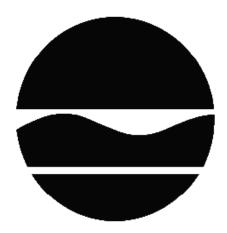
DECISION DOCUMENT

6157 South Transit Road Site Brownfield Cleanup Program Lockport, Niagara County Site No. C932130 November 2011



Prepared by Division of Environmental Remediation New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

6157 South Transit Road Site Brownfield Cleanup Program Lockport, Niagara County Site No. C932130 November 2011

Statement of Purpose and Basis

This document presents the remedy for the 6157 South Transit Road Site site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 6157 South Transit Road Site site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

Based on the Alternatives Analysis evaluation, the completed IRM fully satisfies the remedial action objectives and is fully protective of human health and the environment. Therefore no further action is required.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

11/30/2011

Date

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Michael Cruden, Director Remedial Bureau E

DECISION DOCUMENT

6157 South Transit Road Site Lockport, Niagara County Site No. C932130 November 2011

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: <u>CITIZEN PARTICIPATION</u>

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Lockport Public Library Attn: Marie Bindeman 23 East Avenue Lockport, NY 14094 Phone:

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen

participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <u>http://www.dec.ny.gov/chemical/61092.html</u>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The 6157 South Transit Road Site is located in a suburban area at 6157 South Transit Road, Lockport in Niagara County. It is an approximately 3.67 acre portion of a greater 27.38 acre parcel and is located in a commercially developed area.

Site Features:

Centered within the site was a former car dealership and service building surrounded by parking areas. The car dealership building has been demolished to make room for construction of a new dealership building. The site is bounded to the west by South Transit Road, to the north and south by commercial properties and to the east by the remaining portion of the parcel which includes a 29,000 sq. ft. building and additional parking areas with the remaining two thirds of the parcel to the east consisting of vacant vegetated land.

Zoning:

The site is zoned for commercial use and is currently inactive pending final construction of a new dealership building. The adjacent portion of the parcel to the east is active.

Historic Use:

The Site was used as an automobile dealership and service facility from approximately 1962 to 2008. Former automobile service and repair operations impacted on-site soil/fill and groundwater with volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) which required remediation. The site has been the subject of several former petroleum spill investigations as follows:

Spill #9214442 involved the removal of 3 underground storage tanks (USTs) and 1 aboveground storage tank (AST). Only low level exceedances of soil cleanup objectives (SCOs) were detected and the spill was closed on January 24, 1994.

Spill #9875213 involved the removal of 1 UST. Only low level exceedances of SCOs were detected and the spill was closed on November 19, 1998.

Spill #0650195 was assigned after Department receipt of a report of petroleum contamination detected during an environmental assessment completed in May 2006 at an adjacent property to the north at 6145 S. Transit Road. The assessment also identified chlorinated VOCs sourced at 6145 S. Transit Road near the property boundary with 6157 S. Transit Road. Supplemental site investigations were completed in September 2006 and July-August 2007 and included the installation of fifteen monitoring wells across both properties and sub-slab air sampling at 6145

S. Transit Road. Petroleum and chlorinated VOCs were detected in both the groundwater and air samples. In June 2007, a 500 gallon UST located along the south side of the building at 6145 S. Transit Road was removed along with 55 tons of petroleum impacted soil.

A Remedial Action Plan for 6145 S. Transit Road was approved in April 2008. Subsequent monitoring of a sub-slab depressurization system through April 2009 showed no detectable VOCs and chlorinated VOCs in the groundwater were reduced to less than 10 parts per billion (ppb). The 6145 S. Transit Road site was closed on May 8, 2009.

Spill #0902040 was assigned after Department receipt of a report of exceedances of SCOs detected during a May 2009 Phase II Environmental Site Investigation at 6157 S. Transit Road. Petroleum-like odors were noted and elevated PID readings indicated on-site impacts. The spill was closed on October 27, 2010 after Department receipt of a BCP application for the site. A Brownfield Cleanup Agreement was fully executed on January 28, 2011.

Geology/Hydrogeology:

The overburden consists of reddish brown clayey silt with fine sand and traces of gravel. It extends to a depth of 7 to 12 feet below ground surface and overlies the Lockport Dolomite. Groundwater was encountered at a depth of 2 to 6 feet across the site and is reported to flow in a west and northwest direction across the site. The groundwater encountered most likely represents perched pore water.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: <u>Summary of the Remedial Investigation</u>

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: <u>RI Information</u>

The analytical data collected on this site includes data for:

- groundwater
- soil

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

1,2,4-trimethylbenzene acetone

benzene, toluene, ethylbenzene and xylenes (btex)

benzo(b)fluoranthene	
benzo(a)pyrene	
benzo[k]fluoranthene	
benzo(ghi)perylene	
chrysene	
dibenz[a,h]anthracene	
diethyl phthalate	
fluoranthene	

fluorine naphthalene pyrene phenanthrene methylene chloride cumene dichloroethylene

The contaminant(s) of concern exceed the applicable SCGs for groundwater.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Building demolition and excavation of soil exceeding residential SCOs.

Three areas of the site were excavated: MW-7 and MW-9 in the north, within the footprint of the former building and along the south side of the former building where two abandoned USTs were uncovered and removed during building foundation removal and grading activities. Approximately 412.16-tons of non-hazardous VOC-impacted soil/fill was excavated along with 120-ft of petroleum-impacted pipe and bedding material from the northern (MW-7 and MW-9) area. Approximately 1,087.52-tons of non-hazardous petroleum impacted soil was excavated from the Bldg. No. 1 area along with the removal of five in-ground hydraulic lifts. Approximately 716.35-tons of non-hazardous petroleum-impacted soil was excavated from the UST area. Confirmatory post-excavation sidewall and bottom samples were taken at all 3 locations. All sample results were below Part 375 Unrestricted SCOs with the minor exception of acetone which was below Part 375 Residential SCOs.

6.3: <u>Summary of Human Exposure Pathways</u>

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People are not drinking the groundwater because the area is served by a public water supply that is not affected by residual on-site groundwater contamination.

6.4: <u>Summary of Environmental Assessment</u>

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Prior to Remediation:

The previous site investigations detected petroleum impacts to site soils and groundwater and low level chlorinated volatile organic compounds (VOCs) in site groundwater.

The highest concentration of petroleum impacts to soils was found within the footprint of the former car dealership and service building and ranged up to 102 ppm total petroleum VOCs. Though not represented in the soil analytical results, a second smaller area of low level petroleum impacts to soils was found at the north end of the site in the area of wells MW-7 and MW-9 as noted in the soil boring logs. The highest concentration of petroleum impacts to groundwater was detected in the area of wells MW-7 and MW-9 and ranged from 436 to 599 ug/l total petroleum VOCs. However, it should be noted that no groundwater data was available for the area within the footprint of the former car dealership.

The only area of chlorinated VOCs impacts to groundwater was in the north end of the site in wells MW-7 and MW-10 where total chlorinated VOCs ranged from 91.3 to 16.8 ug/l, respectively in 2007. In 2011 wells MW-7 and MW-10 were resampled (prior to removal of MW-7 during IRM excavation activities) and total chlorinated VOCs ranged from 56.7 to 2 ug/l, respectively.

Post Remediation:

Remedial Investigation (RI) soil boring samples from outside the excavation areas and postexcavation confirmatory soil samples, collected from the excavated areas, indicated that all RI and confirmatory samples were below Part 375 Unrestricted SCOs with the minor exception of acetone. Acetone, which is a common laboratory contaminant, was reported at concentrations below Part 375 Residential SCOs.

Based on the groundwater data, most analytes were not detected or detected below groundwater quality standards. Well MW-7, and its contaminant source soil, were excavated and removed. No SVOCs were detected in the remaining wells. Only slight exceedances were detected for benzene, toluene and xylene at three well locations and Dichloroethene at one well location. Based on the extent of contaminated soils that were removed to levels that meet unrestricted SCOs, the remaining trace concentrations of organic constituents within the groundwater are expected to naturally decrease over time. Standards for metals were exceeded and pesticides were detected slightly above groundwater quality standards. However, there is a municipal restriction on groundwater use reducing any potential contact with or ingestion of groundwater.

6.5: <u>Summary of the Remediation Objectives</u>

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or

mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

There are no remedial action objectives chosen for this site.

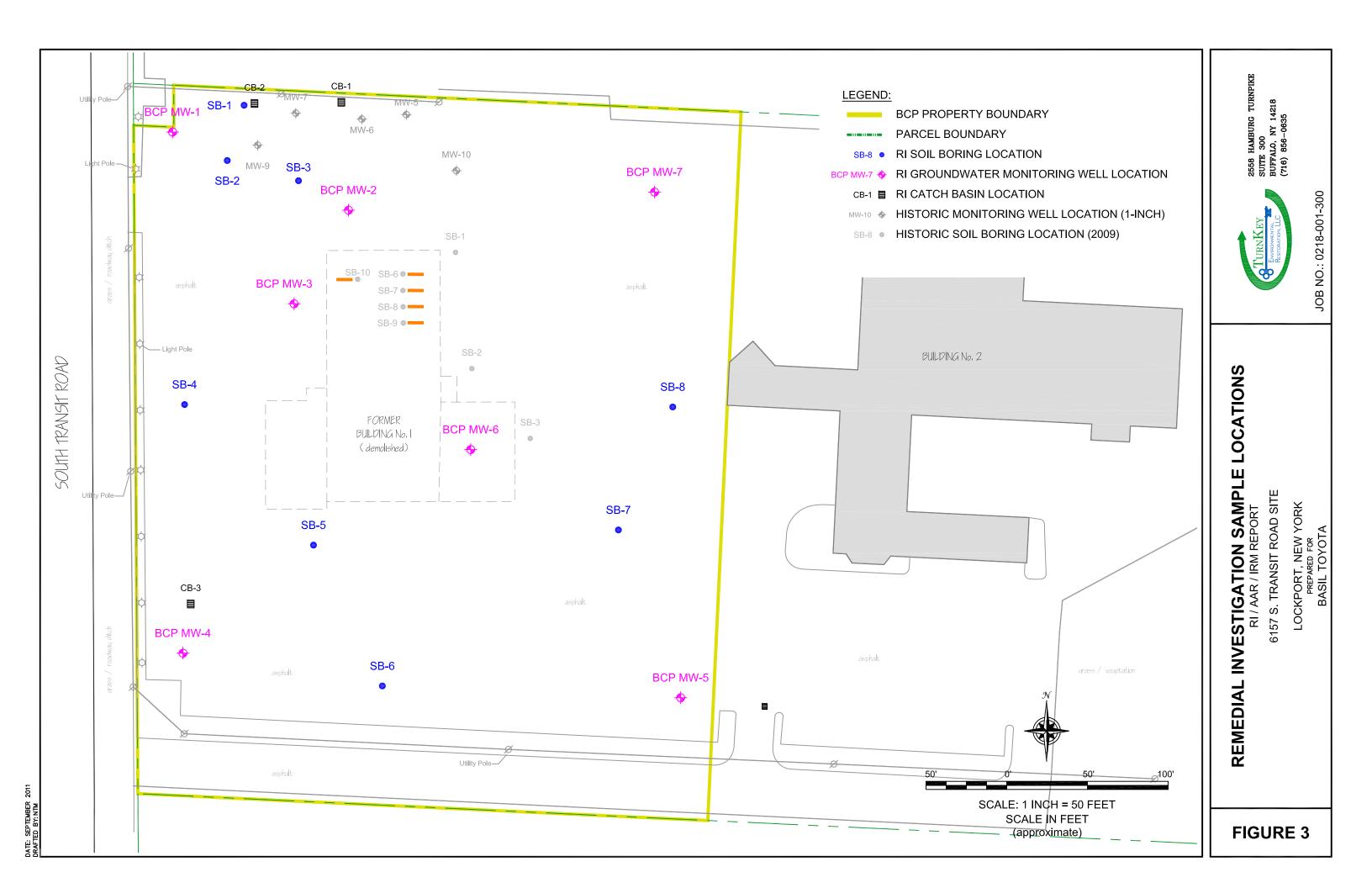
SECTION 7: ELEMENTS OF THE SELECTED REMEDY

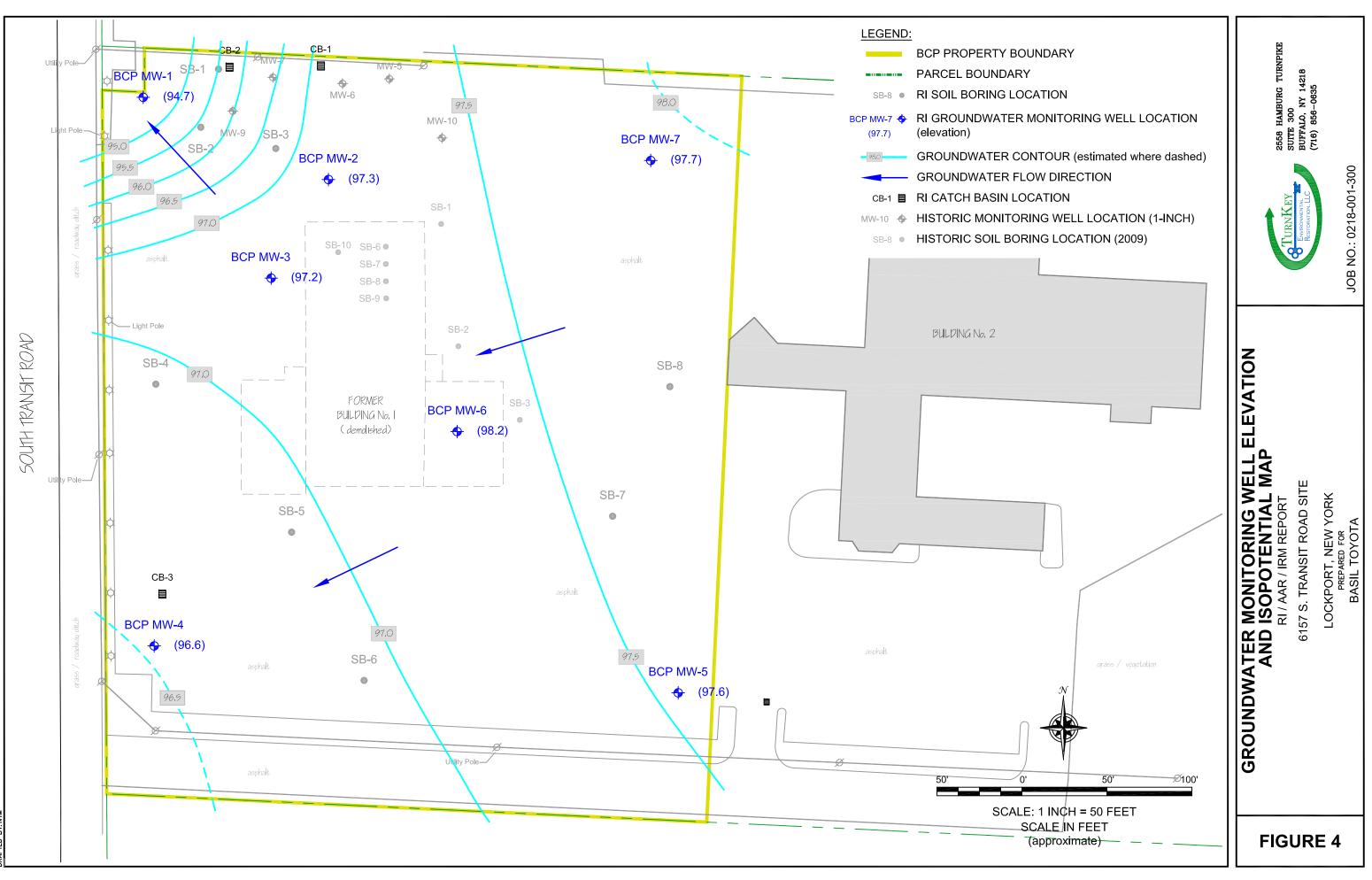
The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

Based on the Alternatives Analysis evaluation, the completed IRM fully satisfies the remedial action objectives and is fully protective of human health and the environment. Therefore no further action is required.

<image/>	<image/> <image/> <image/>	
PROJECT NO.: 0218-001-300 DATE: SEPTEMBER 2011 DRAFTED BY: NTM	SITE PLAN (AERIAL) RI/AAR/IRM REPORT 6157 SOUTH TRANSIT ROAD SITE LOCKPORT, NEW YORK PREPARED FOR BASIL TOYOTA	FIGURE 2

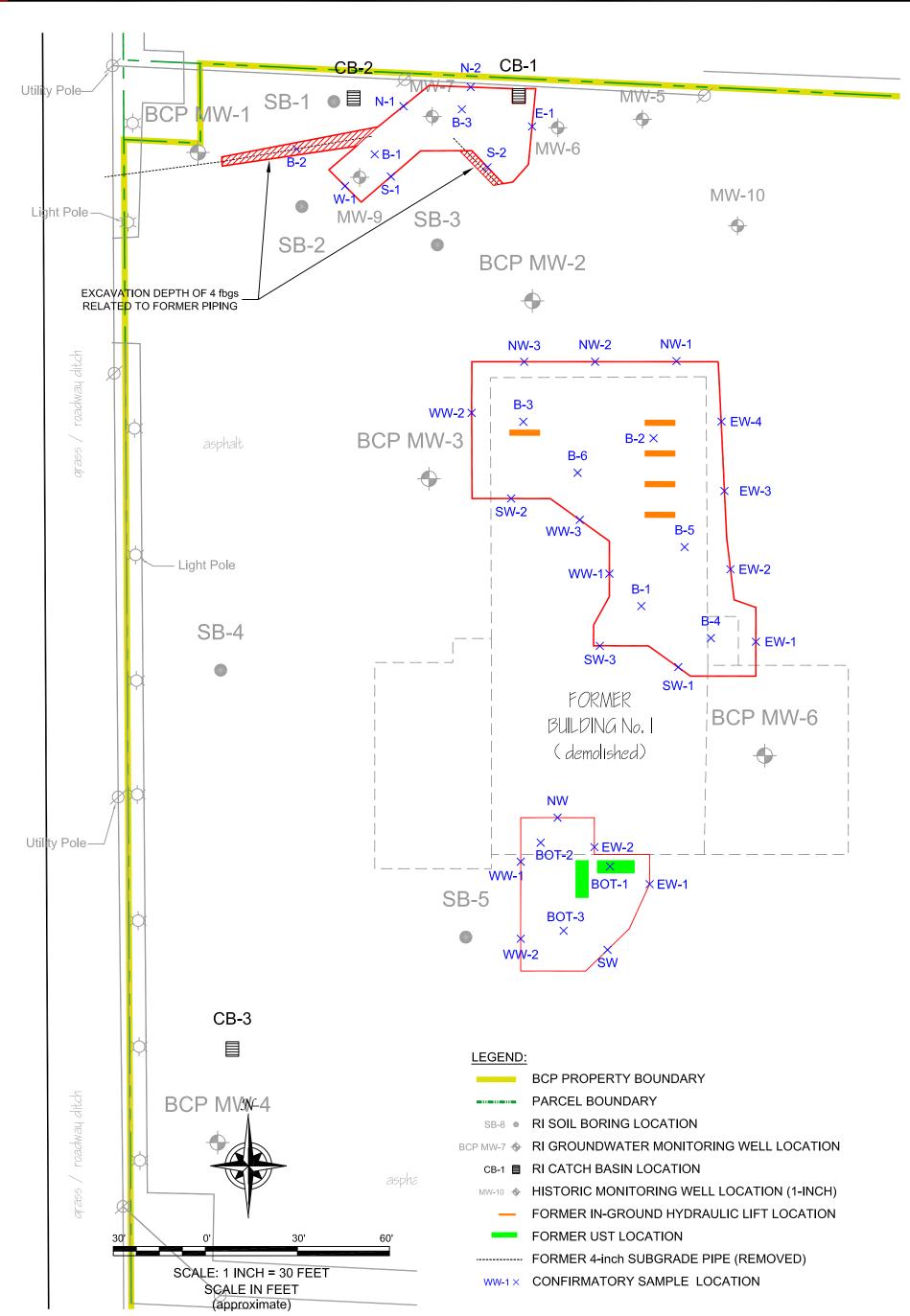




date: September Drafted by: NTM

2011

DATE: SEPTEMBER 2011 DRAFTED BY: NTM



NEW 10 NEW 11 NEW 11 NEW	PARCEL BOUNDARY
SB-8 •	RI SOIL BORING LOCATION
BCP MW-7 🔶	RI GROUNDWATER MONITORING WELL LOCATION
CB-1 目	RI CATCH BASIN LOCATION
MW-10 🔶	HISTORIC MONITORING WELL LOCATION (1-INCH)
	FORMER IN-GROUND HYDRAULIC LIFT LOCATION
	FORMER UST LOCATION
	FORMER 4-inch SUBGRADE PIPE (REMOVED)
WW-1 $ imes$	CONFIRMATORY SAMPLE LOCATION

т	IRM EXCAVATION AREAS		
FIG	RI / AAR / IRM REPORT	TURNKEY	2558 HAMBURG TURNPIKE SUITE 300
UR	6157 S. TRANSIT ROAD SITE	Environmental Restoration, LLC	BUFFALO, NY 14218 (716) 856-0635
E5	LOCKPORT, NEW YORK PREPARED FOR		
	BASIL TOYOTA	JOB NO.: 0218-001-300	

TABLE 1

SUMMARY OF SOIL ANALYTICAL DATA

6157 SOUTH TRANSIT ROAD SITE

LOCKPORT, NEW YORK

_ 1	Unrestricted	Residential	Conc.	Range			
Parameter ¹	SCOs ²	SCOs ²					
			Low	High			
Volatile Organic Compounds (VOCs) - mg/Kg ⁴							
1,2,4-Trimethylbenzene	3.6	47	ND	45			
1,3,5-Trimethylbenzene	8.4	47	ND	32			
2-Butanone (MEK) ⁴	100	100	ND	0.0055 J			
p-Cymene			ND	2.2			
Acetone	0.05	100	ND	0.43			
Benzene	0.06	2.9	ND	0.0016 J			
Carbon Disulfide ⁴	100	100	ND	0.044			
cis-1,2-Dichloroethene	0.25	59	ND	0.095			
Ethylbenzene	1	30	ND	0.38			
Isopropylbenzene (Cumene)	100	100	ND	7.5			
Methyl acetate			ND	0.23			
Methylcyclohexane	0.93	 62	ND ND	0.093			
Methyl tert butyl ether (MTBE) Methylene Chloride	0.95	51	ND	0.15			
n-Propylbenzene	3.9	100	ND	11			
sec-Butylbenzene	11	100	ND	3			
Toluene	0.7	100	ND	0.041			
Total Xylenes	0.26	100	ND	3.9			
Semi-Volatile Organic Compounds				0.0			
Acenaphthylene	100	100	ND	ND			
Acenaphthene	20	100	ND	ND			
Anthracene	100	100	ND	ND			
Benzo(a)anthracene	1	1	ND	ND			
Benzo(b)fluoranthene	1	1	ND	ND			
Benzo(k)fluoranthene	0.8	1	ND	ND			
Benzo(g,h,i)perylene	100	100	ND	ND			
Benzo(a)pyrene	1	1	ND	ND			
Bis(2-ethylhexl) phthalate ⁴	50	50	ND	ND			
Butyl benzyl phthalate ⁴	100	100	ND	ND			
Carbazole			ND	ND			
Chrysene	1	1	ND	0.082			
Di-n-butyl phthalate 4	100	100	ND	ND			
Dibenzo(a,h)anthracene	0.33	0.33	ND	ND			
Dibenzofuran			ND	ND			
Fluoranthene	100	100	ND	0.013			
Fluorene	30	100	ND	0.057			
Indeno(1,2,3-cd)pyrene	0.5	0.5	ND	ND			
Naphthalene	12	100	ND	0.45			
Phenanthrene	100	100	ND	0.034			
Pyrene	100	100	ND	0.019			
Metals - mg/Kg	(0000	1	0040	0140			
Aluminum ⁴	10000	 16	6840 2 9	8140 5.2			
Arsenic Barium	13 350	350	2.9 43.3	5.2 74.1			
Beryllium	7.2	14	0.4	0.44			
Cadmium	2.5	2.5	0.53	0.44			
Calcium ⁴	10000		41800	50900			
Chromium	30	36	9.6	11.2			
Cobalt ⁴	20	30	5.2	8.1			
Copper	50	270	13.4	22.8			
Iron ⁴	2000	2000	13700	16300			
Lead	63	400	26.6	37.5			
Magnesium		-	20200	35800			
Manganese	1600	2000	510	668			
Nickel	30	140	11.6	13.5			
Potassium			493	1110			
Sodium			ND	215			
Vanadium ⁴	100	100	16.3	17.2			
Zinc	109	2200	120	248			
Mercury	0.19	0.91	0.025	0.025			

Mercury	0.18	0.81	0.025	0.025
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Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

Values per 6NYCRR Part 375 Soil Cleanup Objectives (December 2006).
Sample results were reported by the laboratory in ug/Kg and converted to mg/Kg for comparison to SCOs.
Values per NYSDEC Commissioner's Policy Soil Cleanup Guidance (CP-51); Supplemental Soil Cleanup Objectives (SSCO's) (October 2010).

Definitions: ND = Parameter not detected above laboratory detection limit. NA = Parameter not Analysed. "--" = No SCO available.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Analyte was detected in the associated blank as well as in the sample. Value is above the action level for consideration as being external contamination

= Exceedance of Part 375 - Unrestricted Soil Cleanup Objectives (SCO's) = Exceedance of Part 375 - Residential Use Soil Cleanup Objectives (SCO's)

TABLE 2

SUMMARY OF POST EXCAVATION CONFIRMATORY SOIL ANALYTICAL RESULTS 6157 SOUTH TRANSIT ROAD SITE

LOCKPORT, NEW YORK

Parameter ¹	Unrestricted SCOs ²	Residential SCOs ²	Conc. Range		
			Low	High	
Volatile Organic Compounds (VOCs) - mg/Kg ³				
2-Butanone (MEK) 4	100	100	ND	0.018 J	
4-Isopropyltoluene			ND	0.011 J	
Acetone	0.05	100	ND	0.11	
Chlorobenzene	1.1	100	ND	0.0066	
Ethylbenzene	1	30	ND	0.0019 J	
Isopropylbenzene (Cumene) ⁴	100	100	ND	0.002 J	
n-Butylbenzene	12		ND	0.0089	
n-Propylbenzene	3.9	100	ND	0.0067	
sec-Butylbenzene	11	100	ND	0.0017 J	
tert-Butylbenzene	5.9	100	ND	0.0028 J	
Tetrachloroethene	1.3	5.5	ND	0.0018 J	
1,2,4-Trichlorobenzene			ND	0.00053 BJ	
1,2,4-Trimethylbenzene	3.6	47	ND	0.12 B	
1,2-Dichlorobenzene	1.1	100	ND	0.015 B	
1,3,5-Trimethylbenzene	8.4	47	ND	0.019	
1,3-Dichlorobenzene	2.4	17	ND	0.0067	
1,4-Dichlorobenzene	1.8	9.8	ND	0.0039 J	
Total Xylene	0.26	100	ND	0.026	
Methylene Chloride	0.05	51	0.0074	0.011	
Toluene	0.7	100	ND	0.00082 J	
Semivolatile Organic Compounds (SVOCs) - mg/Kg ³					
2-Methylnaphthalene 4	0.41	0.41	ND	0.018 J	
Acenaphthene	20	100	ND	0.0049 J	
Benso(a)anthracene	1	1	ND	0.047 J	
Benzo(a)pyrene	1	1	ND	0.068 J	
Benzo(b)fluoranthene	1	1	ND	0.09 J	
Benzo(g,h,i)perylene	100	100	ND	0.06 J	
Benzo(k)fluoranthene	0.8	1	ND	0.051 J	
Carbazole			ND	0.0098 J	
Chrysene	1	1	ND	0.076 J	
Dibenz(a,h)anthracene	0.33	0.33	ND	0.0092 J	
Diethyl phthalate 4	100	100	ND	0.031 J	
Di-n-butyl phthalate ⁴	100	100	ND	0.089 BJ	
Fluoranthen	100	100	ND	0.14 J	
Fluorene	30	100	ND	0.016 J	
Indeno(1,2,3-cd)pyrene	0.5	0.5	ND	0.051 J	
Naphthalene	12	100	ND	0.018 J	
Phenanthrene	100	100	ND	0.067 J	
Pyrene	100	100	ND	0.94 J	

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (December 2006)

Sample results were reported by the laboratory in ug/Kg and converted to mg/Kg for comparison to SCOs.
Values per NYSDEC Commissioner's Policy Soil Cleanup Guidance (CP-51); Supplemental Soil Cleanup Objectives (SSCO's).

Definitions:

ND = Parameter not detected above laboratory detection limit.

NA = Parameter not analysed. "--" = No SCO available.

a = stimated value; result is less than the sample quantitation limit but greater than zero.
B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

= Exceedance of Part 375 - Unrestriced Soil Cleanup Objectives (SCO's)



TABLE 3 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS 6157 SOUTH TRANSIT ROAD SITE

LOCKPORT, NEW YORK

Parameter ¹ Class 6A GWGS ² Correction of the second BCP WV1 BCP WV2 BCP WV2 BCP WV4 BCP WV4 BCP WV5 BCP WV7 BCP WV7 MV 5 MV 5 MV 7 2-blannone (MEK) 50 ND ND ND ND ND 1.3.J 3.1.J ND ND	MW 9 ³ MW 1 ND ND ND ND
2-Butanone (MEK) 50 ND ND ND ND ND 2.4.4 6.J ND ND ND 2-Heaxonne 50 ND ND ND 6.9.J 2.5.J 3.1.J ND ND ND ND Acetone 50 ND ND 6.9.J 2.5.J 3.9.J 2.1 ND	ND ND
2-Hexanone 50 ND ND ND ND 1.3.J 3.1.J ND ND ND Acetone 50 ND ND 6.9.J 5.5.J 8.9.J 2.1 ND ND ND ND Benzene 1 ND ND 3.7 3.2 ND 1.5 ND	ND ND
Acetone 50 ND ND 6.9 J 5.6 J 8.9 J 21 ND ND ND Benzene 1 ND ND ND 3.7 3.2 ND 1.5 ND ND<	ND ND ND ND ND 2 ND ND
Benzene 1 ND ND 3.7 3.2 ND 1.5 ND ND ND Chlorobenzene 5 ND	ND ND ND ND ND 2 ND ND
Chlorobenzene 5 ND	ND ND ND 2 ND ND
cis-1,2-Dichloroethene 5 5.7 ND 3.5 ND	ND 2 ND ND
Cyclohexane - ND ND 3.3 2 ND 0.58 J ND ND ND 14 Isoproybenzene 5 ND N	ND ND
Éthybenzene 5 ND ND 1.4 1.3 ND	ND ND
Ispropybenzene (Currene) 5 ND	ND ND
n-Propybenzene 5 ND	ND ND
tert-Butybenzene 5 ND S3 1.2.4-Trimetybenzene 5 ND ND ND 3 2.7 ND 1.3 ND	ND ND
1.2.4-Trimethyberzene 5 ND ND 3 2.7 ND 1.3 ND ND ND 140 1.2-Dibtromo-3-Chloropropane 0.04 ND	ND ND ND ND ND ND ND ND ND ND ND ND
1.2-Dibromo-3-Chloropropane 0.04 ND	ND ND ND ND ND ND ND ND
1.2-Dichlorobenzene 3 ND ND <td>ND ND ND ND ND ND</td>	ND ND ND ND ND ND
1.3.5-Trimethybenzene 5 ND ND 0.86 J 0.88 J ND <	ND ND ND ND
1.3-Dichlorobenzene 3 ND ND <td>ND ND</td>	ND ND
1.4-Dichlorobenzene 3 ND A5 Methylethet/(pyclohexane) - 10 1.7 9.7 1.7 ND 2.3 Toluene 5 ND ND 7.9 7.3 ND 2.9 0.77 J ND ND 2.3 Semi-Volatile Organic Compounds (SVOCs) - ug/kg - ND ND ND ND ND NA NA NA 1.7 J 4-Methylphenol - ND ND	
Total Xylene 5 ND ND 7.4 6.8 ND 3.1 ND ND ND 45 Methyl tert butyl ether (MTBE) 10 1.7 9.7 1.7 ND N	ND ND
Methyl tert bulyl ether (MTBE) 10 1.7 9.7 1.7 ND 2.3 Totuene 5 ND ND 7.9 7.3 ND 2.9 0.77 J ND ND 2.1 Semi-Volatile Organic Compounds (SVOCs) - ug/Kg	
Methylcyclohexane - ND ND 4.3 2.6 ND 0.75 J ND ND ND 2.3 Toluene 5 ND ND 7.9 7.3 ND 2.9 0.77 J ND ND 2.1 Semi-Volatile Organic Compounds (SVOCs) - ug/Kg - ND ND ND ND ND ND ND ND 1.7 J 4-Methylaphthalene - ND ND ND ND ND NA NA 1.7 J 4-Methylaphthalene - ND ND ND ND ND NA NA NA NA Actemylaphthalene - ND ND ND ND ND NA NA NA NA Actemylaphthalene - ND ND ND ND ND ND NA NA NA Actemylaphthalene - ND ND ND ND ND NA NA	ND ND
Toluene 5 ND ND 7.9 7.3 ND 2.9 0.77 J ND ND 2.1 Semi-Volatile Organic Compounds (SVOCs) - ug/Kg - ND ND ND ND ND ND ND ND NA NA 1.7 J 4-Methylnaphthalene - ND ND ND ND ND ND NA NA NA 1.7 J 4-Methylphenol - ND ND ND ND ND NA NA NA NA NA NA NA NA NA ND <	ND 1.1
Semi-Volatile Organic Compounds (SVOCs) - ug/kg 2-Methylnaphthalene - ND ND ND ND ND ND NA NA 1.7 J 4-Methylphenol - ND ND ND ND ND 1.8 J ND NA NA NA ND Acenaphthene 20 ND ND ND ND ND ND NA NA 24 Acetophenone - ND ND ND ND ND NA NA 24 Acetophenone - ND ND ND ND ND ND NA NA 24 Acetophenone - ND ND ND ND ND ND NA NA 68 Anthracene 50 ND ND ND ND ND ND NA NA 2.1 J Biphenyl 5 ND ND ND ND ND ND	ND ND
2-Methylnaphthalene ND ND ND ND ND ND NA NA 1.7 J 4-Methylphenol ND ND ND ND ND ND NA NA NA NA NA Aceraphthene 20 ND ND ND ND ND ND NA NA NA 24 Acetophenone ND ND ND ND ND ND NA NA 24 Acetophenone ND ND ND ND ND ND ND NA NA 68 Anthracene 50 ND ND ND ND ND ND NA NA 21 J Biphenyl 5 ND ND ND ND ND ND NA NA 4 J	ND ND
4-Methylphenol - ND ND ND ND ND 1.8.J ND NA NA ND Acetophenone 20 ND ND ND ND ND ND ND NA NA 24 Acetophenone - ND ND ND ND ND ND NA NA 24 Anthracene 50 ND ND ND ND ND ND ND NA NA 68 Biphenyl 5 ND ND ND ND ND ND ND NA NA 24.1	NA NA
Acenaphtene 20 ND ND ND ND ND ND ND NA NA 24 Acetophenone ND ND ND ND ND ND ND NA NA 68 Anthracene 50 ND ND ND ND ND ND NA NA 2.1 J Biphenyl 5 ND ND ND ND ND ND NA NA 4 J	NA NA
Acetophenone ND ND ND ND ND ND NA NA 68 Anthracene 50 ND ND ND ND ND ND NA NA 2.1 J Biphenyl 5 ND ND ND ND ND ND NA NA 4 J	NA NA
Anthracene 50 ND ND ND ND ND ND NA NA 2.1 J Biphenyl 5 ND ND ND ND ND ND NA NA 4 J	NA NA
Biphenyl 5 ND ND ND ND ND ND NA NA 4 J	NA NA
	NA NA
	NA NA
Butyl benzyl phthalate 50 ND ND ND ND ND ND NA NA 3.2 J	NA NA
Din-buty/phthalate 50 0.42 BJ 0.36 BJ ND 0.63 BJ 0.79 BJ 0.67 0.55 BJ NA NA 1.8 BJ	NA NA
Dibenzofuran ND ND ND ND ND ND ND ND NA NA 16	NA NA
Diethyl phthalate 50 ND ND ND ND ND 0.86 J ND NA NA	NA NA
Fluoranthene 50 ND ND ND ND ND ND NA NA 1.8 J	NA NA
Fluorene 50 ND ND ND ND ND ND ND ND NA NA 11	NA NA
N-Nitrosodiphenylamine 50 ND ND ND ND ND ND NA NA 0.57 J	NA NA
Naphthalene 10 ND ND ND ND ND ND NA NA 21	NA NA
Phenanthrene 50 ND ND 1.2 J 0.76 J 1.3 J 2.3 J 0.95 J NA NA 16	NA NA
Pyrene 50 ND ND ND ND ND ND NA NA 1.2 J	NA NA
Organochlorine Pesticides - ug/Kg	
4,4'-DDD 0.3 NA 0.036 J NA NA 0.11 NA 0.053 NA NA NA	NA NA
Endosulfan II - NA 0.019 J NA NA 0.05 NA 0.02 J NA NA NA	NA NA
Endosulfan sulfate NA ND NA NA 0.022 J NA ND NA NA NA	NA NA
Endrin ND NA ND NA NA ND NA NA NA 0.031 J NA NA NA	NA NA
Endrin aldehyde 5 NA ND NA NA 0.056 NA ND NA NA NA NA	NA NA
gamma-Chlordane 0.05 NA 0.082 NA NA 0.14 NA 0.072 NA NA NA Heptachlor epoxide 0.03 NA ND NA NA 0.083 NA 0.023 J NA NA NA	NA NA
Heptachlorepoxide 0.03 NA ND NA NA 0.083 NA 0.023 J NA NA NA Methoxychlor 35 NA ND NA NA 0.11 NA 0.034 J NA NA NA	NA NA
Metroxychior 33 NA NU NA NA U.1 NA U.036 J NA NA NA Metals - ug/Kg ⁴	INA NA
meerars-ug/ng Aluminum – NA 1100 NA NA 560 NA 70300 NA NA NA NA	NA NA
Padminumi – 1900 1900 1900 1900 1900 1900 1900 19	NA NA
Barium 1000 NA 91 NA NA 59 NA 790 NA NA NA NA	NA NA
Berylium 3 NA ND NA NA ND NA 2.7 NA NA NA	NA NA
Cadmium 5 NA ND NA ND NA 4.4 NA NA NA	NA NA
Calcium – NA 114000 NA NA 200000 NA 664000 NA NA NA NA	NA NA
Chromium 50 NA ND NA NA NA 92 NA NA NA	NA NA
Cobalt NA ND NA NA ND NA 50 NA NA NA	NA NA
Copper 200 NA ND NA NA ND NA 160 NA NA NA NA	NA NA
Iron 300 NA 1000 NA NA 450 NA 107000 NA NA NA	NA NA
Lead 25 NA ND NA NA ND NA 120 NA NA NA NA	NA NA
Magnesium 35000 NA S6800 NA NA 78000 NA 251000 NA NA NA	NA NA
Manganese 300 NA 900 NA NA 1500 NA 3400 NA NA	NA NA
Nickel 100 NA ND NA ND NA 110 NA NA NA	N 14
Potassium - NA 790 NA NA 1800 NA 15900 NA NA NA	NA NA
Sodium 20000 NA Sodium Sodium NA 74400 NA 96900 NA NA NA	NA NA
Vanadium NA ND NA ND NA 130 NA NA	NA NA NA NA
Zinc 2000 NA 110 NA NA 12 NA 900 NA NA NA	NA NA

Notes: 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect. 2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - GA Class (TOGS 1.1.1) 3. Samples were collected prior to MV-7 and MW-9 being removed during IRM excavation activities. 4. Sample results were reported by the laboratory in mg/L and converted to ug/L for comparison to GWQSs.

= Exceedance of GA Groundwater Quality Standards (GWQS)