

RECORD OF DECISION

Kingsbury Landfill
Operable Unit Number 02: Off-Site Soils and Sediment
State Superfund Project
Kingsbury, Washington County
Site No. 558008
March 2014



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

DECLARATION STATEMENT - RECORD OF DECISION

Kingsbury Landfill
Operable Unit Number: 02
State Superfund Project
Kingsbury, Washington County
Site No. 558008
March 2014

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Off-Site Soils and Sediment of the Kingsbury Landfill site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 02 of the Kingsbury Landfill site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 31, 2014

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

Kingsbury Landfill
Kingsbury, Washington County
Site No. 558008
March 2014

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

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

SECTION 2: CITIZEN PARTICIPATION

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

available for review by the public at the following document repository:

Hudson Falls Free Library
220 Main Street
Hudson Falls, NY 12839
Phone: (518) 747-6406

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The Kingsbury Landfill Site is located on Burgoyne Avenue near the intersection of Pine Street in the Town of Kingsbury, Washington County, New York. The surrounding area is rural farmland.

Site Features:

The site is a 14 acre closed landfill. The former landfill has been capped and is now covered with grass. A treatment building is located on-site which houses the leachate collection and treatment system (LCTS). The landfill is surrounded by woods, grasses and two ponds.

Current Zoning/Use(s):

The landfill is zoned commercial. The parcels surrounding the landfill are zoned agricultural. The nearest residence is approximately 600 ft west of the site on Burgoyne Avenue.

Historic Uses:

The Kingsbury Landfill operated as a municipal landfill from 1930 to 1985 and received both solid and hazardous wastes. The General Electric Company (GE) disposed of an estimated 1,900 tons of hazardous waste at the landfill. The primary contaminant of concern is PCBs. PCB

contamination most likely migrated off site while the landfill was in operation and in the time prior to it being capped.

Operable Units:

The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. Operable Unit 1 (OU1) is the on-site landfill area. OU2 consists of off-site soil and sediment. The off-site portions consist of a feeder/tow canal for the Champlain Canal, located to the south/southwest of the landfill, Cutter Pond located to the east and a small unnamed pond, referred to in this document as Brown Pond, located to the north.

Site Geology and Hydrogeology:

The site lies within the Hudson-Champlain Lowland, a broad bedrock depression formed in the Middle Ordovician Snake Hill Formation. The bedrock depression became a depositional outlet for retreating Wisconsinan Stages glaciers. The area was occupied by a series of lakes where sand, silt and clay were deposited in broad deltas formed by Glacial Lake Hudson.

Groundwater flow is to the east-southeast through the sand aquifer. Depth to groundwater ranges from 2 to 10 feet below ground surface (bgs) across the site.

Operable Unit (OU) Number 02 is the subject of this document.

A remedial decision was issued previously for OU 01.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site. The residential use category allows a site to be used for any use(s) other than producing animal products for human consumption. Residential use is the land use category intended for single family housing and requires the fewest restrictions on the reasonably foreseeable use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a

site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

General Electric

United Merchants and Manufacturers, Inc.

Town of Kingsbury

The Department entered into a Consent Order with the General Electric Corporation (GE) in 1980; with the Town of Kingsbury (Town) in 1985; and with United Merchants and Manufacturers, Inc. (UMM) in 1985. The Orders obligate the Town, UMM, and GE to provide a financial contribution toward a full remedial program.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- soil
- sediment

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration

guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

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

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. Soils on the site were analyzed for semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs) and Polychlorinated biphenyls (PCBs). Only PCBs were found to exceed applicable cleanup objectives. Inorganics were analyzed for in previous investigations, but were not detected above standards. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

-Polychlorinated biphenyls (PCBs)

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

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

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

IRM - Brown Pond excavation

The remedial investigation indicated that the soil along the banks of Brown Pond, directly to the north of Kingsbury landfill, was contaminated with PCBs up to 1.3 ppm, exceeding the soil clean-up objective (SCO) for protection of ecological resources for PCBs. From October 17, 2011 to October 29, 2011 an IRM was conducted to remove the contamination from the banks and sediment of Brown Pond.

The elements of the IRM were:

Surface water from the pond was pumped from the area prior to excavation work, and treated using a granular activated carbon/duplex bag filter assembly. Once sample results confirmed acceptable treatment, the water was discharged to the east side of the pond down slope towards Cutter Pond. Approximately 80,000 gallons of water was treated and discharged during this IRM.

Sediment was removed to a depth of 2 feet from the north and west lobes of the pond. Sediment was removed to a depth of 7 feet in the south lobe. Bank soil was removed to a depth of 1 to 2 feet in selected areas of the pond banks. Sampling confirmed that remaining levels of PCBs were below 1 ppm. Approximately 266 tons of PCB contaminated material was handled, transported and disposed of off-site at a permitted landfill. Excavation endpoints are shown in Figure 4. Following excavation, the pond was backfilled with clean material to restore original bottom contours.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 02.

Prior to Remediation

For OU1: On-Site Areas:

The site was operated as landfill by the Town of Kingsbury since the early 1930's. The General Electric Company estimated that 1,900 tons of industrial wastes (PCB capacitors, PCB contaminated paper) were disposed at the site. Leachate emanating from the landfill contained PCBs, benzene, and chlorobenzene. Monitoring wells installed around the landfill contained similar compounds.

For OU2: Off-Site Soil and Sediment:

Soil - Based on the investigations conducted to date, the primary contaminants of concern detected in soil were PCBs. Soils along the banks of the feeder canal, Cutter Pond and Brown Pond were analyzed for PCBs. Only the soils along the banks of Brown Pond had levels of PCBs above the SCOs. PCB levels in soil ranged from non-detect to 1.3 ppm.

Sediments - Sediments in Brown Pond were impacted by PCBs. Concentrations of PCBs ranged from non-detect to 34 ppm in the sediments.

Investigations completed in the past in the off-site areas included a fish sampling event. In 1997, the Department conducted a sampling of chain pickerel, yellow perch, yellow bullhead, and pumpkin seed species collected from Cutter Pond. The results indicated that there is some PCB

contamination in the fish in Cutter Pond, however, no sample exceeded the Food and Drug Administration Guideline for PCBs in fish of 2 ppm. None of the fish sampled exhibited a PCB contamination greater than 1 ppm.

Post-Remediation

For OU1: On-Site Areas:

Landfill closure activities were conducted in 1987 through 1989. A slurry wall was constructed around the perimeter of the landfill and an engineered cap was placed on top of the landfill. A gas venting system was installed. The LCTS was also installed during construction to capture and treat groundwater inside the slurry wall. Leachate continues to be collected and treated at the site. The landfill cap is inspected on a regular basis.

For OU2: Off-Site Soil and Sediment:

Remediation of the off-site soil and sediment was completed through an IRM. Prior to remediation, the primary contaminant of concern was PCBs in soil and sediments of Brown Pond. Remedial actions have successfully achieved soil cleanup objectives of below 1 ppm for PCBs.

6.4: Summary of Human Exposure Pathways

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

Remedial activities undertaken at the site have effectively reduced the potential for exposure to site-related contaminants and measures are in place to ensure that these measures remain protective in the future.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objective for the Interim Remedial Action was removal of all soils and sediments exceeding 1 ppm of PCBs.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is selecting No Further Action (NFA) as the remedy

for Operable Unit No. 2 at this site. The Department believes that the NFA remedy is protective of human health and the environment and satisfies the remediation objectives.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminant of concern for OU2 at the site is polychlorinated biphenyls (PCBs). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Soil

Based on the investigations conducted to date, the primary contaminants of concern detected in soil were PCBs. Soils along the banks of the feeder canal, Cutter Pond and Brown Pond were analyzed for PCBs. Only the soils along the banks of Brown Pond had levels of PCBs above the SCOs. PCB levels in soil ranged from non-detect to 1.3ppm. Soil contamination identified during the RI was addressed during the IRM described in Section 6.2 and no remaining soil exceeds 1 ppm for PCBs.

Table #1- Soil

Detected Constituents	Concentration Range Detected (ppm) ^a	Unrestricted SCG ^b (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG ^{c,d} (ppm)	Frequency Exceeding Restricted SCG
PCBs					
Total PCBs	ND-1.3	0.1ppm	2/10	1ppm	1/10

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Residential Use, unless otherwise noted.

d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Ecological Resources

Sediments

Soil samples collected along the banks of Brown Pond during the RI exceeded the SCG for PCBs as discussed in Section 6.2. The contamination along the banks of Brown Pond caused an IRM to be conducted which included sampling and excavation of sediments. Figure 4 shows depth of excavation and confirmatory sampling results and locations.

Sediment contamination identified during the RI was addressed during the IRM described in Section 6.2. Post excavation samples were less than 1 ppm PCB and excavated areas were backfilled with clean soil at depths of 2 to 7 feet in order to restore the original pond bottom contour. No further actions are needed to address the sediment.

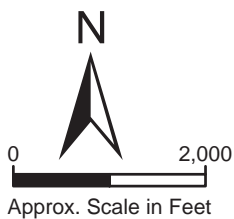
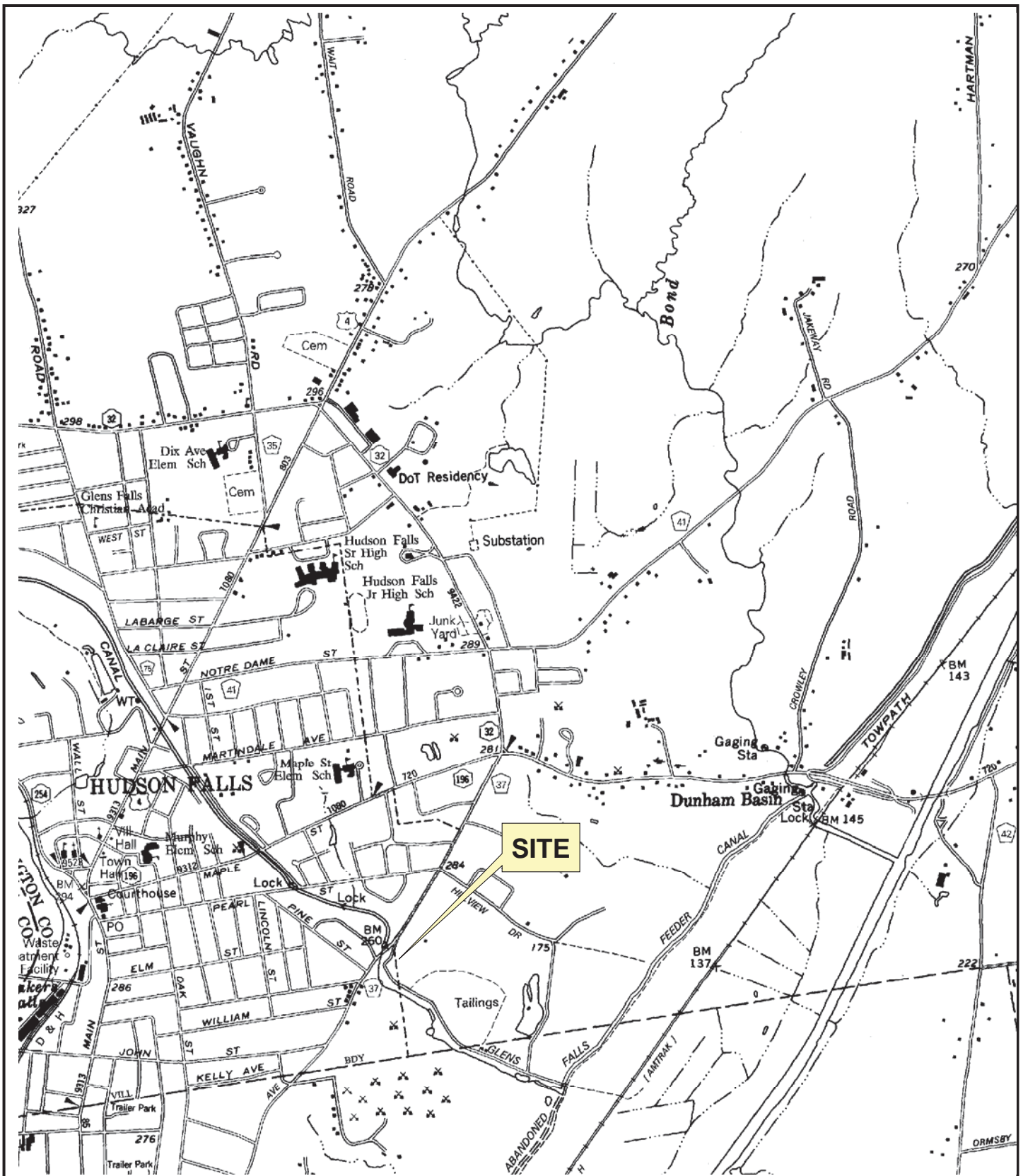


FIGURE 1 SITE LOCATION MAP

**KINGSBURY LANDFILL
NYSDEC #5-58-008**

Village of Hudson Falls Washington County

Project No. 99164

Figure No. 1

Figure 2
Kingsbury Landfill

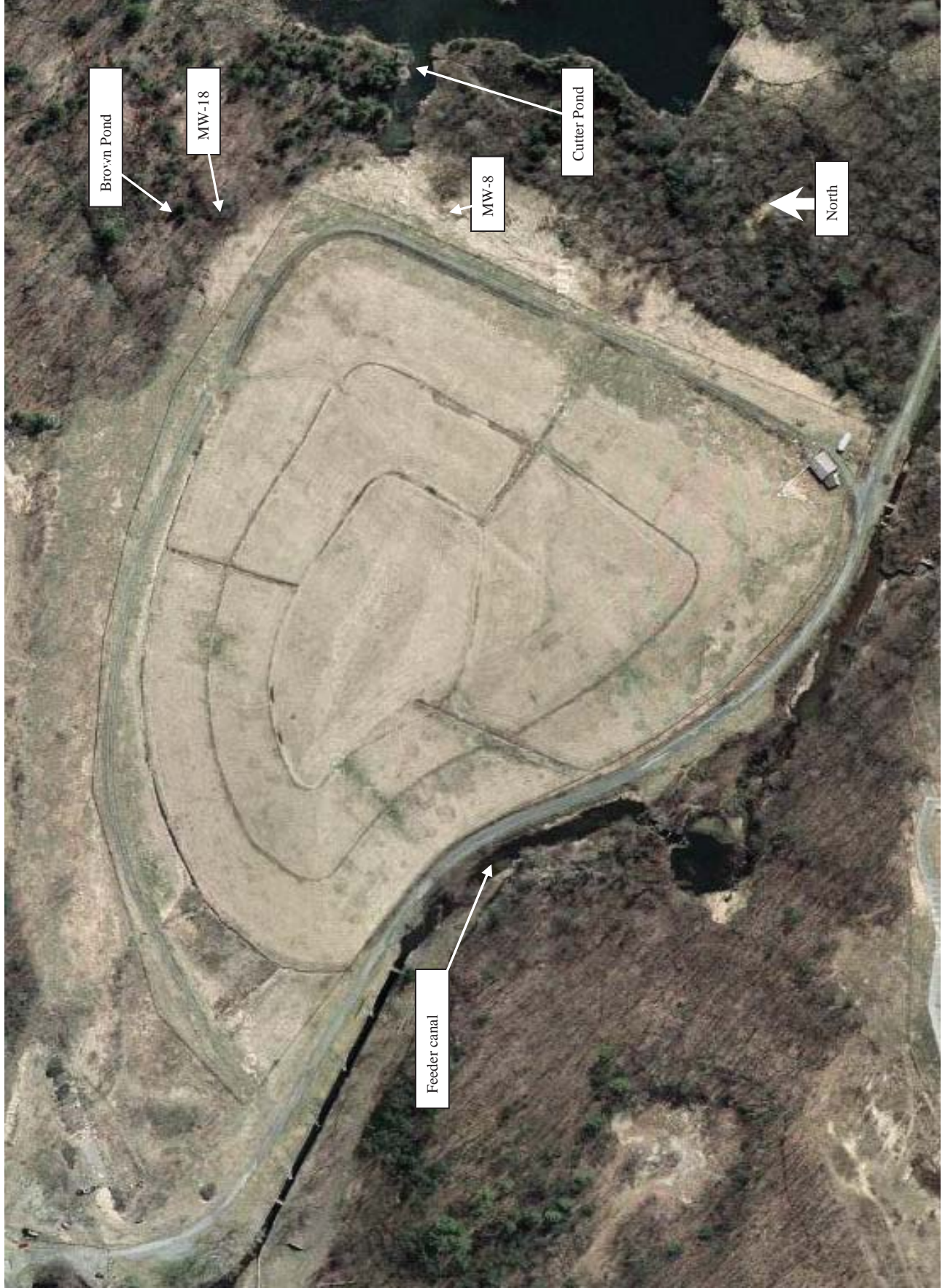
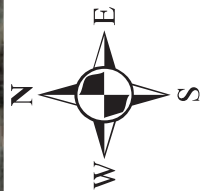


Figure 3



Fort Edward and Kingsbury Landfill Sediment Sample Locations



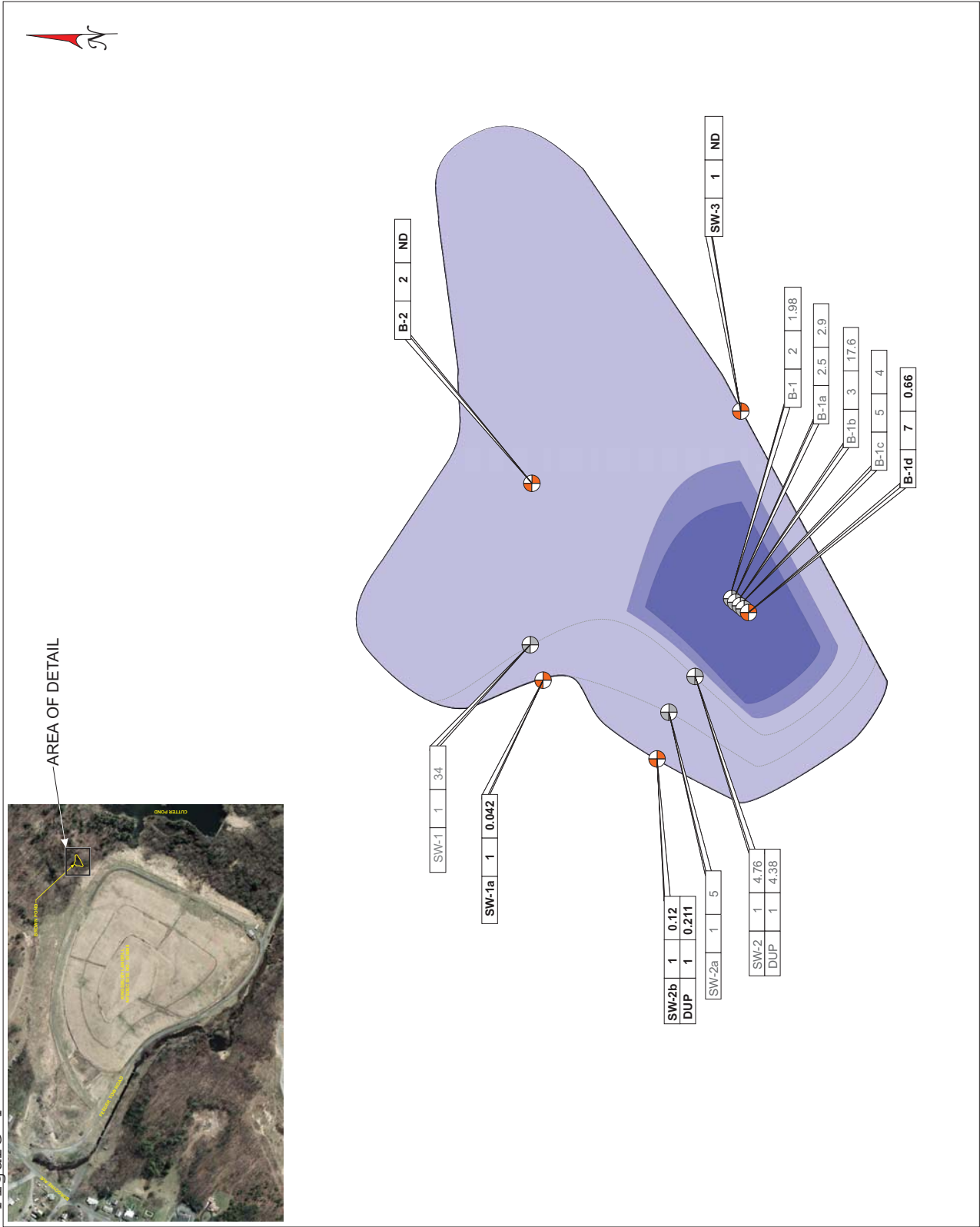
Legend

- Remediation Sites (Yellow dot)
- Town Boundaries (Blue outline)
- Sediment Sample Location (Red dot)

1 in = 408 ft



Figure 4



APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**Kingsbury Landfill Site
Operable Unit No. 2: Off-Site Soils and Sediment
State Superfund Project
Town of Kingsbury, Washington County, New York
Site No. 5-58-008**

The Proposed Remedial Action Plan (PRAP) for the Kingsbury Landfill site (Operable Unit 2) was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 26, 2014. The PRAP outlined the remedial measure proposed for the Kingsbury Landfill site (Operable Unit 2).

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 18, 2014, which included a presentation data obtained during the remedial investigation for the Kingsbury Landfill (Operable Unit 2) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 28, 2014.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: Is the Consent Order the Town of Kingsbury signed still in effect?

RESPONSE 1: The terms and conditions of the Agreement and Determination (index # T091985) signed by the Commissioner of the Department of Environmental Conservation and the Supervisor of the Town of Kingsbury in 1985 continue to be in force. A copy of the order is available upon request.

APPENDIX B

Administrative Record

Administrative Record

**Kingsbury Landfill Site
Operable Unit No. 2: Off-Site Soils and Sediment
State Superfund Project
Town of Kingsbury, Washington County, New York
Site No. 5-58-008**

Proposed Remedial Action Plan for the Kingsbury Landfill Off-Site Soils and Sediment site, Operable Unit No. 2, dated February 2014, prepared by the Department.

Kingsbury & Fort Edward Landfills Off-Site Assessment – dated February 2000, prepared by the Department.

Analytical Data Report – Kingsbury Landfill Off-Site Soils and Sediment Site - Operable Unit 2, dated November 2004, prepared by Lionville Laboratory, Inc.

Analytical Data Report – Kingsbury Landfill Off-Site Soils and Sediment Site - Operable Unit 2, dated August 2006, prepared by Lionville Laboratory, Inc.

Call Out Completion Report, Kingsbury Landfill Site - Brown Pond Interim Remedial Action, dated August 2012, prepared by the Department.