

## Site Management Plan II Template

### For Sites requiring management of *Institutional Controls only*

#### Instructions to NYSDEC Project Manager

This template will be applicable to a site that has no remaining engineering controls, but does have institutional controls that need to be adhered to and maintained. The template should be sent to the remedial party in its entirety.

#### Instructions to Remedial Party / Remedial Party Consultant

This document is a template for development of a Site Management Plan (SMP) for remedial projects performed under the management of NYSDEC, Division of Environmental Remediation. This document is intended to expedite development of a site-specific SMP. By providing format and general content guidelines, this template is designed to provide instruction on the format and content required for agency approval; shorten the document preparation time by remedial parties; improve the quality of draft SMP submittals; shorten the review time by NYSDEC; and streamline the process for SMP approval by NYSDEC. This is a generic and non-site-specific document that does not address all possible health or environmental issues of concern to NYSDEC or NYSDOH. It is provided as a supplement to NYSDEC's DER-10 and is not a substitute for the agency review and comment process.

Many of the sections require that summaries of information from previous documents (e.g., investigation reports, final engineering reports, etc.) be incorporated. The purpose of summarizing this information in this document is to provide a single, concise resource for future owners or site workers to understand the remedial history and nature of site contamination. The emphasis should be on the contamination that remains. The reader should be able to clearly understand the site's remedial history and nature and extent of the contamination remaining in the various environmental media (and perhaps building materials), as well as the corresponding potential human exposure pathways, that are being addressed by the SMP.

This document contains blue text, green text and highlighted bracketed items. Blue text indicates text that is generally acceptable to NYSDEC for use in the site-specific SMP. While it must be applied to each site in a manner that is suitable for site-specific conditions, use of this blue text with minimal changes will generally facilitate the timely acceptance of the SMP by NYSDEC. Green text provides guidance on the recommended content in each of the specific sections of the SMP **and should be deleted from this template** prior to submittal. Items highlighted in blue brackets are variable and should be entered in a clear, self-explanatory manner, specific to each case.

It is strongly recommended that the draft SMP submittal to NYSDEC adhere to the following conventions:

- Retain the original blue text color for all blue text that is not changed.

- Use black text for all new text, including any changes to blue text.
- Delete all green text.
- Remove highlights.
- Use track changes redline/strikeout method for all removal and replacement of blue text.
- Submit the redline/strikeout document (with blue text strikeouts in the text and not in the margins) along with a clean copy of the draft SMP to the NYSDEC.

While this approach is not mandatory, it should significantly reduce the review time required by NYSDEC staff and expedite approval of the document.

The following template is a working document and may be modified and improved periodically. Comments and suggestions for improvement are welcome. It is recommended that the remedial party contact the NYSDEC's project manager prior to initiating the preparation of the SMP to ensure the use of the most recent version of this template.

[Site Name]  
[County Name] COUNTY  
[City], NEW YORK

---

# SITE MANAGEMENT PLAN

NYSDEC Site Number: [xxxxxxx]

USEPA ID # [Enter if applicable]

**Prepared for:**

[Remedial Party Name]

[Remedial Party Address]

**Prepared by:**

[Name]

[Address]

[Phone]

## Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

---

[MONTH YEAR]

## CERTIFICATION STATEMENT

I \_\_\_\_\_ certify that I am currently a [NYS registered professional engineer or Qualified Environmental Professional as in defined in 6 NYCRR Part 375] and that this Site Management Plan 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).

\_\_\_\_\_ [P.E., QEP]

\_\_\_\_\_ DATE

TABLE OF CONTENTS

**[Site Name]**  
**[County Name] COUNTY**  
**[City], NEW YORK**

**SITE MANAGEMENT PLAN**

This Table of Contents should be regenerated upon completion of the site-specific SMP.

Table of Contents

ES EXECUTIVE SUMMARY ..... 10

1.0 Introduction..... 11

    1.1 General ..... 11

    1.2 Revisions ..... 12

    1.3 Notifications ..... 13

2.0 Summary of Previous Remedial Investigations and Remedial Actions ..... 14

    2.1 Site Location and Description ..... 14

    2.2 Physical Setting ..... 15

        2.2.1 Land Use ..... 15

        2.2.2 Geology..... 15

        2.2.3 Hydrogeology ..... 16

    2.3 Investigation and Remedial History ..... 16

    2.4 Remedial Action Objectives..... 17

        2.4.1 Groundwater ..... 17

        2.4.2 Soil ..... 18

        2.4.3 Surface Water..... 18

        2.4.4 Sediment ..... 19

        2.4.5 Soil Vapor ..... 19

    2.5 Remaining Contamination..... 19

        2.5.1 Soil ..... 19

        2.5.2 Sediment ..... 20

2.5.3 Groundwater ..... 21

2.5.4 Surface Water..... 22

2.5.5 Soil Vapor ..... 22

3.0 Institutional Control Plan..... 24

3.1 General ..... 24

3.2 Institutional Controls..... 24

3.3 Site – wide Inspection ..... 25

4.0 Periodic Assessments/Evaluations..... 26

4.1 Climate Change Vulnerability Assessment..... 26

5.0 Reporting Requirements ..... 28

5.1 Site Management Reports ..... 28

5.2 Periodic Review Report ..... 29

5.2.1 Certification of Institutional Controls..... 31

5.3 Corrective Measures Work Plan ..... 32

6.0 REFERENCES ..... 33

**List of Tables**

---

Notifications.....X

Remaining Soil Sample Exceedances.....X

Remaining Sediment Sample Exceedances .....X

Remaining Surface Water Sample Exceedances .....X

Remaining Soil Vapor Sample Exceedances.....X

Remaining Groundwater Exceedances .....X

Groundwater Elevation Measurements.....X

Monitoring Well Construction Details.....X

Inspection Reporting Summary/Schedule.....X

**List of Figures**

---

Site Location Map.....X  
Site Layout Map (Sample Locations, Boundaries, Tax Parcels, etc.).....X  
Geologic Cross Section.....X  
Groundwater Contour Maps .....X  
Remaining Groundwater Sample Exceedances .....X  
Remaining Soil Sample Exceedances .....X  
Remaining Sediment Sample Exceedances .....X  
Remaining Surface Water Sample Exceedances .....X  
Remaining Soil Vapor Sample Exceedances .....X  
Area of Soil Vapor Intrusion Concern .....X  
Institutional Control Boundaries.....X

**List of Appendices**

---

List of Site Contacts.....X  
Excavation Work Plan .....X  
Remedial Party/Owner Responsibilities .....X  
Environmental Easement/Notice/Deed Restriction .....X  
Monitoring Well Boring and Construction Logs .....X  
Field Sampling Plan .....X  
Quality Assurance Project Plan .....X  
Health and Safety Plan.....X  
Site Management Forms .....X

**List of Acronyms**

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Soil Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System

SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

## ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring and reporting activities required by this Site Management Plan:

The table below should reflect the site-specific items listed in Sections 3, 4 and 7. The green text below are examples and should be changed to reflect site specific requirements.

Site Identification: [Site Identification No.] [Site Name and Address]

Institutional Controls:	1. The property may be used for [restricted residential; commercial, etc.] use;
	2. All ICs as listed in Section 3.2 should be listed here.
Inspections:	Frequency
Site-Wide Inspection	Annually
Evaluations	
Climate Change Vulnerability Assessment	
Soil Vapor Intrusion evaluation	Upon change in use/as needed
Reporting:	
Inspections	Annually
Certification/PRR	Every [3,5] years
Final Construction report	Upon completion of Soil management/Excavation activities

Further descriptions of the above requirements are provided in detail in the subsequent sections of this Site Management Plan.

## 1.0 INTRODUCTION

### 1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the [Site] located in [City], [County] New York (hereinafter referred to as the “Site”). See Figure [x]. The Site is currently in the New York State (NYS) [Select one: Brownfield Cleanup Program (BCP), Environmental Restoration Program (ERP), Inactive Hazardous Waste Disposal Site Remedial Program, Voluntary Cleanup Program (VCP)] Site No. [xxxxxx] which is administered by New York State Department of Environmental Conservation (NYSDEC).

[Remedial Party name(s)] entered into a [Brownfield Cleanup Agreement (BCA), State Assistance Contract (SAC), Order on Consent, Voluntary Cleanup Agreement (VCA)] on [date] with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in Figure [X]. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix [X].

Note: The Environmental Easement may not be available when the SMP is drafted. If the metes and bounds are available when the SMP is prepared, this should be included as an appendix and referenced. If the institutional control for the site is a restrictive covenant or environmental notice rather than an easement, change all references to “easement” to “deed restriction” or “environmental notice” in this document. Also, if the area requiring site management is different than the metes and bounds description provided in the easement, a figure showing the site boundary within which site management is required must be provided in this section of the SMP.

After completion of the remedial work, some contamination remains at this site, which is hereafter referred to as “remaining contamination”. [Institutional (ICs)] have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the [county] County Clerk, requires compliance with this SMP and all ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC), release or closure letter;
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the [BCA, SAC, Order on Consent, VCA] (Index #xx-xxxx-xx-xx; Site #xxxxxx) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix [x] of this SMP.

This SMP was prepared by [Environmental Consultant name], on behalf of [Remedial Party name(s)], in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated [month, year], and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs that are required by the Environmental Easement for the site.

## 1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a post-remedial removal of contaminated sediment or soil, or other significant change to

the site conditions. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

### 1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- Written 60-day advance notice of any proposed changes in site use that are required under the terms of the [Select one: (BCA), SAC, Order on Consent, VCA], 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- Written 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (EWP).

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the [Select one: Brownfield Cleanup Agreement (BCA), State Assistance Contract (SAC), Order on Consent, Voluntary Cleanup Agreement (VCA)], and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table [x] on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix [x].

**Table [x]: Notifications\***

Name	Contact Information
[NYSDEC Project Manager]	[phone] [email address]
[NYSDEC Regional HW Engineer]	[phone] [email address]
[NYSDEC Site Control]	[phone] [email address]

\* Note: Notifications are subject to change and will be updated as necessary.

## 2.0 Summary of Previous Remedial Investigations and Remedial Actions

This section should provide a concise description of the location and layout of the site; all areas of remaining contamination; remedial activities performed on-site; history; nature and extent of contamination, both before and after the remedy; that is sufficient for someone not familiar with the site to implement this SMP. Anticipate that this may be the only document available in the future to someone who may be conducting work at the site.

### 2.1 Site Location and Description

The site is located in [City], [County Name] County, New York and is identified as Section [xxxx] Block [xxxx] and Lot [xxx] on the [Municipality or County Name] Tax Map (see Figure [x]). The site is an approximately [x]-acre area and is bounded by [road, feature] to the north, [road, feature] to the south, [road, feature] to the east, and [road, feature] to the west (see Figure [x] – Site Layout Map). The figure is to include the site boundary, the institutional control boundary and tax parcels. The boundaries of the site are more fully described in Appendix [x] –Environmental Easement. The owner(s) of the site parcel(s) at the time of issuance of this SMP is/are:

[Site owner(s)]

Note: The Environmental Easement may not be available when the SMP is drafted. If the metes and bounds are available when the SMP is prepared, this should be included as an appendix and referenced. If the institutional control for the site is a restrictive covenant or environmental notice rather than an easement, change all references to “easement” to “deed restriction” or “environmental notice” in this document. Also, if the area requiring site management is different than the metes and bounds description provided in the easement, a figure showing the site boundary must be provided in Appendix [X] – Environmental Easement.

## 2.2 Physical Setting

### 2.2.1 Land Use

The Site consists of the following: a [building, parking area etc.]. The Site is zoned [commercial, industrial etc.] and is currently [vacant, utilized for commercial uses, etc.]. Site occupants include [dry cleaner, etc.]. Other site attributes pertinent to the land use should be added.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include [commercial, residential, etc.] properties. The properties immediately south of the Site include [commercial, residential, etc.] properties; the properties immediately north of the Site include [commercial, residential, etc.] properties; the properties immediately east of the Site include [commercial, residential, etc.] properties; and the properties to the west of the Site include [commercial, residential, etc.] properties.

### 2.2.2 Geology

This section should **briefly** describe:

- Lithology (including historic fill) with thicknesses:
  - geologic cross section(s) (Figure);

A geologic cross section is shown in Figure [x]. Site specific boring logs are provided in Appendix [x].

### 2.2.3 Hydrogeology

This section should **briefly** describe:

- depth to groundwater;
- groundwater flow directions, site, local and regional;
- local and regional hydraulic conductivity;
- groundwater flow figure with data (Figure);
- confining layers, if present;
- presence of sole-source aquifers, if applicable;
- presence of private wells, if applicable, and locations of public water supply wells.

The following text should be included in this section:

A groundwater contour map is shown in Figure [x]. Groundwater elevation data is provided in Table [x]. Groundwater monitoring well construction logs are provided in Appendix [x]. Information regarding whether the wells have been previously decommissioned or are still intact should be provided.

## 2.3 **Investigation and Remedial History**

This section should include a concise description of all investigation and remedial activities performed for the site. The descriptions should be provided in chronological order and provide a brief summary of the findings of each project record. This section should be short and concise, but comprehensive. This section should also:

- Briefly describe past uses and ownership;
- Reference historical reports (remedial investigation, feasibility study, etc.); and
- Describe former structures, processes and activities.

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 6.0 - References.

In Section 6, list all investigation and remedial reports prepared, with specific titles and dates. Include reports for off-site findings as applicable. This section should describe the original site conditions prior to implementation of the remedy and describe the conceptual model of on-site and off-site contamination, and any areas of concern requiring remediation. This should be a broad overview of pre-remedial contamination at the site, similar to the level of detail in the ROD or Decision Document. This should answer the question, “why was remediation performed?”.

Known or suspected sources of contamination (e.g. underground storage tanks, disposal areas, dry wells, etc.) should be identified on Figures. Contaminant classes and major compounds or elements identified in each of the media of concern (e.g. soil, groundwater, soil vapor, indoor air, surface water and sediment) should be provided. Ranges of contaminant concentrations for primary contaminants and comparison should be included in applicable table(s) or figure(s), as warranted. The latter can usually be pulled from the decision document. Do not include numerous pages of investigatory data.

## 2.4 Remedial Action Objectives

This section should provide the listing of the Remedial Action Objectives (RAOs) from the Record of Decision or Decision Document for the Site. Generic RAOs are listed below for reference purposes. Non-applicable RAOs should be deleted and revised to be consistent with the Record of Decision or Decision Document for the site and site – specific RAOs should be added as necessary.

The Remedial Action Objectives (RAOs) for the Site as listed in the [Record of Decision or Decision Document] dated [month, day, year] are as follows.

### 2.4.1 Groundwater

#### RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

#### RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

#### 2.4.2 Soil

##### RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

##### RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

#### 2.4.3 Surface Water

##### RAOs for Public Health Protection

- Prevent ingestion of water impacted by contaminants.
- Prevent contact or inhalation of contaminants from impacted water bodies.
- Prevent surface water contamination which may result in fish advisories.

##### RAOs for Environmental Protection

- Restore surface water to ambient water quality criteria for the contaminant of concern.

- Prevent impacts to biota from ingestion/direct contact with surface water causing toxicity and impacts from bioaccumulation through the marine or aquatic food chain.

#### 2.4.4 Sediment

##### RAOs for Public Health Protection

- Prevent direct contact with contaminated sediments.
- Prevent surface water contamination which may result in fish advisories.

##### RAOs for Environmental Protection

- Prevent releases of contaminant(s) from sediments that would result in surface water levels in excess of (ambient water quality criteria).
- Prevent impacts to biota from ingestion/direct contact with sediments causing toxicity or impacts from bioaccumulation through the marine or aquatic food chain.
- Restore sediments to pre-release/background conditions to the extent feasible.

#### 2.4.5 Soil Vapor

##### RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

### **2.5 Remaining Contamination**

This section should provide a sufficient summary of contamination remaining at the site so that anyone performing future excavations or development at the site can anticipate the environmental conditions they will encounter. Non-applicable sub-sections should be removed from this section.

#### 2.5.1 Soil

This section should describe the existing soil conditions, both on-site and off-site, after completion of the remedy.

This section should include the following:

- A description of the contaminant classes and major compounds or elements identified in the soil;
- A table of exceedances of applicable/relevant Unrestricted Use SCOs (Part 375-6) after completion of the remedial action;
- A figure of exceedances of applicable/relevant Unrestricted Use SCOs (Part 375-6) after implementation of the remedial action. This figure should also identify areas complying with Unrestricted Use SCOs (Part 375-6) after completion of the remedial action;
- A figure showing the elevations of the top of remaining soil contamination and the thickness of the remaining contamination;
- A description of the estimated volume of remaining soil contamination;
- A description of the demarcation layer (if present, including material, depth, extent, etc.) or a description of the depth at which remaining contamination will be encountered, and the depth at which contamination is no longer expected;
- A description of areas of the site that contain remaining source areas or higher levels of contamination;
- A description of active utility lines or other subsurface infrastructure present at the site and remaining contamination that may be encountered during maintenance or removal of the utility or infrastructure;
- A description of remaining or suspected contamination that was not remediated due to the presence of buildings or critical infrastructure;

The following text should be included in this section:

Table [x] and Figure [x] summarize the results of all soil samples collected that exceed the Unrestricted Use SCOs and the [residential, restricted residential, commercial or industrial] Use SCOs at the site after completion of remedial action. When reporting results in tables and figures, values for non-detects or below minimum reporting limits must be provided with the limit as follows: ND (<0.5) or < MRL (<0.27).

### 2.5.2 Sediment

This section should describe the existing sediment conditions, both on-site and off-site, after completion of the remedy.

This section should include the following:

- A description of the contaminant classes and major compounds or elements identified in the sediment;

- A table of exceedances of applicable/relevant standards, criteria and guidelines (SCGs) after completion of the remedial action;
- A figure of exceedances of applicable/relevant SCGs after completion of the remedial action;
- A figure showing the elevations of the top of remaining sediment contamination and the thickness of the remaining contamination;
- A description of the estimated volume of remaining sediment contamination;
- A description of the demarcation layer (if present, including material, depth, extent, etc.) or a description of the depth at which remaining contamination will be encountered, and at which contamination is no longer expected;
- A description of areas of the site that contain remaining source areas or higher levels of contamination;

The following text should be included in this section:

Table [x] and Figure [x] summarize the results of all sediment samples collected that exceed the SCGs after completion of the remedial action.

When reporting results in tables and figures, values for non-detects or below minimum reporting limits must be provided with the limit as follows: ND (<0.5) or < MRL (<0.27).

### 2.5.3 Groundwater

This section should describe the existing groundwater conditions, both on-site and off-site, after completion of the remedy.

This section should include the following:

- A description of the contaminant classes and major compounds or elements identified in the groundwater;
- Table of exceedances of applicable/relevant SCGs after completion of the remedial action;
- Figure of exceedances of applicable/relevant SCGs after completion of the remedial action;
- Figure of plume;
- A description of the depths, range and aerial location of the remaining groundwater contamination at the site including contaminants of concern and levels above SCGs for the site;
- A description of areas of the site that contain remaining source areas or higher levels of contamination;

The following text should be included in this section:

Table [x] and Figure [x] summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action. When reporting results in tables

and figures, values for non-detects or below minimum reporting limits must be provided with the limit as follows: ND (<0.5) or < MRL (<0.27).

#### 2.5.4 Surface Water

This section should describe the existing surface water conditions, both on-site and off-site, after completion of the remedy.

This section should include the following:

- A description of the contaminant classes and major compounds or elements identified in the surface water;
- Table of exceedances of applicable/relevant SCGs after completion of the remedial action;
- Figure of exceedances of applicable/relevant SCGs after completion of the remedial action;
- A description of the depths, range and aerial location of the remaining surface water contamination at the site including contaminants of concern and levels above SCGs for the site;
- A description of areas of the site that contain remaining source areas or higher levels of contamination;

The following text should be included in this section:

Table [x] and Figure [x] summarize the results of all samples of surface water that exceed the SCGs after completion of the remedial action. When reporting results in tables and figures, values for non-detects or below minimum reporting limits must be provided with the limit as follows: ND (<0.5) or < MRL (<0.27).

#### 2.5.5 Soil Vapor

This section should describe the existing soil vapor exceedances and concerns regarding the potential for soil vapor intrusion conditions, both on-site and off-site, after completion of the remedy.

This section should include the following:

- Summary of soil vapor data;
  - Contaminant classes and major compounds in ambient air, indoor air, crawl space air, soil vapor and sub-slab soil vapor.

- Ranges and maximum concentrations.
- A description of areas of the site that contain higher levels of contamination;
- Table of exceedances of applicable/relevant SCGs after completion of the remedial action;
- Figure of exceedances of applicable/relevant SCGs after completion of the remedial action;

The following text should be included in this section:

Table [x] and Figure [x] summarize the results of all samples of soil vapor that exceed the SCGs after completion of the remedial action.

When reporting results in tables and figures, values for non-detects or below minimum reporting limits must be provided with the limit as follows: ND (<0.5) or < MRL (<0.27).

### **3.0 Institutional Control Plan**

#### **3.1 General**

Since remaining contamination exists at the site, Institutional Controls (ICs) are required to protect human health and the environment. This IC Plan describes the procedures for the implementation and management of all ICs at the site. The IC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all ICs on the site;
- The basic implementation and intended role of each IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of ICs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix [x]) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the ICs required by the site remedy, as determined by the NYSDEC.

#### **3.2 Institutional Controls**

A series of ICs is required by the [ROD, RAWP or Decision Document] to: (1) prevent future exposure to remaining contamination; and, (2) limit the use and development of the site to [usage type] uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an

amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure [x]. These ICs are:

List all ICs; use the following text as appropriate; this list should match the remedy for the site and the Environmental Easement.

- The property may be used for : [residential, restricted residential; commercial, industrial] use;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the [county name] Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure [x], and appropriate actions to address exposures must be implemented; and
- Vegetable gardens and farming on the site are prohibited;

### 3.3 Site – wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect the remaining contamination at the site. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report.

During an inspection, an inspection form will be completed as provided in Appendix [x] – Site Management Forms. The inspections will determine and document the following:

Compliance with all ICs, including site usage;

- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- If site records are complete and up to date.

Reporting requirements are outlined in Section 5.0 of this plan.

Inspections will also be performed in the event of an emergency. An inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the ICs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

## **4.0 Periodic Assessments/Evaluations**

### **4.1 Climate Change Vulnerability Assessment**

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments

provide information so that the site is prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

The SMP should include a summary of any vulnerability assessments performed for the site and should describe the method(s) to be used to conduct the vulnerability assessment, the source of information for future climate projections and a list of the assets/vulnerabilities to be included in the evaluation for future assessments. The assessment should also include an evaluation of adaptations to increase the site and associated remedial systems resilience to such events. If a vulnerability assessment has not been prepared for the site at the time of the preparation of the SMP, a description of the timing of future vulnerability assessments and/or the justification for not performing a vulnerability assessment should be included in the SMP.

This section provides a summary of vulnerability assessments that will be conducted for the site during periodic assessments, and briefly summarizes the vulnerability of the site and/or engineering controls to severe storms/weather events and associated flooding.

This assessment should include, but not be limited to, a discussion of potential vulnerabilities to be assessed during periodic reviews such as the following:

- Flood Plain: Identify whether the site is located in a flood plain, low-lying or low-groundwater recharge area.
- Site Drainage and Storm Water Management: Identify areas of the site which may flood during severe rain events due to insufficient groundwater recharge capabilities or inadequate storm water management systems.
- Erosion: Identify any evidence of erosion at the site or areas of the site which may be susceptible to erosion during periods of severe rain events.
- High Wind: Identify areas of the site and/or remedial system which may be susceptible to damage from the wind itself or falling objects, such as trees or utility structures during periods of high wind.
- Electricity: Identify the susceptibility of the site/remedial system to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes, and the associated impact on site equipment and operations.
- Spill/Contaminant Release: Identify areas of the site and/or remedial system which may be susceptible to a spill or other contaminant release due to storm-related damage caused by flooding, erosion, high winds, loss of power etc.

It is recommended that photographs of any vulnerable areas identified at the site be provided as part of this section.

## **4.2 Soil Vapor Intrusion Evaluation**

This section is applicable to any site that has an IC related to soil vapor intrusion as identified in Section 3.2-Institutional Controls.

A soil vapor intrusion evaluation must be performed upon a change in use of the property that will result in occupancy of a previously unoccupied building or initial occupancy of a new building. The breadth of this evaluation will be determined based upon discussion with the NYSDEC Project manager and NYSDOH. Based upon these discussion and agency requirements, a work plan may need to be developed that requires that sampling be performed. At a minimum, a SVI sampling work plan would include the following information:

- A figure showing the soil vapor intrusion sample locations;
- Discuss the depths of the soil vapor samples;
- Include a table of sample locations and analytical parameters to be analyzed along with the minimum reporting limits to be achieved by the NYS ELAP-certified laboratory;

Upon completion of the evaluation, if an action is required, any actions taken or to be taken must be reflected in an updated SMP.

## 5.0. Reporting Requirements

### 5.1 Site Management Reports

All site management inspection events will be recorded on the appropriate site management forms provided in Appendix [x]. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table [x] and summarized in the Periodic Review Report.

**Table [x]: Schedule of Inspection Reports**

Task/Report	Reporting Frequency*
-------------	----------------------

Inspection Report	Annually

\* The frequency of events will be conducted as specified until otherwise modified by the NYSDEC.

All inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Non-routine event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and

## 5.2 Periodic Review Report

The Periodic Review Report will consist only of the certification as specified in Section 5.2.1 except in the event where there have been changes to the site or data gathered during the certifying period. Given such an event, the submittal of a comprehensive PR report will be necessary, as specified below.

A Periodic Review Report (PRR) will be submitted to the Department beginning 30 days after the initial 15 month certifying period. This initial certifying period commences upon issuance of the [Certificate of Completion or equivalent document e.g., Satisfactory Completion Letter, No Further Action Letter, etc.]. After submittal of the initial Periodic Review Report, the next PRR shall be submitted [annually or insert third or fifth, as appropriate] to the Department or at another frequency as may be subsequently required by the Department. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix [X] -Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ICs required by the remedy for the site.
- Results of the required annual site inspections and severe condition inspections, if applicable.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any data and/or information generated during the reporting period, with comments and conclusions, if any
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
  - Any new conclusions or observations regarding site contamination based on inspections or data generated;
  - Recommendations regarding any necessary changes to the remedy; and
  - The overall performance and effectiveness of the remedy.

### 5.2.1 Certification of Institutional Controls

Within 30 days after the end of each certifying period, as determined by the NYSDEC, the following certification will be provided to the Department:

*“For each institutional control identified for the site, I certify that all of the following statements are true:*

- The institutional 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;*
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*
- Use of the site is compliant with the environmental easement.*
- The information presented in this report is accurate and complete.*

*I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner’s Designated Site Representative] (and if the site consists of multiple properties): [and I have been authorized and designated by all site owners to sign this certification] for the site.”*

For BCP projects which the Department has determined do not represent a significant threat to public health or the environment, but where contaminants in groundwater exceed drinking water standards, the following should also be included:

- *No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and*

For BCP projects, every five years the following certification will be added:

- *The assumptions made in the qualitative exposure assessment remain valid.*

The signed certification will be included in the Periodic Review Report, if such report is required for the period. Otherwise, the Certification will be submitted as a stand-alone document.

The Periodic Review Report/Certification will be submitted, in electronic format, to the NYSDEC Central Office, the NYSDEC Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report/Certification may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

### **5.3 Corrective Measures Work 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 control, a Corrective Measures Work 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 Work Plan until it has been approved by the NYSDEC. Upon completion of the Corrective Measure, a signed certification form must be submitted to the Department.

## 6.0 REFERENCES

A listing of all site-specific reports utilized for preparation of the SMP should be included in this section.

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – “Technical Guidance for Site Investigation and Remediation”.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Other reports such as the RI, FS, ROD, RAWP, Design etc.

## APPENDIX [x] – LIST OF SITE CONTACTS

This Appendix should include a listing of all site contacts. The below table should be edited as necessary to include all site contacts necessary for implementation of the SMP.

Name	Phone/Email Address
[Site Owner]	[phone] [email address]
[Remedial Party]	[phone] [email address]
[Qualified Environmental Professional]	[phone] [email address]
[NYSDEC DER Project Manager]	[phone] [email address]
[NYSDEC Regional HW Engineer]	[phone] [email address]
[NYSDEC Site Control]	[phone] [email address]
[On and off-site access contacts such as tenants, adjacent property owners, etc.]	[phone] [email address]
[Remedial Party Attorney]	[phone] [email address]

## APPENDIX [X] – EXCAVATION WORK PLAN (EWP)

This plan is similar to a Remedial Action Work Plan and can be largely drawn from the approved site-specific version of that final document.

### [X]-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. Table [x] includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix [x].

**Table [x]: Notifications\***

[Central Office NYSDEC Representative]	[phone] [email address]
[Regional Office NYSDEC Representative]	[phone] [email address]
[NYSDEC Site Control]	[phone] [email address]

\* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of

concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix [x] of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

## [X]-2 SOIL SCREENING METHODS

Soil screening methodology methods should be described here. The following text should be included in this section:

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section [X] of this Appendix.

### **[X]-3 SOIL STAGING METHODS**

This section should provide details describing erosion and sedimentation controls for stockpiles. This section should be consistent with Section [X]-11 Stormwater Pollution Prevention of this Appendix. The following text should be included in this section:

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

### **[X]-4 MATERIALS EXCAVATION AND LOAD-OUT**

This section should describe all methods to be followed for materials loading and on-site management prior to leaving the site. The following text should be included in this section:

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

#### **[X]-5 MATERIALS TRANSPORT OFF-SITE**

This section should describe all methods to be followed for materials management while in transport off-site. The following text should be included in this section:

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: [describe route and provide map]. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]]

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

## **[X]-6 MATERIALS DISPOSAL OFF-SITE**

This section should describe all methods to be followed for materials disposal off-site. The following text should be included in this section:

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class

of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

#### **[X]-7 MATERIALS REUSE ON-SITE**

This section should provide all details for methods to be followed for materials reuse on-site. 'Reuse on-site' means reuse on-site of material that originates at the site and which does not leave the site during the excavation. Material reuse on-site will comply with the requirements of NYSDEC DER-10 Section 5.4(e)4. The following topics should be covered:

- Procedure for determining if reuse is appropriate:
  - Sampling (methods and analytical)
  - Stockpile segregation scheme for on-site reuse
- Size of stockpiles, location (figure)

The following text should be included in this section:

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic

matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

## **[X]-8 FLUIDS MANAGEMENT**

The following text should be included in this section:

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

## **[X]-9 RESERVED**

## **[X]-10 BACKFILL FROM OFF-SITE SOURCES**

This section should describe all methods to be followed for the import, handling and placement of backfill material from off-site. The requirements for backfill used at the site should be consistent with the backfill requirements provided in DER-10 (e.g., Appendix 5).

The following topics should be covered:

- Source area approval process
  - Sources of backfill material
- Source area background check
- DOT Certification
  - Chemical sampling
- Analytes
- Frequency
  - Imported Soil Chemical Quality Standards
- Applicability of protection of groundwater SCOs
- Applicability of protection of ecological resources SCOs

- Stockpile procedures for imported backfill material
  - Size of stockpiles, cover, etc.

The following text should be included in this section:

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at <http://www.dec.ny.gov/regulations/67386.html>, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table [x]. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

## **[X]-11 STORMWATER POLLUTION PREVENTION**

For large excavations, but less than 1 acre, procedures for stormwater pollution prevention should be specified in the EWP. For construction projects exceeding 1 acre, this is required. A summary of the Stormwater Pollution Prevention Plan that conforms to the requirements of the NYSDEC Division of Water guidelines and NYS regulations should be included here. The plan itself may be included as an Appendix to the EWP. The following text should appear in this section:

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

## **[X]-12 EXCAVATION CONTINGENCY PLAN**

Describe the procedures to be followed upon discovery of an unknown source of contamination that may require remediation (USTs, stained soil, drums, etc.). This should include procedures for suspending excavation work, pumping fluids from tanks or containers, and reporting to the spill hotline. Include the following text:

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

### **[X]-13 COMMUNITY AIR MONITORING PLAN**

This section should provide all details of the Community Air Monitoring Plan. Guidance can be obtained in Appendix 1A of DER-10, Generic Community Air Monitoring Plan. At a minimum, this section must include:

- Details of the perimeter air monitoring program;
- Action levels to be used;
- Methods for air monitoring ;
- Analytes measured and instrumentation to be used;
- A figure of the location(s) of all air monitoring instrumentation. A figure showing specific locations must be presented for monitoring stations based on generally prevailing wind conditions, with a note that the exact locations to be monitored on a given day will be established based on the daily wind direction.

The following text should be included somewhere in this section:

A figure showing the location of air sampling stations based on generally prevailing wind conditions is shown in Figure [X]. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at

least two downwind monitoring stations. If a sensitive receptor, such as a school, day care or residential area is adjacent to the site, a fixed monitoring station should be located at that site perimeter, regardless of wind direction, and discussed in the text.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers on the day of exceedance. All data is to be reported in the final report for the excavation activity.

#### **[X]-14 ODOR CONTROL PLAN**

The following text should be included as part of this section:

This odor control plan is capable of controlling emissions of nuisance odors off-site [and on-site, if there are residents or tenants on the property]. Specific odor control methods to be used on a routine basis will include [define elements]. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events within one day of the odor event and notified of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the Excavation Activities Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils; [add other elements as appropriate]. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods [add others as necessary].

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by

sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

#### **[X]-15 DUST CONTROL PLAN**

The following text should be included somewhere in this section:

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

#### **[X]-16 OTHER NUISANCES**

The following items may be necessary depending on the type of wastes present, the location of the site and other site-specific concerns. These plans are generally not required for submission to the NYSDEC.

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

**[X]-17 REPORTING**

A report is to be submitted to the NYSDEC within 90 days of completion of the activities performed under this EWP. This report shall contain a summary of the activities performed; a summary of all data gathered and results; information about any media that was removed from the site: volume, contamination levels, area from which removed; and any other information that may be indicate a change to the “remaining contamination” that is at the site. Such changes may require revision of the SMP.

**APPENDIX [X]**  
**RESPONSIBILITIES of**  
**OWNER and REMEDIAL PARTY**

## **Responsibilities**

This page may be used when site management responsibilities are to be carried out by multiple parties. For example, it can be used when a Remedial Party does not own the site property, and, therefore, must share site management and/or reporting obligations with a site owner, or when the State is operating a remedial system or otherwise carrying out site management.

The responsibilities for implementing the Site Management Plan (“SMP”) for the **[Insert Site Name]** site (the “site”), number **[Insert Site Number]**, are divided between the site owner(s) and a Remedial Party, as defined below. The owner(s) is/are currently listed as: **[Insert site owners’ names, contacts and addresses]** (the “owner”).

**Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out**, the term Remedial Party (“RP”) refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation (“NYSDEC”) is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is: **[Insert RP’s name, contact and address]**.

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

### **Site Owner’s Responsibilities:**

- 1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.
- 2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in a(n) **[Select one-Environmental Easement, Deed Restriction, Environmental Notice]** remain in place and continue to be complied with. The owner shall provide a written

certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

- 3) In the event the site is delisted, the owner remains bound by the [Select one-Environmental Easement, Deed Restriction, Environmental Notice] and shall submit, upon request by the NYSDEC, a written certification that the [Select one-Environmental Easement, Deed Restriction, Environmental] is still in place and has been complied with.
- 4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.
- 5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section [xxx]-Notifications.
- 6) In the event some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in [Section xxx]- Notifications and (ii) coordinate the performance of necessary corrective actions with the RP.
- 7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property/ies. 6 NYCRR Part contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 2.4 of the SMP. A 60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html>.
- 8) If an owner has a written agreement to perform work for the RP, a description of the activities may be inserted here. (The corresponding agreement should also be included in the SMP.) The owner will [insert activities here: maintain fences, conduct mowing, etc.] on behalf of the RP. The RP remains ultimately responsible for maintaining the engineering controls.
- 9) If the site remedy requires the installation, operation, and/or maintenance of an on-site vapor intrusion mitigation system insert the following: Until such time as the NYSDEC deems the vapor mitigation system unnecessary, the owner shall operate

the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.

- 11) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP, or owner, to the tenants on the property. The owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

### **Remedial Party Responsibilities**

- 1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.
- 2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.
- 3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.
- 4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).
- 5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html> .

- 6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section [xxx]- Notifications ] of the SMP.
- 7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Section [X] or Appendix [X] (Operation , Monitoring and Maintenance Manual) of the SMP.
- 8) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.
- 9) Any change in use, change in ownership, change in site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the Department to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

#### **APPENDIX [X] – ENVIRONMENTAL EASEMENT**

This Appendix should include a copy of the Environmental Easement or appropriate deed restriction, environmental notice, etc. The figure/survey that shows the restricted areas must also be included in this Appendix as one is not always filed with the county clerk. In addition, this Appendix should include copies of any required access agreements of other properties required to perform site management activities.

**APPENDIX [x] – HEALTH AND SAFETY PLAN**

A Health and Safety plan (HASP) and associated Community Air Monitoring Plan (CAMP) will be prepared by a qualified person in accordance with the most recently adopted and applicable general industry (29 CFR 1910) and construction (29 CFR 1926) standards of OSHA, the U.S. Department of Labor, as well as any other federal, state or local applicable statutes or regulations. The CAMP must include the appropriate requirements identified by the NYSDOH. Both documents shall be prepared in accordance with NYSDEC's DER-10. At a minimum, the HASP will include a description of the health and safety procedures associated with both performance monitoring of the remedial system(s) and effectiveness monitoring. A copy of the HASP will be available at the site during the conduct of all activities to which it is applicable.

**APPENDIX [x]**  
**SITE MANAGEMENT FORMS**

This Appendix should include all site specific site management forms including site inspection form, routine operation and maintenance forms and non-routine operations and maintenance forms for the site. The forms should be completed during site maintenance activities and provided to the NYSDEC in electronic format in accordance with the reporting requirements specified in Section 7.0 of the SMP. All forms presented are subject to approval of the NYSDEC and should include the minimum reporting requirements as described in Section 7.0.