields on the first page of the custodies for samples collected 05/26/11.

The custody for samples collected 06/01/11 does not denote the number of vials or preservatives.

Volatile Analyses

Sample surrogate and internal standard recoveries, the holding times, and the instrument tunes were acceptable.

Due to presence in the associated trip blanks, detections of acetone in the samples are considered external contamination, and are to be edited to reflect non-detection ("U").

The matrix spike evaluations of MW-4S and MW-7I show acceptable recoveries and duplicate correlations for the five analytes evaluated. Fortified blanks show acceptable recoveries for all target analytes.

Blind field duplicate correlations of MW-5D and MW-6S are acceptable.

Due to outlying low responses, the results for the following compounds in the indicated validated samples are to be qualified as estimated ("UJ"/"J"), with possible low bias:

- bromomethane (26%RSD) in all project samples
- 1,2-dibromo-3-chloropropane, carbon disulfide, 4-methyl-2-pentanone, trans-1,3-dichloropropene, cis-1,3-dichloropropene, 2-hexanone, and trans-1,4-dichloro-2-butene (27%D to 43%D) in MW-5I and MW-12I
- 1,2-dibromo-3-chloropropane, carbon disulfide, trans-1,3-dichloropropene, and trans-1,4-dichloro-2-butene (23%D to 42%D) in MW-1S

Metals/CN Analyses

Matrix spike/duplicate correlations were performed on MW-4S and MW-7I. Selenium produced low recoveries in both parent samples (65% and 40%, respectively). Results for that element in all of the project samples are to be qualified as estimated in value ("UJ"/"J"), with a possible low bias. The matrix spike of MW-4S also shows marginally low recoveries of mercury and silver (73% and 74%). The results for those two elements in the samples reported in IRS073 are therefore to be qualified as estimated in value ("UJ"/"J"), with possible low biases.

Blind field duplicate correlations of MW-5D and MW-6S were acceptable, with the exception of that for mercury (>±CRDL) in MW-5D. The results for that analyte are to be qualified as estimated in value ("UJ"/ "J") in that parent sample and its duplicate.

Due to presence in the associated field blank, the detections of mercury in MW-2I, MW-4S, and MW-5I are considered external contamination or interference and are to be edited to reflect non-detection ("U") at the originally reported concentrations.

The ICP serial dilution evaluations of MW-4S and MW-7I are acceptable.

Instrument processing was compliant.

Wet Chemistry Analyses

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

Matrix spike/duplicate correlations were performed on MW-4S and MW-7I. All recovery values and duplicate correlations were within validation guidelines, with the exception of the duplicate correlation for BOD5 (60%RPD) and recovery for nitrite (76%) in MW-4S. The results for those two analytes in that parent sample are to be qualified as estimated in value ("UJ"/"J").

Blind field duplicate correlations of MW-5D and MW-6S were acceptable, with the exception of those for BOD5 and TOC (50%RPD and 40%RPD) in MW-6S. The results for those two analytes are to be qualified as estimated in value ("UJ"/ "J") in that parent sample and its duplicate.

Due to presence in the associated field blank, the detections of TKN in MW-1S, MW-4I, MW-6I, and MW-7I are considered external contamination and are to be edited to reflect non-detection ("U") at the originally reported concentrations.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: IRS073 — **Analytical Requirements**

Customer Sample Code	Laboratory Sample Code	ME	MSVOA	WC
MW-X	1105A84-001	X	X	X
MW-1D	1105A84-002	X	X	X
MW-1I	1105A84-003	X	X	X
MW-1S	1105A84-004	X	X	X
MW-4D	1105A84-005	X	X	X
MW-4I	1105A84-006	X	X	X
MW-6D	1105A84-007	X	X	X
MW-6I	1105A84-008	X	X	X
MW-6S	1105A84-009	X	X	X
MW-7I	1105A84-010	X	X	X
FB-05/26/11	1105A84-011	X	X	X
MW-11D	1105B39-001	X	X	X
MW-11I	1105B39-002	X	X	X
MW-11S	1105B39-003	X	X	X
MW-12D	1105B39-004	X	X	X
MW-12I	1105B39-005	X	X	X
MW-12S	1105B39-006	X	X	X
FB-05/27/11	1105B39-007	X	X	X
TB-05/27	1105B39-008		X	

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, RSL, Priority Pollutant,

ASP B 2000
CG 6/24/11

IRS073 S3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: IRS074

Customer Sample Code	Laboratory Sample Code	Analytical Requirements ME	MSVOA	WC
MW-2D	1105B79-001	X	X	X
MW-2I	1105B79-002	X	X	X
MW-4S	1105B79-003	X	X	X
MW-5I	1105B79-004	X	X	X
MW-5S	1105B79-005	X	X	X
FB-05/31/11	1105B79-006	X	X	X
TB-05/31	1105B79-007		X	
SB-05/31	1105B79-008		X	
MW-X	1106013-001	X	X	X
MW-3S	1106013-002	X	X	X
MW-5D	1106013-003	X	X	X
FB-06/01/11	1106013-004	X	X	X
TB-6/01/11	1106013-005		X	

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B 2005
CG 7/7/11

IRS074 S3

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ANALYSES
SAMPLE RECEIVED: 5/26/11 & 5/27/11
SDG#: IRS073

For Samples:

MW-X	MW-7I
MW-X	FB-05/26/11
MW-1D	MW-11D
MW-1I	MW-11I
MW-1S	MW-11S
MW-4D	MW-12D
MW-4I	MW-12I
MW-6D	MW-12S
MW-6I	FB-05/27/11
MW-6S	TB-05/27

The above water samples were analyzed for the part 360 baseline list of volatile organic analytes by EPA method 8260B according to the requirements of the NYSDEC ASP Rev. 2000.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

Sample MW-7I was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. A lab-fortified blank and matrix spike blank were analyzed and indicate good method efficiency.

Vinyl chloride had an RSD greater than 20.5% but less than 40% in the initial calibration.

Cis 1,3-dichloropropene and trans 1,3-dichloropropene had %D's greater than 25% in the continuing calibration of 6/2/11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: June 22, 2011

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR METALS
SAMPLE(S) RECEIVED: 5/26/11 & 5/27/11
SDG #: IRS073

For Sample(s):

MW-X	MW-7I
MW-1D	FB-05/26/11
MW-1I	MW-11D
MW-1S	MW-11I
MW-4D	MW-11S
MW-4I	MW-12D
MW-6D	MW-12I
MW-6I	MW-12S
MW-6S	FB-05/27/11

Sample(s) was/were received by H2M Labs, Inc for cyanide and TAL metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA 61E Trace ICP instrument, method 7470A with a Leeman HYDRA mercury analyzer and cyanide methods 9010/9014.

Sample MW-7I was utilized for QC analysis and reporting.

Spike analysis did not meet acceptance criteria for selenium. The sample was post spiked, reanalyzed and recovered at 95.1%. Selenium data was reported flagged "N" on forms 1 and 5a.

No other issues were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: June 20, 2011

Vincent Stancampiano
Vice President

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLE(S) RECEIVED: 5/26/11 & 5/27/11
SDG #: IRS073

For Sample(s):

MW-X	MW-4I	FB-05/26/11	MW-12I
MW-1D	MW-6D	MW-11D	MW-12S
MW-1I	MW-6I	MW-11I	FB-05/27/11
MW-1S	MW-6S	MW-11S	
MW-4D	MW-7I	MW-12D	

Sample(s) was/were received by H2M Labs, Inc for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Alkalinity	SM2320B	Ammonia	SM4500-NH3 H
Anions-Cl/SO4/Br	EPA 300.0	Nitrate	EPA 353.2
Biochemical Oxygen Demand	SM5210B	Nitrite	EPA 353.2
Chemical Oxygen Demand	EPA 410.4	Phenols	EPA 420.1
Color	SM2120B	Total Dissolved Solids	SM2540C
Hexavalent Chromium	SM3500-Cr D	Total Kjeldahl Nitrogen	EPA 351.2
Hardness	SM2340C	Total Organic Carbon	EPA SW 846 9060

Sample MW-7I was utilized for QC analysis and reporting.

Samples MW-12D, MW-12I and MW-12S contained a small amount of grass clippings. Similar grass clippings were present on the outside of the containers. The presence of grass in the samples may have an affect on the final reported values.

Samples were diluted and reanalyzed as required to keep instrument readings within calibration ranges.

No other issues were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: June 20, 2011

Vincent Stancampiano
Vice President

IRS073 S30

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ANALYSES
SAMPLE RECEIVED: 5/31/11 & 6/1/11
SDG#: IRS074

For Samples:

MW-2D	SB-05/31
MW-2I	MW-X
MW-4S	MW-3S
MW-5I	MW-3S
MW-5S	MW-5D
FB-05/31/11	FB-06/01/11
TB-05/31	TB-6/01/11

The above water samples were analyzed for the part 360 baseline list of volatile organic analytes by EPA method 8260B according to the requirements of the NYSDEC ASP Rev. 2000.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

Sample MW-4S was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. A lab-fortified blank and matrix spike blank were analyzed and indicate good method efficiency.

Vinyl chloride had an RSD greater than 20.5% but less than 40% in the initial calibration.

Cis 1,3-dichloropropene and trans 1,3-dichloropropene had %D's greater than 25% in the continuing calibration of 6/2/11.

Dibromochloromethane had a %D greater than 25% in the continuing calibration of 6/5/11.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: June 27, 2011

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR METALS
SAMPLE(S) RECEIVED: 5/31/11 & 6/1/11
SDG #: IRS074

For Sample(s):

MW-2D	FB-05/31/11
MW-2I	MW-X
MW-4S	MW-3S
MW-5I	MW-5D
MW-5S	FB-06/01/11

Sample(s) was/were received by H2M Labs, Inc for cyanide and TAL metals analysis.

Samples were prepared and analyzed using EPA method 6010B with a TJA 61E Trace ICP instrument, method 7470A with a Leeman HYDRA mercury analyzer and cyanide methods 9010/9014.

Sample MW-4S was utilized for QC analysis and reporting.

Spike analysis did not meet acceptance criteria for mercury, selenium and silver. The sample was post spiked, reanalyzed and recovered at 85.30% for selenium and 99.1% for silver.

The results for mercury, selenium and silver are flagged with an "N" on Forms I and 5A. A spike analysis did not recover with 75-125% for iron. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers are not required.

No other issues were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: June 27, 2011

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLE(S) RECEIVED: 5/31/11 & 6/01/11
SDG #: IRS074

For Sample(s):

MW-2D	FB-05/31/11
MW-2I	MW-X
MW-4S	MW-3S
MW-5I	MW-5D
MW-5S	FB-06/01/11

Sample(s) was/were received by H2M Labs, Inc for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Alkalinity	SM2320B	Ammonia	SM4500-NH3 H
Anions-Cl/SO4/Br	EPA 300.0	Nitrate	EPA 353.2
Biochemical Oxygen Demand	SM5210B	Nitrite	EPA 353.2
Chemical Oxygen Demand	EPA 410.4	Phenols	EPA 420.1
Color	SM2120B	Total Dissolved Solids	SM2540C
Hexavalent Chromium	SM3500-Cr D	Total Kjeldahl Nitrogen	EPA 351.2
Hardness	SM2340C	Total Organic Carbon	EPA SW 846 9060

Sample MW-X was utilized for QC analysis and reporting.

Duplicate BOD analysis did not meet acceptance criteria. Batch acceptance was based on LCS duplicate analysis.

Spike analysis did not meet acceptance criteria for nitrite. The sample, duplicate and spike aliquots were reanalyzed showing similar results. The reanalysis was utilized for reporting. Batch acceptance was based on ICV, CCV, LFB and LFBD analysis.

Samples were diluted and reanalyzed as required to keep instrument readings within calibration ranges.

No other issues were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: July 7, 2011

Vincent Stancampiano
Vice President