AECOM Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Latham, NY
60135838.05
May 2011

Site Management Plan
Old Agway Site
Ballston Spa, New York
NYSDEC Site # 5-46-021

AECOM Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Latham, NY
60135838.05
May 2011

Site Management Plan
Old Agway Site
Ballston Spa, New York
NYSDEC Site # 5-46-021

Lori A. Hoose
Prepared By Lori A. Hoose

Scott A Underhill
Reviewed By Scott A. Underhill

Contents

Engineering Certification ii

1.0 Introduction 1-1

1.1 Site Background 1-1

2.0 Site Management Plan 2-1

2.1 Engineering Control Components 2-1
2.1.1 Leachate Collection System 2-1
2.1.2 Site Access Control 2-1
2.1.3 Foundation Wall Repair/Removal 2-1
2.1.4 Soil Characterization and Management 2-2

2.2 Institutional Controls Components 2-2

2.3 Inspections and Notifications 2-3

3.0 Operation, Maintenance and Monitoring Plan 3-1

4.0 Inspections, Reporting and Certification 4-1

4.1 Site Inspections 4-1
4.1.1 Inspection Frequencies 4-1
4.1.2 Inspection Forms, Sampling Data, and Maintenance Reports 4-1
4.1.3 Evaluation of Records and Reporting 4-1
4.1.4 Certification of Engineering and Institutional Controls 4-1

4.2 Periodic Review Report 4-1

4.3 Corrective Measures Plan 4-2

5.0 References 5-1

List of Figures

Figure 1 – Site Location Map

Figure 2 – Schematic Cross-section of Collection Trench

List of Tables

Table 1 – Monitoring/Inspection Schedule

Table 2 - Leachate Collection Pipe Sample Analysis and Clean Up Objectives for Water and Soil

Attachments

Attachment 1 Old Agway Health and Safety Task Hazard Analysis

Attachment 2 IC/EC Certification Form

Attachment 3 Site Inspection Checklist

Engineering Certification

I certify that I am currently a NYS registered professional engineer and that this Site Management Plan for the Old Agway Site was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Respectfully submitted,
AECOM Technical Services Northeast, Inc.

May 31, 2011

Scott A. Underhill
Registered Professional Engineer
New York License No. 075332

Date

1.0 Introduction

This document is required as an element of the remedial program at the Old Agway Site ("Site") under the New York State Superfund Standby Program administered by New York State Department of Environmental Conservation (NYSDEC). The Site is listed as Class 4 (issued Site number 5-46-021) meaning that it has been properly closed but requires continued site management, consisting of operation, maintenance, and monitoring (OM&M).

1.1 Site Background

The Site is located off of Science Street in a residential area of Saratoga County in Ballston Spa, New York (Figure 1). The Agway Store building was destroyed by fire on March 4, 1977, and as a result various pesticides and herbicides stored in the basement were released into the environment. After the fire, recognizable herbicides and pesticides were removed, and the basement floor of the building was broken up and backfilled, leaving an exposed foundation wall along the western portion of the Site. Subsequent rainfall infiltrated the backfilled foundation, resulting in the generation of leachate in the subsurface, which ponded at the surface in residential properties down gradient and adjacent to the Site. Samples of the leachate were collected, and analysis showed concentrations of several contaminants, including pentachlorophenol, 2, 4, 5-TP (silvex), and atrazine.

A horizontal collection system consisting of 97 feet of perforated pipe was installed approximately 4-ft below grade in September 1977 to prevent ponding of the groundwater seepage on adjacent properties downgradient from the site (Figure 2). The leachate and groundwater collected by the system is directly discharged to the Saratoga County Sewer District publically owned treatment works for treatment. NYSDEC has been maintaining the collection system since the Consent Order expired in 1986, part of which includes the periodic collection of groundwater samples. The groundwater from the collection system has been sampled periodically since 1990 and every five quarters since 2007 by AECOM Technical Services Northeast, Inc. (AECOM). In April 2007, the NYSDEC approved AECOM to perform site maintenance and monitoring (M&M) at the Site over a four year period. Maintenance within the first year of the program included tree and debris removal from the area of the collection system, location and uncovering of the manhole, and a video inspection to assess the integrity of the collection system.

The instability of the foundation wall on the west end of the property was noted during the initial maintenance and inspection at the Site. Portions of the wall were severely deteriorated. No repairs have been made to correct the stability of the foundation wall to date. The current property owner has inquired as to when repairs to the wall will be made.

2.0 Site Management Plan

This SMP was prepared by AECOM, on behalf of NYSDEC, in general accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementation of Engineering Controls (ECs) and Institutional Controls (ICs) and includes:

- An Engineering Control and Institutional Control (EC/IC) Plan, and
- A Operation, Maintenance and Monitoring (OM&M) Plan.

Engineering controls have been incorporated into the Site remedy to provide proper management of remaining contamination to ensure protection of public health and the environment. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs.

The EC/IC Plan is one component of the SMP in addition to the Operation, Maintenance and Monitoring Plan and is subject to revision by NYSDEC.

2.1 Engineering Control Components

2.1.1 Leachate Collection System

The leachate collection system installed in 1977 continues to be utilized. The collection system is working to abate and prevent the flow of leachate from the Site over the surface and shallow subsurface of properties downgradient and adjacent to the Site by diverting such leachate flow into the Saratoga County Sewer District's sanitary system. Residents in the area are connected to the Village water system.

Analytical results from the February 2010 leachate collection system sampling event demonstrated that multiple exceedances of the New York State Ambient Water Quality Standards (AWQS) for drinking water remain, including detections of aldrin, 2,4,5-TP (silvex) and atrazine. Maintenance of the collection system and monitoring of the leachate should therefore be continued on a five quarter basis. Furthermore, all appropriate permits for the discharge water should be attained, as well as any work that needs to be done to acquire them. During the NYSDEC and NYSDOH file review for the PRR, no permits were located for the site.

2.1.2 Site Access Control

A six foot high chain link fence currently contains the portion of the leachate collection system to the west of the foundation wall. The existing fence is to be inspected and maintained during Site inspections as part of this EC/IC plan. Future modifications to the exact location of the chain link fence may be allowed with NYSDEC approval.

2.1.3 Foundation Wall Repair/Removal

A foundation wall of the Agway store remains on-site along the western property boundary with the Ballard property. This wall is a barrier to the potentially impacted soil located to the east and below the old store foundation. Seeps were observed coming from this wall in the past (1980's), however, inspections since 2007 have not noted any seeps coming from the wall.

Inspection of the wall will be conducted during annual Site visits. The wall is currently in disrepair and an engineer should inspect the structural integrity of the wall. If the only problem is determined to be spalling of the Skim coat, then the recommendation is to remove and replace the skim coat. If cracks or other conditions are noted, then a secondary structural analysis should be implemented.

Should the wall be required to be removed from the Site, any debris generated shall be handled in the appropriate manner and disposed of accordingly.

2.1.4 Soil Characterization and Management

Results from the most recent leachate collection system sampling event, in February 2010, have indicated that the drainage water from the Site is still being impacted by the surrounding soils. Since the Site cannot be delisted unless the hazardous waste (pesticides backfilled on-site when the store burned) are removed, soil samples should be collected to delineate any soils that have levels of pesticides in exceedance of New York State Part 375-6 Unrestricted Use Soil Cleanup Objectives (SCOs). If soils are found to have contaminant levels above Unrestricted Use SCOs, then a remedy should be implemented to remove this source and eliminate continued groundwater impact. Should the excavation of soils be deemed necessary, a Soil Management Plan will be prepared by the contractor, to be submitted to and approved by the NYSDEC prior to initiating any soil excavations. This will describe procedures for contaminant delineation, soil excavation and removal of soils from the property that are designed to protect human health and the environment. This plan will include, at minimum:

- A provision for prior notification and approval of NYSDEC and NYSDOH for any intrusive activities that could result in exposure to subsurface soils. In addition, data from any post excavation monitoring efforts are to be reviewed prior to any intrusive activities;
- Protocols and procedures for sampling soils to determine the concentration of contaminants;
- A description of health and safety requirements and general procedures to be followed during any Site excavation of soils. This should be designed to minimize the possibility that personnel at the facility and the surrounding community will be exposed to Site contaminants during the excavation of soils;
- In the case of off-site soil disposal, a hazardous waste determination protocol to verify whether deposition into a secure hazardous waste landfill or a solid waste landfill is necessary;
- A determination of any Site appropriate green technology use per DER-31; and
- A provision for a submittal of a construction completion report to the NYSDEC for all activities conducted pursuant to the Soil Management Plan.

2.2 Institutional Controls Components

A series of Institutional Controls have been implemented by the NYSDEC to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the installation of groundwater wells and use of groundwater. Adherence to these Institutional Controls on the Site is required by the NYSDEC and will be implemented under this SMP. These Institutional Controls are:

- All ECs must be operated and maintained as specified in this SMP;
- All ECs on the Old Agway Site must be inspected and certified annually;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management for the Site must be reported at the frequency and in a manner defined in this SMP; and
- On-site environmental monitoring devices and treatment units must be protected and replaced as necessary to ensure the devices function in the manner specified in this SMP.

The site has a series of ICs in the form of site restrictions, based on the Site's status as a Class 4 Hazardous Waste site in the NYS Registry. Adherence to these ICs is required by the NYSDEC. Site restrictions that apply to the Site are:

- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended purpose; and
- All future activities on the property that will disturb remaining contaminated material are prohibited unless they are conducted with the permission of the NYSDEC, per the December 23, 1999 letter to Charles Hogan from Denise Wagner, NYSDEC.

2.3 Inspections and Notifications

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Maintenance and Monitoring Plan. A comprehensive Site-wide inspection will be conducted on a five quarter basis to coincide with the leachate sampling, regardless of the frequency of the Periodic Review Report (PRR).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by the NYSDEC.

Notifications will be submitted by the M&M Contractor to the NYSDEC as needed. Notifications will be made to Payson Long or David Gardner, Remedial Bureau E, Section D, NYSDEC DER, 625 Broadway, Albany, NY 12233. In the event that NYSDEC develops a centralized notification system, that system will be used instead.

3.0 Operation, Maintenance and Monitoring Plan

The monitoring program for the Old Agway site is summarized in Table 1 below:

Table 1. Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Leachate Collection Sump	Every Five Quarters	Water	SVOCs plus Atrazine by EPA method SW 8270 Chlorinated herbicides by EPA method SW 8151 Organochlorine pesticides by EPA method SW 8151 Organophosphate pesticides by EPA method SW 8141
Site Inspections	Annually	NA	NA

* The frequency of events will continue as specified until otherwise approved by NYSDEC and NYSDOH.

All leachate sampling activities will be recorded in a field book. Other observations (e.g.,foundation wall, tree obstructions.) will be noted on the Site Inspection Checklist (Attachment 3).

As presented on Table 1, leachate from the sump will be sampled and analyzed for; Semi-Volatile compound plus Atrazine by EPA method SW 8270, Chlorinated Herbicides by EPA method SW 8151, Organochlorine pesticides by EPA method SW 8151, and Organophosphate pesticides by EPA method SW 8141.

Table 2 in the Attachments presents the leachate data collected to date, and includes the Clean-up objectives for both groundwater and soil for the compounds of concern at the Old Agway Site. The clean up objectives/standards for water were obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) - New York State Ambient Water Quality Standard and Guidance Values for drinking water and Groundwater Effluent Limitation, June 1998. The soil clean up objectives are referenced in 6 NYCRR Part 375-6.8, Environmental Remediation Programs, Effective December 14, 2006.

All field work will be conducted in accordance the Old Agway Task Hazard Analysis form (See Attachment 1), which will be updated and approved prior to any field activities.

All monitoring results will be reported to NYSDEC in the Periodic Review Report. A letter report will also be prepared subsequent to each sampling event. The report (or letter) will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;

- Type of samples collected;
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (or be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether leachate conditions have changed since the last reporting event.

Data will be reported in digital format as determined by NYSDEC.

4.0 Inspections, Reporting and Certification

4.1 Site Inspections

4.1.1 Inspection Frequencies

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

4.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

Forms and any other information generated during regular monitoring events and inspections will be kept on file. All forms, including the attached EC/IC Certification forms and Site Inspection Checklist (Attachment 2 and 3), and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report.

4.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that:

- The EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment.

4.1.4 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will certify the following:

- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment; and
- The engineering control systems are performing as designed and are effective.

4.2 Periodic Review Report

A PRR was submitted to and approved by the Department in January 2011. A PRR will be submitted every five years thereafter (January 2016), unless the frequency is changed in a subsequent PRR. The PRR will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also incorporated into the PRR. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;

- Data summary tables and graphical representations of contaminants of concern by media which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific Decision Document;
    - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
    - The overall performance and effectiveness of the remedy.

The PRR will be submitted, in electronic format, to the NYSDEC Central Office and the NYSDOH Bureau of Environmental Exposure Investigation.

4.3 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

5.0 References

New York State Department of Environmental Conservation. 1981. *Order of Consent: Ballston Agway Cooperative.* Signed by M. Peter Lanahan, First Deputy Commissioner, August 6, 1981.

___. 1999. December 23, 1999 letter to Charles Hogan from Denise Wagner, NYSDEC.

___. 1998. Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) - New York State Ambient Water Quality Standard and Guidance Values for drinking water and Groundwater Effluent Limitation, June 1998.

___. 2006. 6 NYCRR Part 375-6.8, Environmental Remediation Programs, Effective December 14, 2006.

___. 2010, DER-10, Technical Guidance for Site Investigation and Remediation, NYSDER, May 2010.

Figures

LEGEND

HISTORIC GROUNDWATER FLOW DIRECTION

COLLECTION SUMP

PLAN

0' 100' 200' 400'

Map Reference:
Study area can be found on the USGS 7.5 minute quadrangle, Saratoga Springs series.

AECOM

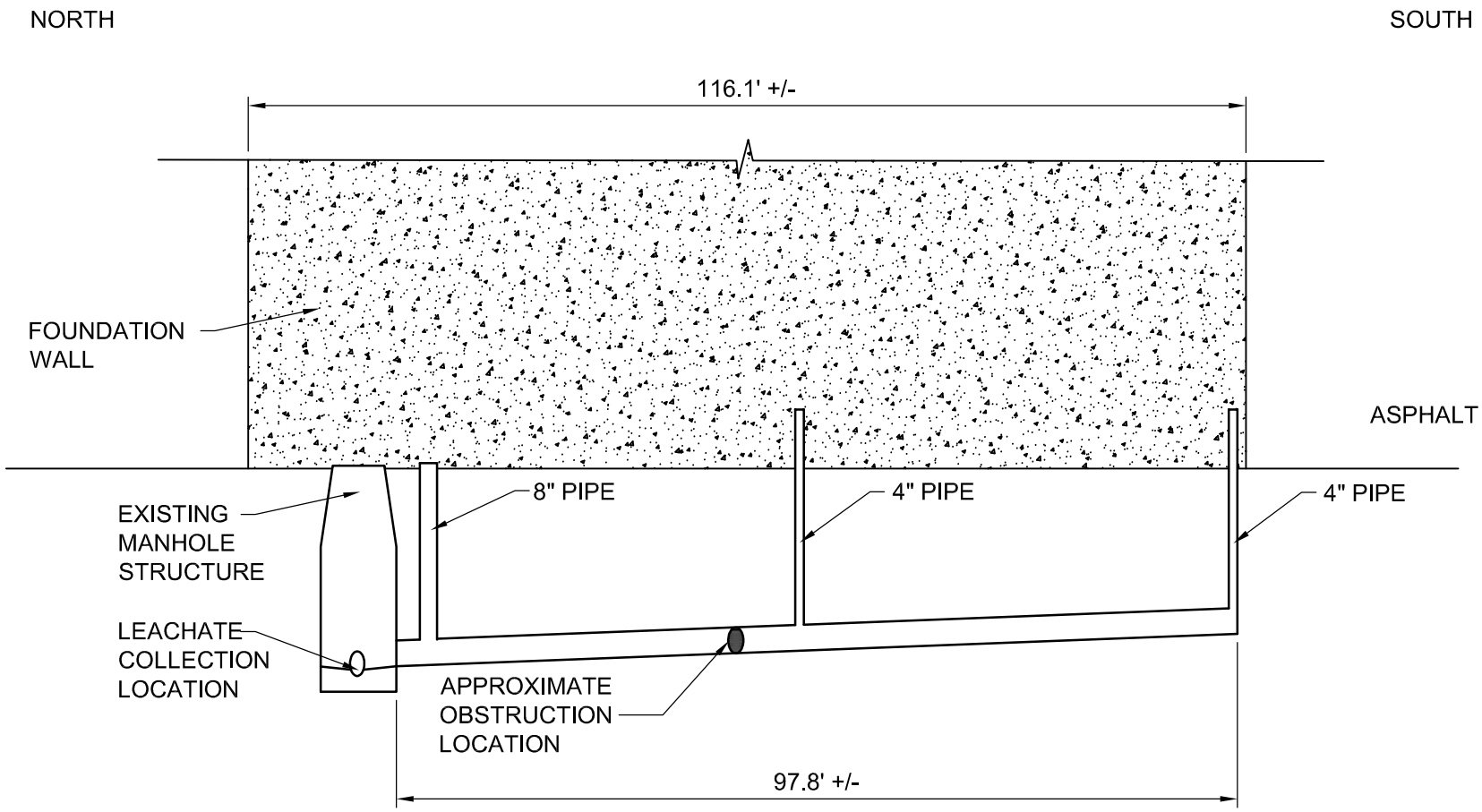
Figure 1
Site Location Plan

OLD AGWAY STORE - SITE 5-46-021
BALLSTON SPA, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
AGWAY-ORTHO-2010.dwg	—	99161	7/2010	02

Plotted By: MeisterK
Layout--Sheet Name: FIGURE2
Plot File Date Created: Jul/12/2010 2:38 PM

Filename: L:\WORK\99161\CADD\AGWAY-SITE-MAP\AGWAY-ORTHO-2010.DWG



CROSS SECTION (FACING EAST)

NOT TO SCALE

AECOM

Figure 2 - Schematic Cross-section of Collection Trench

OLD AGWAY STORE - SITE 5-46-021
BALLSTON SPA, NEW YORK

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
AGWAY-SITE-MAP.dwg	—	99161	AUG. 2009	03

Tables

Table 2
Old Agway Site
Ballston Spa, New York
Site #5-46-021
Leachate Collection Pipe Sample Analysis
and Clean Up Objectives for Water and Soil

Chemical	Groundwater Standard or Guidance Value [1]	Leachate Collection Pipe								Unrestricted use Soil Cleanup Objectives in ppm [2]
		Mar-90	Aug-91	May-92	Apr-95	Nov-99	Aug-07	Nov-08	Feb-10	
Pesticide Organics										
Aldrin	NDC	**0.11**	**0.29**	**0.29**	**0.15**	**0.47**	**0.13**	**0.12**	**0.14**	0.005
Chlordane	0.05	<0.05	<0.5	<0.5	<0.84	NA	<0.050	<0.050	<0.050	0.094
gamma-Chlordane	0.1	NA	NA	NA	NA	0.19	<0.050	<0.050	<0.050	None
gamma-BHC (lindane)	0.05	NA	NA	NA	NA	0.18	<0.050	<0.050	<0.050	0.1
Dieldrin	0.004	**0.16**	**0.25**	**0.25**	<0.17	**0.32**	**0.16**	**0.20**	**0.12**	0.005
4,4'-DDD	0.3	<0.1	<0.1	<0.1	<0.17	<0.10	<0.10	<0.10	<0.10	0.0033
Phenols										
Phenols	1	<1	<1	<1	NA	**41.2**	<10	<20	<10	0.33
Pentachlorophenol	1	<1	<1	<1	NA	NA	<20	<40	<20	0.8
Herbicides										
2,4-D	50	<1	<1	<1	<1.7	<1.0	<1.0	<1.0	<1.0	None
2,4,5-TP (Silvex)	0.26	**1.5**	**0.96**	**1.9**	<0.84	**0.85**	**0.14**	**0.32**	**0.13**	3.8
Organophosphate Pesticides										
Atrazine	7.5	**160**	**8.6**	**240**	**270**	**546**	NA	**160**	**150**	None
Diazinon	0.7	<0.2	<0.2	<0.2	<0.33	<0.46	NA	NA	<5.1	None
Demeton-o,s	5	**11**	<1	**2.4**	<0.33	<0.31, <0.15	NA	NA	<5.1, <5.1	None
Ronnel	None	NA	NA	NA	NA	**1.59**	NA	NA	NA	None
Fensulfothion	None	NA	NA	NA	**0.48**	<0.46	NA	NA	NA	None
o,o,o - Tepp	None	NA	NA	NA	NA	NA	<0.2	<0.2	NA	None
Thionazin	None	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Phorate	NDC	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Dimethoate	None	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Disulfoton	NDC	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Methyl Parathion	1.5	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Parathion	1.5	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None
Famphur	None	NA	NA	NA	NA	NA	<0.2	<0.2	<5.1	None

[1] TOGS 1.1.1 - New York State Ambient Water Quality Standard and Guidance Values for drinking water and Groundwater Effluent Limitation, June 1998.

[2] 6 NYCRR Part 375-6.8, Environmental Remediation Programs, Effective December 14, 2006

NDC = the standard is the non-detectable concentration by the approved analytical methods.
Bold = Analyte detected
Bold and Highlighted = Analyte detected above AWQS or GV
NA = not analyzed
All concentrations in ug/L.
- not applicable

Attachment 1

Old Agway Health and Safety Task Hazard Analysis

S3NA-209-FM TASK HAZARD ANALYSIS

AECOM	Project Name: Old Agway Site - 546021	Project Number: 60135838	Client: NYSDEC
	Supervisor: Scott Underhill	Project Manager: Lori Hoose	Location: Court Street, Ballston Spa, NY
	THA Developed By: Lori Hoose		Date: May 2011
TASK HAZARD ANALYSIS	Task Name: Leachate sampling from Sump and Site Inspections	Regularity of Task: One-time ☐ Routine ☑	

	Job Event Sequence (List the major steps of the individual task)	Hazards (List primary hazards)	Hazard Classification (before controls) Severity	Likelihood	Risk Level	Hazard Classification	Controls (List controls that AECOM will implement)
1	Remove Manole Cover	Weight of Manhole Lid, Possible pinching	1	1	1	Low	Crow Bar or manhole cover remover, heavy cloth gloves
2	Using a beaker on a stick, sample leachate	Splashing of water	1	1	1	Low	Safety glasses and protective gloves.
3	from discharge point in manhole.				0		
4	Replace Manhole cover.	Weight of Manhole Lid, Possible pinching	1	1	1	Low	Crow Bar, Manhole cover remover, heavy cloth gloves.
5					0		
6	Site Inspections	Insects, Cold/heat	1	1	1	Low	Proper protective clothing.
7					0		
8					0		
9		Contaminants of Concern:			0		
10		Pesticides (Aldrin, Dieldrin)			0		
11					0		
12		Herbicides (2,4,5-TP (Silvex))			0		
13		Phenols			0		
14					0		
15					0		
16					0		
17					0		

Hazard Classification Guidelines

Severity

1 Remote potential for injury, property damage/$ loss, or env damage

2 Potential for minor first aid injury, property damage/$ loss, or environmental damage

3 Potential for moderate personnel injuries, including medical treatment, property damage/$ loss, environmental damage, or negative public impact

4 Potential for a serious injury, major property damage/$ loss, serious impact to the environment, and public health

5 Catastrophic damage to people, property/equipment, environment, or public health

Likelihood of Occurrence

1 Very unlikely

2 Unlikely

3 Likely

4 Very likely

5 Certain

Hazard Classification Matrix

Likelihood \ Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Risk Level
Low
Medium
High

Risk Level = Likelihood x Severity

S3NA-209-FM TASK HAZARD ANALYSIS

AECOM	Project Name: Old Agway Site - 546021	Project Number: 60135838	Client: NYSDEC
	Supervisor: Scott Underhill	Project Manager: Lori Hoose	Location: Court Street, Ballston Spa, NY
	THA Developed By: Lori Hoose		Date: May 2011

SUMMARY OF CONTROLS	Task Name: Leachate sampling from Sump and Site Inspections	Regularity of Task: One-time ☐ Routine ☑

Personal Protective Equipment (*check all that apply*)

- ☑ CSA/ANSI Safety-Toed Boots (Leather or Rubber)
- ☑ CSA/ANSI Safety Glasses or Goggles
- ☑ CSA/ANSI-approved Hard Hat
- ☑ CSA/ANSI Type II/III Reflective Traffic Safety Vest
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

Air Monitoring (reference HASP monitoring plan)

☐ No air monitoring required ☑ Air monitoring required (*see procedures below*)

Parameter	Location/Monitoring Interval	Response/Action Levels	Response Activity
		See Below	See Below

Required Training (associated with this THA)	Key SOPs (associated with this THA)		Client & Other Requirements
1 40 Hazwhoper training	S3NA-308-PR Manual Lifting, Field		Air Monitoring will be conducted if there is any entering the manhole (including "breaking the plain" of the manhole). If this case, air would need to be monitored for oxygen and LEL.
2	S3NA-505-PR Cold Stress Prevention		
3	S3NA-511-PR Heat Stress Prevention		
4	S3NA-305-PR Hand and Power Tools		
5			
6			

Acknowledgement / Signatures

Project Manager / Supervisor (signature): Date:

Name	Signature	Company	Date	Name	Signature	Company	Date

S3NA-209-FM TASK HAZARD ANALYSIS

AECOM	Project Name: Old Agway Site - 546021	Project Number: 60135838	Client: NYSDEC
	Supervisor: Scott Underhill	Project Manager: Lori Hoose	Location: Court Street, Ballston Spa, NY
	THA Developed By: Lori Hoose		Date: May 2011
EMERGENCY RESPONSE PLAN	Task Name: Leachate sampling from Sump and Site Inspections	Regularity of Task: One-time ☐ Routine ☑	

Check-in Procedures

Check-in Times	Check-in Person	Phone Number	Cell Phone Number
Alternate:			

Emergency Coordinators / Key Personnel

Name	Title	Phone Number	Cell Phone Number
	On-site First Aid Attendant		
Lori Hoose	Project Manager	518 951-2353	518 275-5691
	Site Supervisor		
Michael Grasso	Regional SH&E Manager	607-282-0175	607-282-0175
	Incident Reporting Line (BY THE END OF THE SHIFT)	1.800.348.5046	
David Gardner	Client Contact	518 402-9813	
Payson Long			

Emergency Agencies / Public Utilities

Name	Type	Details	Phone Number
Ballston Spa Police Department	Police		911
Eagle Matt Lee Fire Department	Fire		911 or (518) 885-6261
Community Emergency Corps	Ambulance		911
Saratoga Hospital	Nearest Hospital / Clinic		911 or (518) 587-3222
	Poison Control Center		1 800-222-1222
	Pollution / Environmental		

Emergency Equipment & Supplies

- ☑ First Aid Kit - Type:
- ☐ Blankets / Survival:
- ☑ Fire Extinguishers Type:
- ☑ Communication Device
- ☑ Vehicle Safety Equipment
- ☑ Eye Wash
- ☐ Spill Kit
- ☐ Other:

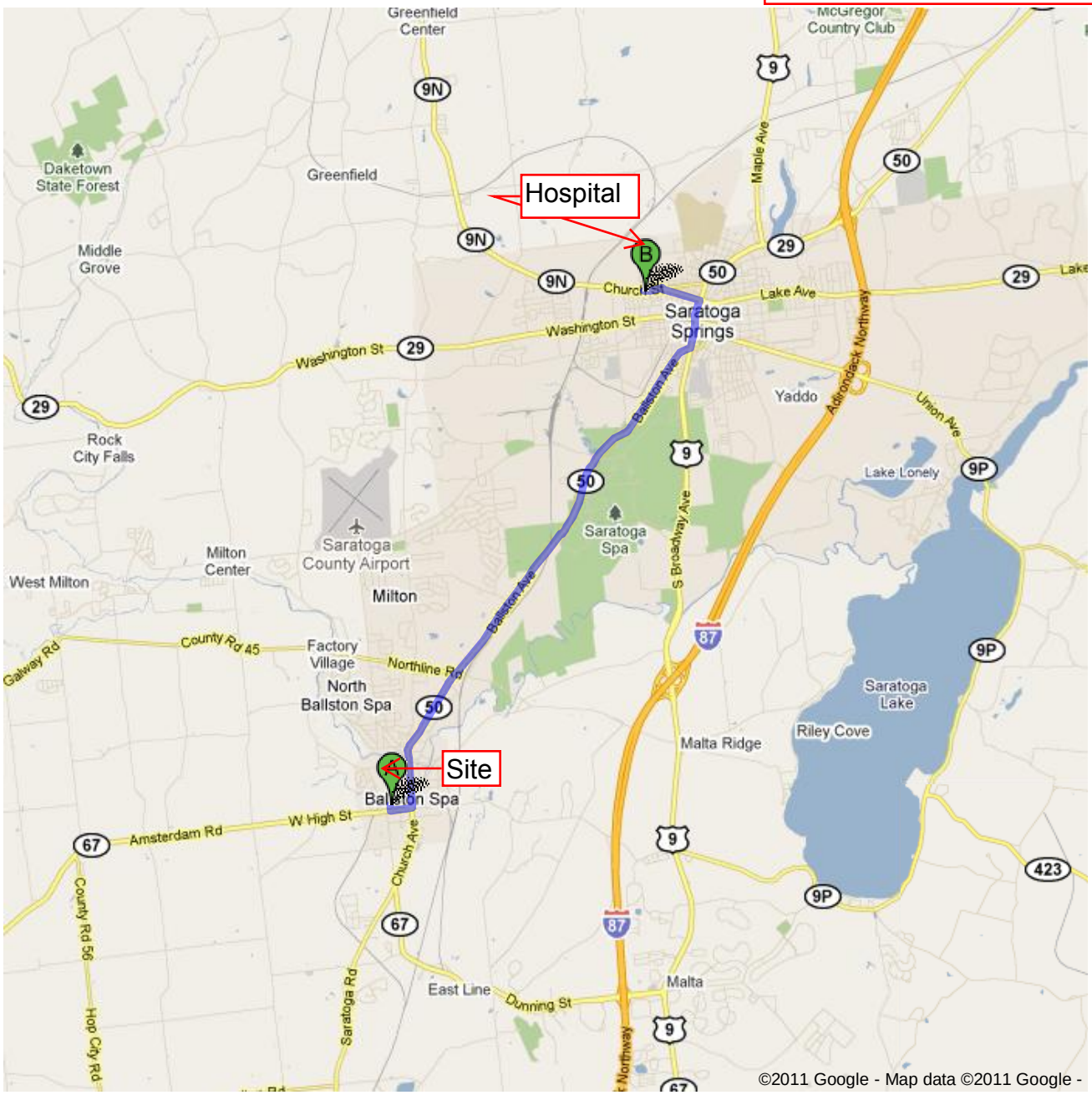
Other Emergency Plan Details

See Attached Map to Saratoga Hospital

Google maps

Directions to Saratoga Hospital
211 Church Street, Saratoga Springs, NY 12866-1090 - (518) 587-3222
7.7 mi – about **17 mins**

Map to Saratoga Hospital



Court St, Ballston Spa, NY 12020

1.	Head **south** on **Court St** toward **W High St**	go 325 ft total 325 ft
2.	Turn left onto **W High St** About 2 mins	go 0.2 mi total 0.3 mi
3.	Turn left onto **Milton Ave** About 1 min	go 0.7 mi total 1.0 mi
4.	Continue onto **Doubleday Ave** About 2 mins	go 1.1 mi total 2.0 mi
5.	Continue onto **Ballston Ave** About 7 mins	go 4.5 mi total 6.5 mi
6.	Turn left onto **Broadway Ave** About 2 mins	go 0.6 mi total 7.1 mi
7.	Turn left onto **Church St** Destination will be on the right About 2 mins	go 0.6 mi total 7.7 mi

Saratoga Hospital
211 Church Street, Saratoga Springs, NY 12866-1090 - (518) 587-3222

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

Attachment 2

IC/EC Certification Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PERIODIC REVIEW DATA COLLECTION FORM (PRDCF)
12/23/2010

SITE DESCRIPTION

REMEDIAL PROGRAM: **HW**

SITE NO.: **546021**

CITY/TOWN: Ballston Spa
COUNTY: Saratoga

SITE NAME: **Old Agway Store**

SITE ADDRESS: Science Street
ZIP CODE: 12020

SITE-USE RESTRICTION: Not Specified
CURRENT USE: Structure

SITE MANAGEMENT PLAN INCLUDES:

SITE MANAGEMENT PLAN INCLUDES:	YES	NO	N/A
Institutional/Engineering Control (IC/EC) Certification Plan	☒	☐	☐
Monitoring Plan	☒	☐	☐
Operation and Maintenance (O&M) Plan	☐	☒	☐

PERIODIC REVIEW FREQUENCY: Every 5 years

DATE OF THIS PERIODIC REVIEW: Last completed January 2011

DESCRIPTION OF INSTITUTIONAL CONTROLS BEING CERTIFIED

Land Use Restriction
Groundwater Use Restriction

DESCRIPTION OF ENGINEERING CONTROLS BEING CERTIFIED

Leachate Collection System
Fencing
Foundation Wall for soil and groundwater

DESCRIPTION OF REMEDY ELEMENTS SUBJECT TO THE MONITORING PLAN

PR Determines monitoring of below elements is:			Satisfactory	Unsatisfactory	May be discontinued
OU 01	Hydraulic Control	Groundwater-Containment	☐	☐	☐

OU 01	Leachate Recovery	Other	☐	☐	☐

DESCRIPTION OF REMEDY ELEMENTS SUBJECT TO THE O&M PLAN

PR Determines monitoring of below elements is:			Satisfactory	Unsatisfactory	May be discontinued
OU 01	Hydraulic Control	Groundwater-Containment	☐	☐	☐
OU 01	Leachate Recovery	Other	☐	☐	☐

DESCRIPTION OF ANY CORRECTIVE ACTION WORK NEEDED

Corrective Action Work Plan Approved: **Corrective Action Work Plan Implementation Complete:**

Will be determined based on Site Inspection

Note: List Problems and Severity as found in Reference 5 "Site Management Problems and Severity Identification Guidelines."

PERIODIC REVIEW REPORT APPROVAL AND ACCEPTANCE OF IC/EC CERTIFICATION

Date PRR Approved and IC/EC Certification Accepted:

PR Frequency: ☐ **Continues every ____ years** ☐ **New Period**

Attachment 3

Site Inspection Checklist

Site-Wide Annual Inspection Form

Old Agway Site
Ballston Spa, New York
Site # 5-46-021

Inspection Date:_____

Item	Yes	No	N/A	Comments
Where applicable, is the collection system fence in good condition?				
Is there any sign of leachate or seeps from the foundation wall?				
Is the foundation wall showing signs of deterioration?				
Is the area around the manhole clear and the manhole accessible?				
Has remedial performance criteria been achieved or maintained?				
Has sampling and analysis of appropriate media been performed during the monitoring event?				
Has the maintenance checklist been completed? (If a system is installed)				
Are site records including the Site Management Plan complete and up-to-date?				
If applicable, have there been any modifications made to the remedial or monitoring system?				
If applicable, does the remedial or monitoring system need to be changed or altered at this time?				
Has there been any intrusive activity, excavation, or construction occurred at the site?				
Were the activities mentioned above, performed in accordance with the SMP?				
Was there a change in the use of the site or were there new structures constructed on the site?				

Note: Upon completion of the form any non-conforming items warranting corrective action should be identified here within.

Name of Inspector: _____ Signature of Inspector: _____

Inspector's Company: _____ Date: _____