RECORD OF DECISION

Moreau Dredge Spoil Disposal Site
State Superfund Project
Moreau, Saratoga County
Site No. 546042
March 2012

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

DECLARATION STATEMENT - RECORD OF DECISION

Moreau Dredge Spoil Disposal Site
State Superfund Project
Moreau, Saratoga County
Site No. 546042
March 2012

Statement of Purpose and Basis

This document presents the remedy for the Moreau Dredge Spoil Disposal 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 the Moreau Dredge Spoil Disposal 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

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Maintain the existing isolation cap/cover, which has been constructed, over the former dredge spoil disposal structure to satisfy Toxic Substances Control Act requirements.

3. Installation of a cover system where surficial PCB concentrations exceed 1 part per million beyond the margins of the closed and covered portions of the Moreau Dredge Spoil Disposal Site. This will involve the installation, maintenance, and monitoring of a soil cover system. Included are the areas along the margins of the drainage system surrounding the containment cell and that lead away from the containment cell toward the Hudson River where PCB levels exceed 1 ppm.

A site cover will be required to allow for commercial use of the site. The cover will consist of a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

4. For those accumulations of soil within the existing, asphalt-lined drainage system around the Moreau Dredge Spoil Disposal Site, removal and consolidation under the cover to be applied over the soil along the margins of the drainage system surrounding the closed and covered containment cell. Approximately 395 cubic yards of soil will be removed.

5. Imposition of an institutional control in the form of an environmental easement or an environmental notice for the controlled property that:
(a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
(b) allows the use and development of the controlled property for restricted residential (parcels zoned residential) or commercial (parcels not zoned residential) as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
(c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
(d) prohibits agriculture or vegetable gardens on the portions of the controlled property which were subject to remediation; and
(e) requires compliance with the Department approved Site Management Plan.

6. A Site Management Plan is required, which includes the following:
(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easements and Environmental Notices discussed in Paragraph 5 above.

Engineering Controls: The existing isolation cap/cover discussed in Paragraph 2 above and the soil covers discussed in Paragraph 3 above.

This plan includes, but may not be limited to: (i) Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; (ii) descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions; (iii) provisions for the management and inspection of the identified engineering controls; (iv) maintaining site access controls and Department notification; and (v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

(b) a Monitoring Plan to include, but not be limited to: (i) monitoring of groundwater to assess the performance and effectiveness of the remedy; and (ii) a schedule of monitoring and frequency of submittals to the Department.

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 3o, 2o12

Date

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

RECORD OF DECISION

Moreau Dredge Spoil Disposal Site
Moreau, Saratoga County
Site No. 546042
March 2012

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 has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of hazardous wastes at this site, as more fully described in this document, has contaminated various environmental media. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Record of Decision (ROD) identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for selecting the remedy.

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 repositories:

New York State Department of Environmental Conservation
Attn: William Shaw
625 Broadway
Albany, NY 12233
Phone: (518) 402-9676

USEPA - Hudson River PCB Project Field Office
421 Lower Main Street
Hudson Falls, NY 12839
Phone: (518) 747-4389

Town of Moreau Office Building
61 Hudson Street
South Glens falls, NY 12803
Phone: (518) 792-1030

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) 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 Moreau Dredge Spoil Disposal Site is located in the Town of Moreau, Saratoga County. The site is immediately west of the Hudson River, east of West River Road, a short distance south of rail line which crosses the Hudson River at Rogers Island. NY State Route 197 is approximately 1/4 mile north of the site.

Site Features:

The Moreau Dredge Spoil Disposal Site consists of a closed and covered containment cell built by the New York State Department of Transportation (NYSDOT) between 1977 and 1979 to hold dewatered sediment removed from portions of the upper Hudson River following the demolition of the Fort Edward Dam in 1973. The grass covered containment cell is lined with clay and has a clay cap. The southern and eastern margins of the containment cell slope away sharply and the entire cell is surrounded with an asphalt-lined drainage system that drains rain

water and directs groundwater away from the cell along the southern property margin to the Hudson River. Portions of the area east of the containment cell are a mixture of open grassy areas and woodlands, while the area furthest to the east and closest to the Hudson River is currently being used as a Work Support Marina Facility for the Hudson River PCBs Site remedial dredging project. A large portion of the parcel being used for the Work Support Marina Facility is covered with clean fill and pavement.

Current Zoning/Use:

The closed and covered containment cell at the site is the location of a Toxic Substances Control Act approved dredge spoil containment structure and is currently zoned Hudson River Regulatory. The eastern portion of the property occupied by the containment cell is also zoned as Hudson River Regulatory and is now the location of an active Work Support Marina Facility for the Hudson River PCBs Site remedial dredging project.

Historic Use:

The single lined containment cell at this site was constructed in the western portion of the current property parcel by the NYSDOT in 1977 and was used to hold dewatered dredge spoil material removed from the Hudson River around Rogers Island in conjunction with routine and emergency maintenance dredging operations and some PCB-contaminated river bottom materials or remnant deposits that were stranded along the eastern shore of the Hudson River upstream of the former Fort Edward Dam following its removal in 1973. Available NYSDOT records report that the Moreau Dredge Spoil Disposal Site was used between 1977 and 1979 for the disposal of up to 200,000 cubic yards of dredge spoil material. The containment cell was then closed and covered with a TSCA-approved clay cap installed by the NYSDOT. The site is inspected and maintained the site under the TSCA program. The latest TSCA program inspection occurred on May 20, 2010.

Site Geology and Hydrogeology:

The natural site overburden is consistent with the regional model of alluvial and stratified unconsolidated glacio-fluvial and glacio-lacustrine deposits, except it is on a smaller scale with greater variability. Native material underlying and surrounding the dredge spoil materials at the site primarily consists of brown to gray silty clays inter-fingered with layers of gray to brown silty sands.

Groundwater flow in the area outside of the closed and covered containment cell typically moves away from the slight topographic rise on the west and toward the Hudson River in a general east-southeast direction.

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 commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the RI to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is 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 Company

NYS Department of Transportation

The PRPs for the site declined to implement a remedial program when requested by the Department. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action. The PRPs are subject to legal actions by the state for recovery of all response costs NYSDEC has incurred. NYSDEC is continuing all operation, maintenance and monitoring activities at this site under the governing TSCA authorization for the Moreau Dredge Spoil Disposal Site.

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:

- groundwater
- surface water
- soil

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 SCGs 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. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

Polychlorinated Biphenyls (PCBs)

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- soil

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.

There were no IRMs performed at this site during the RI.

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.

The Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 01, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

The disposal of approximately 200,000 cubic yards of PCB-contaminated dredge spoil materials at this site has been confirmed. The containment cell at the Moreau Dredge Spoil Disposal Site is clay lined and has a clay cap. Based upon investigations conducted to date, the primary contaminants of concern for the Moreau Dredge Spoil Disposal Site are PCBs in soils. Groundwater monitoring data from the area outside of the closed and covered containment cell demonstrates that groundwater is not being impacted by this site. Some of the soils that have accumulated within the asphalt-lined drainage system that drains rain water and directs groundwater away from the cell are contaminated with PCBs and could potentially impact the water within the drainage system, the groundwater, or the Hudson River.

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.*

Access to the site is unrestricted. However, direct contact with contaminated soil is unlikely since it is below a clay cap. People could come in contact with contaminants in sediment and surface water within drainage areas on the site.

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 objectives for this site are:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the feasibility study (FS) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Containment Cell Hydraulic Management with Off-Site Water Treatment and Site Management - plus - Drainage Swale Soil Cover remedy.

The estimated present worth cost to implement the remedy is $3,010,000. The cost to construct the remedy is estimated to be $435,000 and the estimated average annual cost is $675,800.

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;

- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Maintain the existing isolation cap/cover, which has been constructed, over the former dredge spoil disposal structure to satisfy Toxic Substances Control Act requirements.

3. Installation of a cover system where surficial PCB concentrations exceed 1 part per million beyond the margins of the closed and covered portions of the Moreau Dredge Spoil Disposal Site. This will involve the installation, maintenance, and monitoring of a soil cover system. Included are the areas along the margins of the drainage system surrounding the containment cell and that lead away from the containment cell toward the Hudson River where PCB levels exceed 1 ppm.

A site cover will be required to allow for commercial use of the site. The cover will consist of a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

4. For those accumulations of soil within the existing, asphalt-lined drainage system around the Moreau Dredge Spoil Disposal Site, removal and consolidation under the cover to be applied over the soil along the margins of the drainage system surrounding the closed and covered containment cell. Approximately 395 cubic yards of soil will be removed.

5. Imposition of an institutional control in the form of an environmental easement or an environmental notice for the controlled property that:
(a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
(b) allows the use and development of the controlled property for restricted residential (parcels zoned residential) or commercial (parcels not zoned residential) as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
(c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
(d) prohibits agriculture or vegetable gardens on the portions of the controlled property which were subject to remediation; and
(e) requires compliance with the Department approved Site Management Plan.

6. A Site Management Plan is required, which includes the following:
(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements

necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easements and Environmental Notices discussed in Paragraph 5 above.

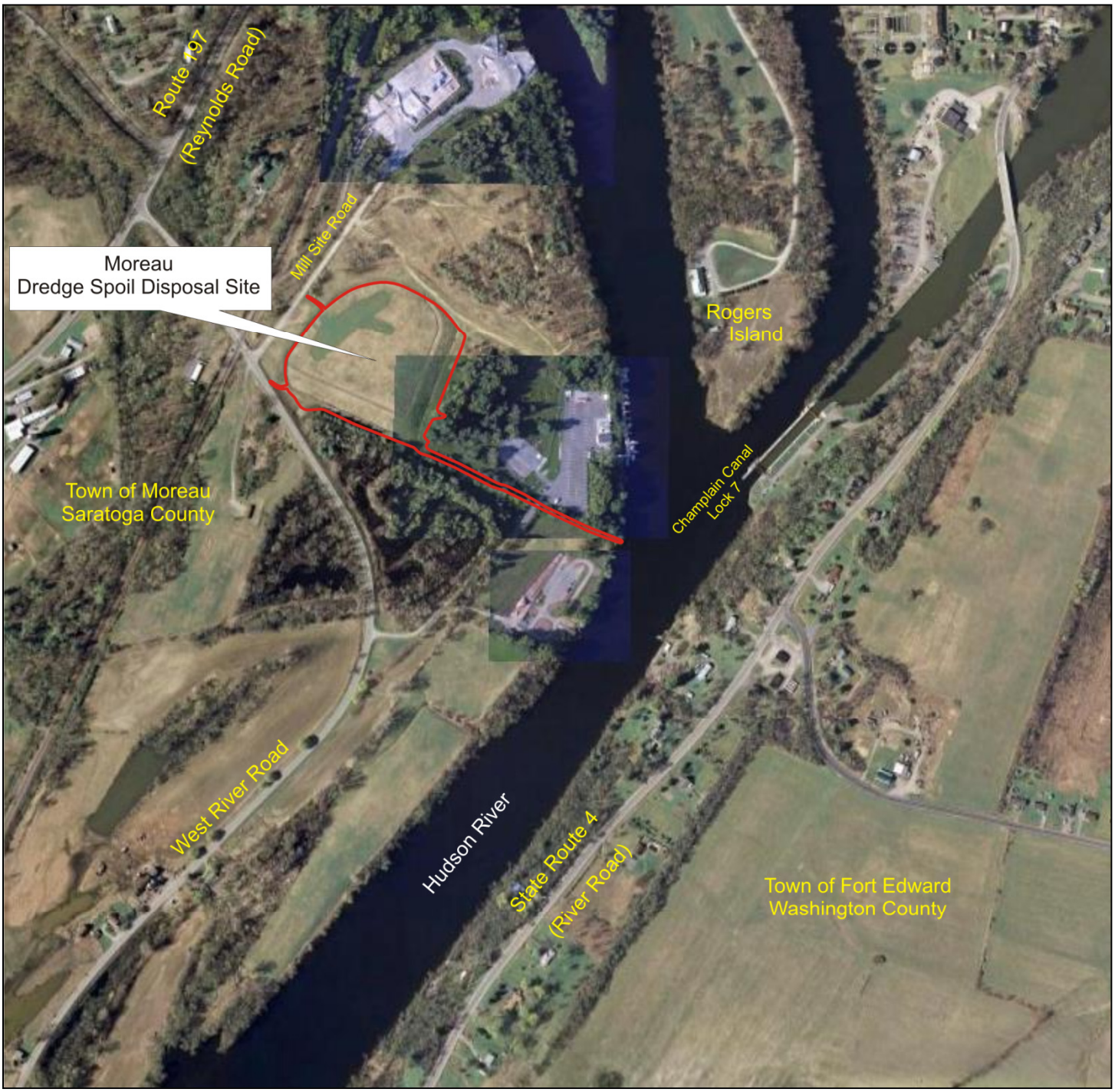
Engineering Controls: The existing isolation cap/cover discussed in Paragraph 2 above and the soil covers discussed in Paragraph 3 above.

This plan includes, but may not be limited to: (i) Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; (ii) descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions; (iii) provisions for the management and inspection of the identified engineering controls; (iv) maintaining site access controls and Department notification; and (v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

(b) a Monitoring Plan to include, but not be limited to: (i) monitoring of groundwater to assess the performance and effectiveness of the remedy; and (ii) a schedule of monitoring and frequency of submittals to the Department.

Figure 1 - Location Map

Moreau Dredge Spoil Disposal Site
Record of Decision
March 2012



0 100 200 300 400 500 1000 1500 2000

Scale in Feet

N
W E
S

Aerial Imagery extracted from Google Earth and Microsoft's Bing Maps.

Figure 2
Remedial Findings and Proposed Remedy

Moreau Dredge Spoil Disposal Site
Record of Decision
March 2012

Excerpt from the February 2012
"Remedial Investigation Report for the Moreau Dredge Spoil Disposal Site"

RECORD OF DECISION

Exhibits A through D

Moreau Dredge Spoil Disposal Site
State Superfund Project
Town of Moreau, Saratoga County
Site No. 546042
March 2012

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, 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 contaminants are arranged into one category; pesticides/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 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site which could potentially impact groundwater, surface water, and/or sediment.

Wastes are defined in 6 NYCRR Part 375-1.2 (aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375 (au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and Source areas were identified at the site include all areas used by the NYSDOT to dispose of nearly 180,000 cubic yards of dewatered dredge spoil materials that were removed from the Champlain Canal/Hudson River navigation channel during routine and emergency maintenance dredging operations following the removal of the Fort Edward Dam in 1973 - and - to dispose of another 14,000 cubic yards of material removed from Remnant Area 3A within the former pool above the former Fort Edward dam. Sampling has confirmed that the dredge spoil and remnant area materials placed at the site were contaminated with PCBs. The disposal cell is covered with grass with moderate to steep grade. An asphalt-lined drainage system surrounds the disposal cell and drains rain water and directs groundwater away from the cell along the southern property margin to the Hudson River.

The waste/source area identified will be addressed in the remedy selection process.

Groundwater

Based on groundwater samples collected in December of 2005; March, June and September of 2006; and June and September of 2008 during the RI, PCBs were not detected in groundwater samples collected from monitoring wells located outside of the disposal cell.

Table 1 - Groundwater

Detected Constituents	Concentration Range (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
Pesticides/PCBs			
Total PCBs	ND	0.09	(No exceedances)

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for groundwater. The evaluation of remedial actions for the waste area (the capped and lined cell) will take into account the need to protect groundwater from releases from the cell.

Soil

Surface Soil

Prior to the RI, NYSDEC collected 90 on-site surface soil samples from the Moreau Site and the Old Moreau Dredge Spoil Site to the north to evaluate the potential for levels of PCBs above unrestricted SCOs. The majority of samples contained detectable PCB concentrations less than 1 ppm and approximately 15% of the samples exhibited PCB concentrations ranging from 1 ppm to 5.5 ppm. Samples exhibiting the highest PCBs concentrations were collected by NYSDEC from the drainage area along the northern border of the Moreau site, adjacent to the southern perimeter of the Old Moreau site and to the east of the Moreau site containment cell.

During the RI, surface soil samples (less than 2 inches below grade) were collected from 40 locations, including six locations along the disposal cell perimeter. The majority of surficial soil samples collected on the site contained PCB concentrations that ranged from not detected to less than 1 ppm. Surface soil samples containing PCBs at greater than 1 ppm were collected outside the northwest corner of the disposal cell near the access road and east of the containment cell near the center of the site.

Subsurface Soil

Ten test pits were excavated on-site in the area surrounding the containment cell during the RI. PCB concentrations up to 23 ppm were detected within samples from these test pits. The greatest concentrations of PCBs were detected in dredge spoils collected from test pits between the cemetery and Jones/Rogers estate and from depths generally less than 6 feet BGS. Subsurface soil samples collected from 19 borings in the vicinity of the cell exhibited PCB concentrations ranging from 1.5 ppm to 24 ppm; soil samples collected during installation of monitoring wells exhibited PCB concentrations in the same range. The majority of native soil samples collected beneath the dredge spoils did not contain detectable concentrations of PCBs and the few native soil samples that did contain PCBs were at concentrations less than 0.5 ppm.

Fifty-six subsurface soil samples collected from 36 soil borings located either within or immediately adjacent to the disposal cell. Thirty-two of these samples contained PCB concentrations greater than 1 ppm, with the highest detection at 20 ppm.

During RI activities, seven samples were collected from the on-site drainage system bordering the eastern and southern edges of the dredge spoils disposal cell, while two were collected from the drainage path along the southern perimeter of the site. During the additional site investigation, a sample was collected from the lower drainage path on the southwest side of the disposal cell. The PCB concentrations in these samples ranged from 0.18 to 1.4 ppm, with the highest concentrations in the drainage path east of the cell. As these samples were taken from areas where there is only occasional water associated with runoff events within a paved drainage system, these areas will be managed as soils when evaluating and implementing the remedial alternatives for the site.

The predominant PCB detected in surface and subsurface soil samples was Aroclor 1248; however, Aroclors 1242 and 1254 was also detected.

Detected metals in surface and subsurface soils did not exceed SCOs. Some soil samples collected from the drainage system surrounding the disposal cell exhibited elevated levels of barium, calcium, cobalt, iron,

manganese, and sodium. However, because these naturally occurring metals were detected much less frequently than PCBs, PCBs are the primary contaminant of concern in soils.

Table 2 - Soil

Detected Constituents	Concentration Range (ppm)[a]	Unrestricted Use SCG[b] (ppm)	Frequency Exceeding Unrestricted Use SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted Use SCG
Pesticides/PCBs					
Total PCBs	ND to 24 ppm	0.1	7/35	1	43/121

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 Restricted Residential or Commercial Use, unless otherwise noted.

The primary soil contaminants are polychlorinated biphenyls (PCBs) associated with the sediments removed from nearby portions of the Hudson River as dredge spoil materials and placed at this site. The contaminated soils are primarily within the constructed cell, but are also found at or near the surface within and adjacent to the drainage system that surrounds the constructed cell and that leads away from the cell toward the Hudson River.

Based on the findings of the Remedial Investigation, the presence of PCBs within the dredge spoils placed at the site has resulted in the identified soil contamination at the site. PCBs are considered to be the primary contaminants of concern and will drive the remediation of soil addressed by the remedy selection process.

Surface Water

During the RI sampling, four surface water samples were collected from the asphalt-lined drainage system that drains rain water and directs groundwater away from the disposal cell. In addition, two possible groundwater seeps were sampled in 2008 beyond the drainage path along the southern extent of the disposal cell. PCBs were detected in three of the four surface water sample locations within the drainage system, at concentrations ranging from 0.72 parts per billion (ppb) to 1.8 ppm. The highest concentrations were detected near where the groundwater capture pipes join with the drainage system at the north east and southwest corners of the disposal cell. The two samples collected in 2008 form the possible groundwater seeps south of the disposal cell did not contain any PCBs.

Table 3 - Surface Water

Detected Constituents	Concentration Range (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
Pesticides/PCBs			
Total PCBs	ND to 1800	0.09	3/4

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b-SCG: Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1) and 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards.

The primary surface water contaminant is PCBs associated with the drainage system portion of the dredge spoil disposal site.

Based on the findings of the Remedial Investigation, the presence of PCBs within the dredge spoils placed at the site and adjacent sites has resulted in the contamination of surface water within the drainage system. PCBs are considered to be the primary contaminants of concern at the site and will drive the remediation of surface water within the drainage system addressed by the remedy selection process.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A. Two sets of alternatives are evaluated; one set to address the cell containing the dredge spoils, and a second set to address the soil contamination associated with the drainage swale surrounding and leading away from the disposal cell.

Cell Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

Cell Alternative 2: Cell Hydraulic Management with Off-Site Water Treatment and Site Management

Alternative 2 includes the periodic removal of impounded water as needed from the closed and covered containment cell using existing structures, with treatment of the extracted water at a permitted off-site facility. Alternative 2 also includes operation, maintenance and monitoring, as well as development of a Site Management Plan. Engineering controls include signs and possible access limitations. Institutional Controls include an Environmental Notice.

Present Worth: *$2,895,000*
Capital Cost: *$321,000*
Annual/Periodic Costs: *$674,800*

Cell Alternative 3: Cell Hydraulic Management with On-Site Water Treatment and Site Management

Alternative 3 is identical to Alternative 2, except that extracted water treatment would be done at a wastewater treatment plant constructed on-site. The water would be discharged to either a drainage way to the River, or to the Hudson River directly.

Present Worth: *$1,623,000*
Capital Cost: *$761,000*
Annual/Periodic Costs: *$799,600*

Cell Alternative 4: Excavation and On-Site Treatment

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil clean objectives listed in Part 375-6.8 (a). This alternative would include excavation and on-site treatment of all waste and soil contamination above the unrestricted soil cleanup objectives. Treated residuals would be used as backfill on-site. The remedy will not rely on institutional or engineering controls to prevent future exposure. There is no Site Management, no restrictions, and no periodic review. This remedy

will have no annual cost, only the capital cost. The treatment technology used, determined during design, is assumed to be high temperature thermal desorption for the purposes of analysis. All applicable substantive permit requirements relating to the operation of the treatment process apply to the work.

Capital Cost:.....*$48,970,000*

Cell Alternative 5: Excavation and Off-Site Disposal

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil clean objectives listed in Part 375-6.8 (a). This alternative would include excavation and off-site disposal of all waste and soil contamination above the unrestricted soil cleanup objectives. The remedy will not rely on institutional or engineering controls to prevent future exposure. There is no Site Management, no restrictions, and no periodic review. This remedy will have no annual cost, only the capital cost.

Capital Cost:.....*$43,780,000*

Drainage Swale Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

Drainage Swale Alternative 2: Excavation and Off-Site Disposal

This alternative includes the excavation and off-site disposal of all soils within and immediately adjacent to the drainage swale which surrounds the disposal cell and conveys water to the area east of the cell toward the River. The surface soil SCG of 1 part per million total PCB applies to this alternative. There would be no site management, restrictions, or periodic review.

Capital Cost:.....*$841,000*

Drainage Swale Alternative 3: Soil Cover

This alternative includes the installation of a soil cover over the areas in and adjacent to the drainage swale which exceed the surface soil SCO of 1 part per million total PCBs. In the wetted portion of the swale, the soil would be removed and consolidated under the cover to be applied over the soil along the margins of the drainage system. This alternative also includes operation, maintenance and monitoring, as well as development of a Site Management Plan. Engineering controls include signs and possible access limitations.

Present Worth:.....*$115,000*
Capital Cost:.....*$114,000*
Annual Costs:.....*$1,000*

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual/Periodic Costs ($)	Total Present Worth ($)
Cell Alternative 1 No Action	*$0*	*$0*	*$0*
Cell Alternative 2 Site Management with Off-Site Water Treatment	*$321,000*	*$674,800*	*$2,895,000*
Cell Alternative 3 Site Management with On-Site Water Treatment	*$761,000*	*$799,600*	*$1,623,000*
Cell Alternative 4 Excavation and On-Site Treatment	*$48,970,000*	*$0*	*$48,970,000*
Cell Alternative 5 Excavation and Off-Site Disposal	*$43,780,000*	*$0*	*$43,780,000*
Swale Alternative 1 No Action	*$0*	*$0*	*$0*
Swale Alternative 2 Excavation and Off-Site Disposal of Source Areas and Swale Contents	*$841,000*	*$0*	*$841,000*
Swale Alternative 3 Soil Cover	*$114,000*	*$1,000*	*$115,000*

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department has selected Cell Alternative 2: Cell Hydraulic Management with Off-Site Water Treatment and Site Management**,** along with Swale Alternative 3: Soil Cover, as the remedy for this site. Cell Alternative 2 and Swale Alternative 3 would achieve the remediation goals for the site by managing the water within the disposal site to prevent any future releases from the cell, and by eliminating the potential route of exposure to the surface soils in the drainage swales. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figure 2.

Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Cell Alternative 1 and Swale Alternative 1 are not protective, as no work would be undertaken to abate the current exposures posed by the site. The selected Cell Alternative 2 and Swale Alternative 3 would satisfy this criterion by preventing future exposures to the dredge spoils within the cell, and to the PCB contaminated soils within and adjacent to the swales. Under this remedy, the dredge spoils within the cell continue to be inaccessible for direct contact or erosion, and the hydraulic management prevents releases via groundwater. Routes of exposure associated with surface exposure of the PCB contaminated soils within and adjacent to the drainage swales would be eliminated by the removal of the contaminated soils within the swale and their consolidation under the cover to be applied over those areas of contaminated soil along the margins of the drainage system.

Cell Alternatives 4 and 5, excavation with either off-site disposal or on-site treatment, would both also meet this criterion, as would Cell Alternative 3. Swale Alternative 2 would also meet this criterion by eliminating the routes of exposure related the contaminated material within and adjacent to the drainage swale.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Cell Alternatives 2, 3, 4 and 5, as well as Swale Alternatives 2 and 3, all meet SCGs. The alternatives involving on-site treatment of soil (Cell Alternative 4) and water (Cell Alternative 3) would require meeting the substantive requirements of the permits which would otherwise be issued for the work.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

The Cell Alternatives with the highest degree of long term effectiveness and permanence are Cell Alternatives 4 and 5. Cell Alternatives 2 and 3 also have high long term effectiveness and permanence, as the maintenance and monitoring of the already constructed cell sufficiently reduces the risk of exposure to the dredge spoils over the long term. Swale Alternative 2 (removal with off-site disposal) has higher permanence than Swale Alternative 3 (soil cover in place for source areas and excavation of soils within swale).

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Cell Alternative 4 has the highest degree of reduction in toxicity, mobility or volume, as all of the dredge spoils within the cell would be treated. Cell Alternatives 2, 3 and 5 would result in the same reduction in mobility, as the material would be contained within a lined and capped cell with water management and long term operation and maintenance. For the Swale Alternative, the off-site disposal Alternative, 2, has slightly higher reduction in mobility as all of the contaminated material would be in a lined off-site landfill rather than a portion remaining beneath a soil cover.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Cell Alternative 4 would have the highest degree of short term impacts, as the entire cell would be excavated and treated on-site. Cell Alternative 5 would have somewhat lesser impacts, as the material would be shipped off-site rather than treated on-site. Cell Alternatives 4 and 5 reflect a lesser degree of green remediation as they include significant expenditure of energy and resources. Cell Alternatives 2 and 3 both have significantly less short term impacts, with Cell Alternative 2 having the least short term impacts since shipment of leachate for off-site treatment is done without need for constructing and operating an on -site water treatment plant. Swale Alternatives 2 and 3 have similar short term impacts and effectiveness.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

The most implementable Cell Alternative is 2, as the only active measures would be shipping leachate for off-site treatment along with maintenance and monitoring of the cell. Commercial treatment capacity is readily available, as are contractors to transport the water. Cell Alternative 3 requires design, construction, operation and monitoring of a water treatment plant; the personnel and materials are available, and meeting the substantive requirements of a water discharge permit is achievable. Cell Alternatives 4 and 5 take much more substantial effort to excavate the cell, but personnel and equipment are available. For Cell Alternative 4 the design, construction and operation of a soil treatment system, including meeting the substantive requirements of

applicable permits, result in the lowest implementability among the alternatives. For the Swale Alternatives, the implementability of each alternative is very similar.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary widely. The most costly Cell Alternatives, 4 and 5, address all of the dredge spoils from the site, but at an order of magnitude higher cost. Cell Alternatives 2 and 3 also meet SCOs and the RAOs, but at a much lower cost. Swale Alternative 3 is more cost effective than Swale Alternative 2 due to the similar overall effectiveness and the higher cost of Swale Alternative 2.

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The current land use is as a containment cell for dredge spoils. Achieving predisposal conditions would require an order of magnitude increase in cost, rendering these Cell Alternatives (4 and 5) infeasible. The surrounding land uses are expected to be commercial or recreational, as there are no adjacent residential parcels. Cell Alternatives 2 and 3 are compatible with the current land use (continuing to use the cell for containment of dredge spoils) as are both Swale Alternatives 2 and 3.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Cell Alternative 2 and Swale Alternative 3 are being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.

APPENDIX A

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY

Moreau Dredge Spoil Disposal Site

State Superfund Project

Town of Moreau – Saratoga County - New York

Site No. 546042

March 2012

The Proposed Remedial Action Plan (PRAP) for the Moreau Dredge Spoil Disposal Site (Moreau), 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 24, 2012. The PRAP outlined the remedial measure proposed for the contaminated soil at the Moreau site.

The release of the PRAP was announced by sending a notice to the public contact list and served to invite the public to comment on the proposed remedy.

A public meeting was held on March 6, 2012 and provided information about the Remedial Investigation (RI) and the Feasibility Study (FS) for the Moreau site and discussed elements of the proposed remedy. The meeting also provided citizens with an opportunity to discuss concerns, ask questions and comment on the proposed remedy. All questions and comments received during the public comment period have become part of the Administrative Record for this site. The public comment period for the Moreau PRAP ended on March 26, 2012.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following passages provide the narrative of each question/comment received and the Department's response.

The following questions and comments were made and answered during the public meeting held on March 6, 2012:

COMMENT 1: Were samples collected from the drainage swales around the site and is anything getting into the Hudson River from this part of the site?

RESPONSE 1: During the remedial investigation sampling program, soil and water samples were collected from the asphalt-lined drainage system that drains rain water and directs groundwater away from the disposal cell. PCBs were found in all of the soil samples at concentrations between 0.18 to 1.4 ppm. The contaminated soils found within the drainage system are most likely the result of the erosion of contaminated soil from some uncovered areas along the margins of the swale, and do not represent any release of dredge spoil materials from within the containment cell. PCBs were also

detected in three of the four water sample locations within the drainage system at concentrations ranging from 0.72 parts per billion (ppb) to 1.8 ppm. The presence of PCBs in these water samples is most likely the result of an incidental amount of PCB-contaminated soil from the drainage path being entrained in the sample at the time of collection and not an indication that PCBs are in the water. The water flow along the drainage system is intermittent and accumulations of eroded soil found within the drainage path inhibit water flow and the movement of contaminated soil to the Hudson River. Contaminants do not appear to be impacting the Hudson River to any appreciable degree as a result of overland runoff or water flowing along the drainage system at the present time. Implementation of the remedy will address the soil and water within the drainage system at the site.

COMMENT 2: What will be done to address the soil within the drainage swales around the site?

RESPONSE 2: Soils within the drainage system will be removed and consolidated in areas along the margins of the drainage system where the surface soils are contaminated with PCBs at concentrations above the soil cleanup objective of 1 ppm. After consolidation, this soil and the soils in-place along the margins within these areas will be covered with a soil cover consisting of a demarcation layer at least 1 foot of clean soil.

COMMENT 3: Are the plants on the site removing contamination from the soil and if so, could pollen present exposure concerns?

RESPONSE 3: Any PCBs that may transfer from site soils into site plants are expected to mostly persist in roots, leaves and/or shoots, and are expected to return to nearby soil after the plants shed leaves or die. Generally, the uptake of PCBs in plants is low and is not expected to contribute substantially to a reduction of PCBs in soil. Available data do not suggest that pollen is a PCB exposure concern for people using the site.

COMMENT 4: Are the small bushes that are growing on the site impacting the clay cover?

RESPONSE 4: Given their present size, most likely not. However, these small bushes will be removed this year and the Site Management Plan for the site will require periodic clearing.

COMMENT 5: There are portions of the covered area at the Moreau Dredge Spoil Disposal Site that have not been mowed for at least three years. Will these areas be mowed again?

RESPONSE 5: Yes. These areas will be mowed again this year and the Site Management Plan for the site will require periodic mowing.

COMMENT 6: If the State was to dig up the entire site and remove all of the PCB contamination, would the PCBs have to be destroyed or could they be placed in a landfill?

RESPONSE 6: PCB-contaminated soil from this site could be disposed of in a regulated land-based facility.

COMMENT 7: What technology would be used to treat the soil at the site?

RESPONSE 7: PCB-contaminated soil from this site could be treated by thermal and/or chemical means. One of the alternatives considered involved treatment by turning the soil material into glass or vitrification. However, the costs associated with the vitrification process and the huge energy demands made that alternative untenable.

COMMENT 8: The Town of Moreau is responsible for maintaining the Rogers Family Cemetery surrounded by the Moreau Dredge Spoil Disposal Site, the Old Moreau Dredge Spoil Disposal Area and the Special Area 13 Dredge Spoil Disposal Area, but present access to the cemetery grounds is very difficult. Will there still be access to the cemetery grounds so the Town will be able to fulfill their obligation now and in the future?

RESPONSE 8: Yes, the cemetery grounds will remain accessible.

COMMENT 9: Who is responsible for the cost?

RESPONSE 9: After the remedy is selected, all potential responsible parties (PRPs) will be approached about assuming responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate funding alternatives.

COMMENT 10: Has traffic from the Hudson River PCBs Site remedial dredging project potentially impacted any of these sites and have those potential impacts been considered?

RESPONSE 10: While some PCB contamination may be present under the roadways leading to the Work Support Marina and the Backfill Storage and Offloading Area associated with the Hudson River PCBs Site remedial dredging project, the roadways are covered with clean material including an adequate thickness of either pavement or crushed stone. These materials provide an adequate barrier and it is unlikely that any travel use of these roadways have caused any migration of any PCB contaminated soils underneath.

COMMENT 11: Could the remedy be implemented while the dredging project is underway or would the roadways need to stay clear for Hudson River dredging-related traffic?

RESPONSE 11: The remedy could be implemented while the Hudson River PCBs Site dredging project is underway. Any remedial work would be coordinated, to the extent necessary, with any of the operations associated with the Hudson River PCBs Site dredging project. For example, the application of the soil cover over the adjacent Old Moreau Dredge Spoil Disposal Area would be timed so that it would not interfere with access to the Backfill Storage and Offloading Area associated with the dredging project.

COMMENT 12: When do you anticipate issuing the RODs for the three Dredge Spoil Sites in Moreau?

RESPONSE 12: After the Public Comment Period closes, the Department will prepare a Responsiveness Summary addressing all of the questions and comments received for each site during the Public Meeting and the Public Comment Period and then begin assembly of the associated Record of Decision documents for each site. The Department intends to issue the RODs

for Moreau and the Old Moreau Dredge Spoil Disposal Areas by March 31, 2012. It is expected the Special Area 13 Dredge Spoil Area ROD will be issued by May.

John G. Haggard, Executive Director of the Remediation and Hudson Programs for General Electric, submitted a comment letter on March 26, 2012, which is included in the Administrative Record (Appendix B).

COMMENT 13: *The Moreau Dredge Spoil Disposal Site is not an "Inactive Hazardous Waste Disposal Site" as defined by the Environmental Conservation Law, and therefore the New York State Department Environmental Conservation (NYSDEC) has no authority to issue a Record of Decision or to take any other action under the State Superfund Program regarding the Moreau disposal site.*

NYSDEC has neither the authority to order the implementation of the selected remedy nor is it authorized to expend hazardous waste remedial program funds to implement the proposed remedy under the Environmental Conservation Law ("ECL") and 6 NYCRR Part 375. The Moreau disposal site does not meet the definition of "inactive hazardous waste disposal site" that is found in Section 27-1301(2) and in 6 NYCRR Section 375-1.2(y) in that it is not "an area or structure [as to which] no permit or authorization issued by … a federal agency for the disposal of hazardous waste was in effect after the effective date of this title."

The Moreau disposal site was authorized by the U.S. Environmental Protection Agency ("USEPA") for the disposal of dredge spoils under the Toxic Substance Control Act ("TSCA"). The TSCA-approved clay cap installed by the NY State Department of Transportation (NYSDOT) and the subsequent, ongoing maintenance of the Moreau disposal site under TSCA constitute a "permit or authorization" issued by a Federal agency, and therefore removes the Moreau disposal site from the definition of "inactive hazardous waste disposal site." Due to the fact that the Moreau disposal site is not an "inactive hazardous waste disposal site," as the term is defined in the ECL and in 6 NYCRR Part 375, NYSDEC is precluded from taking action or seeking any form of relief under the statutory and regulatory program established to address such sites.

Thus, pursuant to the provisions of Subparagraph 3(a) of Section 97-b of the State Finance Law, establishing the State's hazardous waste remedial fund, NYSDEC may not spend moneys from such fund for the inactive hazardous waste disposal site remedial program. Consequently, the provision in State Finance Law Section 97-b – Subdivision 6 – requiring NYSDEC to "make all reasonable efforts to recover the full amount of any funds expended from the fund pursuant to [the above-cited subparagraph] through litigation or cooperative agreements with responsible persons" is inapplicable. Without the legal authority to expend any such moneys, a recovery obligation is irrelevant.

Relief under the so-called enforcement language of ECL Section 27-1313, found in Subparagraph 3(a) thereof, is similarly unavailable to NYSDEC. That provision states:

> *Whenever the commissioner finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to*

develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order.

This provision, too, hinges on the definition of "inactive hazardous waste disposal site." Because the Moreau disposal site is outside that category, NYSDEC lacks the authority to seek enforcement relief under Section 27-1313(3)(a) of the ECL.

RESPONSE 13: Nothing in Environmental Conservation Law precludes the Department from utilizing the ROD process to document the rationale for selecting the remedial alternative for this site and to engage in citizen participation as the remedy selection is completed.

The assertions that *"The Moreau disposal site was authorized by the U.S. Environmental Protection Agency ("USEPA") for the disposal of dredge spoils under the Toxic Substance Control Act ("TSCA"). The TSCA-approved clay cap installed by the NY State Department of Transportation (NYSDOT) and the subsequent, ongoing maintenance of the Moreau disposal site under TSCA constitute a "permit or authorization" issued by a Federal agency, and therefore removes the Moreau disposal site from the definition of "inactive hazardous waste disposal site.""* are invalid. The Moreau Dredge Spoil Disposal Site was established prior to April 18, 1978 - the date that the regulations governing the disposal of PCBs under TSCA became effective - and contained nearly 180,000 cubic yards of debris and sediment (dredge spoil material) that were removed from the Champlain Canal/Hudson River navigation channel along the eastern side of Rogers Island between September and December 1977 and early 1978 during maintenance dredging operations of the Canal System. Records indicate that in October 1978, 14,000 cubic yards of material was removed from Remnant Area 3A (unprotected sediments and debris stranded within the former pool above the Niagara Mohawk timber-crib dam at Fort Edward that was demolished in 1973) and placed within the Moreau Dredge Spoil Disposal Site under the stated USEPA - TSCA Authorization letter to the NYSDEC granting approval to dispose of 14,000 cubic yards of material from Remnant 3A. This 14,000 cubic yards of material (with a reported average PCB concentration of 1,000 parts per million (ppm)) was placed upon the dredge spoil material already within the Moreau Dredge Spoil Disposal Site. Due to the fact that most of the material disposed of within the Moreau Dredge Spoil Disposal Site was placed prior to the effective date of the TSCA regulations governing the disposal of PCBs and that the stated TSCA Authorization covers only the use of the Moreau Site for the disposal of an additional 14,000 cubic yards of material from Remnant Area 3A, the Moreau Dredge Spoil Disposal Site meets the definition of *"inactive hazardous waste disposal site*" found in Section 27-1301(2) and in 6 NYCRR Section 375-1.2(y) in that it is *"an area or structure [as to which] no permit or authorization issued by… a federal agency for the disposal of hazardous waste was in effect after the effective date of this title."*

COMMENT 14: *The FACT SHEET for the Proposed Remedial Action at the Moreau Dredge Disposal Site incorrectly states that the remedial investigation and feasibility study for the site were submitted to the NYSDEC by New York State Department of Transportation (NYSDOT) and General Electric(GE).*

RESPONSE 14: The correct narrative reads: *"NYSDEC developed the proposed remedy after reviewing the detailed investigation of the site and evaluating the remedial options in the feasibility study submitted under New York's State Superfund Program."* The Fact Sheet has been revised.

COMMENT 15: *The administrative record for the key site documents is incomplete and, as a result, NYSDEC has compromised the public participation process that is required as part of remedy selection.*

Even if the Moreau site could be considered an "inactive hazardous waste disposal site," there are significant and serious problems with the administrative record and process for the site. NYSDEC commenced the requisite 30 day public comment period on February 24, 2012 with issuance of the PRAP with comments due by March 26, 2012. However, the Remedial Investigation (RI) and Feasibility Study (FS) documents were not placed in the public repositories and made available for review until March 1, 2012 and March 6, 2012, respectively. This resulted in the RI and FS reports being made available six (6) and eleven (11) days, respectively, into the public comment period.

The unavailability of the RI/FS documents for review at the start of the public comment period was further impeded by the fact that the proposed remedy as presented in the FS was different from that which was presented in the PRAP. Moreover, since the proposed remedy for this site includes an expectation that the remedy "Maintain the existing isolation cap/cover, which has been constructed, over the former dredge spoil disposal structure to satisfy Toxic Substances Control Act requirements," the administrative record should include the Monitoring and Maintenance plan, as well as all the prior inspection reports and operation, maintenance and monitoring (OM&M) records that were required as part of the authorization of Moreau site for the placement of dredge spoil material.

The unavailability of key administrative documents for review at the start of the public comment period compromises the process. Hence, NYSDEC should place the RI and FS reports in the cited repositories, including electronic copies at the county email listservs, reissue the PRAP and re-start the public comment period.

RESPONSE 15: A request for a 30 day extension to the public comment period for the Moreau Dredge Spoil Disposal Site Proposed Remedial Action Plan (PRAP) was received from General Electric on March 6, 2012 and after deliberations between respective legal counsels, an agreement was reached where the close of the comment period for the given PRAP would remain Monday, March, 26, 2012.

COMMENT 16: *The PRAP presented a proposed remedy cost that was approximately four times (4x) lower than the costs provided in the FS Report, and NYSDEC's failure to explain this significant cost difference further compromises any meaningful review during the public comment period.*

The estimated present value (PV) cost to implement the proposed remedy set forth in the PRAP is $762,000. The PV cost of the remedial alternative in the FS that represents the proposed remedy is $3,010,000. This significant cost difference is unexplained by NYSDEC and complicates the review process during the public comment period.

RESPONSE 16: The costs in the FS Report are correct and the appropriate corrections have been made in the ROD narrative.

COMMENT 17: *The RI data that was used to calculate key statistical values and relied upon for making risk management decisions was not clearly defined by NYSDEC and appears to have included data from adjacent sites (Old Moreau and Special Area 13).*

There are three contiguous dredge spoil material disposal sites. The Old Moreau and Special Area 13 sites share common boundaries with the Moreau site. The clearest site boundaries for the Moreau site were provided in the FS report. Based on these boundaries, additional data clearly not within the Moreau site was included in its RI Report. Consequently, the data evaluation conducted for the Moreau RI likely included additional data not associated with the site and it appears the information relied upon by NYSDEC in selecting a proposed remedy was biased.

RESPONSE 17: As the comment points out, the Moreau Dredge Spoil Disposal Site shares common boundaries with the Old Moreau Dredge Spoil Disposal Area and the Special Area 13 Dredge Spoil Disposal Area. These common boundaries may or may not be coincident with the established tax map property boundaries for any one of the given sites. The tabular and narrative summaries and discussions within the Remedial Investigation Report for the Moreau Dredge Spoil Disposal Site include data point results for those sampling points within the established tax map property boundary for the given site and some data point results for sampling points on adjoining established tax map properties where relevant, even if those data point results where later assigned to be associated with and pertinent to the proposed remedy for either one of the other two adjacent dredge spoil sites. The proposed remedy for the Moreau Dredge Spoil Disposal Site as defined and illustrated in the given PRAP, and now this ROD, is based on an interpretation of those data point results deemed to be associated with and pertinent to the Moreau Dredge Spoil Disposal Site regardless of location with respect to established tax map property boundaries. (This approach is echoed in the selection of the proposed remedy provided in the respective PRAP documents for the Old Moreau Dredge Spoil Disposal Area and the Special Area 13 Dredge Spoil Disposal Area.) This issue was also discussed during the public meeting.

COMMENT 18: *The suggestion in the FS of a potential future recreational use appears to contravene the conditions under which USEPA approved the placement of dredge spoil material at the Moreau site.*

The authorization given by USEPA to allow placement of dredge spill material at the Moreau site contained certain conditions, which included development of a "…plan for securing the Moreau site from unwarranted access." NYSDEC's consideration of the potential for future public recreational use of the site as a means to justify application of a Restricted Commercial Soil Cleanup Objectives (SCO) is contrary to USEPA authorization of this site for the placement of dredge spoil material. USEPA's condition for authorizing the placement of dredge spoil material at the Moreau site was to restrict future access. Hence, the current M-1 industrial zoning and corresponding SCO for PCBs of 25 ppm should apply when considering remedial alternatives.

RESPONSE 18: Restrictions on future use of the disposal cell do not necessarily apply to the entire property, or to the site as defined in the PRAP. Future site uses of portions of the site are appropriate for consideration in remedy selection. See also Response 13.

COMMENT 19: *Subsurface PCB sample results should not be compared to SCOs for any purpose, including remedial alternative evaluation, because NYSDEC sought, and USEPA authorized, the placement of dredge spoil materials at this location.*

The comparison of subsurface PCB sample results to SCOs implies there would be a credible technical basis for evaluating proposed remedial alternatives. However, subsurface data for PCBs should not be compared to SCOs because NYSDEC sought and received approval from USEPA to place dredge spoil material known to contain PCBs at the Moreau site. Moreover, subsurface investigations of an authorized disposal unit for PCB contaminated dredge spoil material should not even have been part of the scope of the RI. Hence, to the extent SCOs influence the proposed remedy, a compliance average concentration should be determined just for the surface sample results and that compliance average should be compared to the SCO consistent with the area designated as M-1 industrial zone classification (i.e., 25 ppm).

RESPONSE 19: The Department disagrees. The majority of the dredge spoil placement was not related to the temporary TSCA Authorization. See also Response 13.

COMMENT 20: *The statement in the RI (page 5-5) that "PCBs are potentially leaching from the containment cell and ultimately could be discharged to the drainage ditch" is unsupported and contradicts other statements in the FS Report and the RI data.*

During the RI, leachate sampling was conducted within the landfill and groundwater sampling was conducted outside of the landfill. In addition, sampling of seeps, soil and ponded surface water was conducted in the drainage ditch. The FS (pages 3-6 and 5-5) clearly states that there is no evidence that PCB contaminated leachate has migrated to groundwater. In addition, no PCBs were detected in the seep samples. Thus, there is no evidence that leachate is migrating from the containment cell and impacting the drainage ditch.

Low levels of PCBs, with a 95% UCL on the mean of 0.85 mg/kg, are present in the ditch soil. Samples of ponded water exhibited PCB concentrations ranging from 0.72 ppb to 1.8 ppm. However, as stated in the RI Report, elevated concentrations of metals and PCBs could be from elevated turbidity in these samples. As the results do not present analysis of dissolved concentrations of metals and PCBs in the ponded water, its usefulness in assessing potential impacts is severely limited. Furthermore, as stated in the RI, the comparative criteria used for these ponded water samples was also conservative, as "…NYSDEC criteria are used only as a guide when evaluating surface water analytical data because the data was generated from temporarily ponded depressions and drainage ditches that are not representative of 'true' surface water bodies for which the criteria apply." Thus, it is not appropriate to use this conservative comparison for remedial decisions.

RESPONSE 20: The Department disagrees that it is inappropriate to use this conservative assumption. Measureable concentrations of PCBs in surface water support the hypothesis that there is the potential for migration as described.

COMMENT 21: *The selection of a remedial action objective (RAO) to "Reduce the risk of contamination of the groundwater by reducing the contamination levels in soils and/or migration of leachate" is not supported by the data.*

RESPONSE 21: The comment is not applicable to the PRAP. The remedial action objectives put forth in the PRAP for this site are:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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.

COMMENT 22: *The component of the proposed remedy that involves removal of leachate from inside the authorized landfill is poorly conceived and unnecessary as any liquid fraction inside the landfill has not been shown to present a threat of release.*

RESPONSE 22: The component of the remedy that involves the monitoring of hydraulic conditions within the closed and covered containment cell - and the periodic removal of impounded water as needed (once a threshold water elevation is reached), are necessary to monitor and maintain the hydrostatic pressure within the containment cell in order to minimize the potential for slump failure of the clay cover established on the slopes of the cell along the eastern and southern margins. The need to monitor and removed impounded water as needed at this site has precedent. Before the clay cover was placed over the containment cell in November 1978, hydrostatic pressure associated with water accumulation within the clay lined basin caused surface slumping of the finished clay cover in two areas on the slopes established along the eastern and southern margins of the cell. No displacement of dredge spoil material occurred during that event and the clay covers were repaired.

COMMENT 23: *The Monitoring & Maintenance Plan, which was a requirement of USEPA authorization of the Moreau Dredge Spoil Disposal site, already provides for reducing the liquid level in the disposal cell when necessary. Hence, this component of the proposed remedy is redundant as it is already an obligation of the NYSDOT pursuant to USEPA authorization of the Moreau site for the placement of dredge spoil material.*

The Monitoring & Maintenance Plan (11/10/82) requires that NYSDOT remove leachate from the landfill to maintain a level of 139 amsl. As this is part of the operation of the landfill pursuant to USEPA authorization under TSCA, it is essentially part of an ongoing "Limited Action" (i.e., an action already being performed for other, regulatory or otherwise, reasons) and should not contribute to the cost as a component of the proposed remedy.

RESPONSE 23: The Department disagrees. Leachate management, as needed, is an element of the selected remedy. Allocation of responsibility is not appropriate in remedy selection. See also Response 13 - the bulk of the need for leachate management is not related to the temporary TSCA Authorization.

COMMENT 24: *The Human Health Risk Evaluation concluded that there is no unacceptable human health risk. Therefore, there is no basis for NYSDEC to conclude the site poses a significant threat to human health. Hence, there is no basis to support the Class 2 designation and no basis to propose a remedy to protect human health.*

The RI concluded that the estimated risks based on current and future use scenarios were below threshold values or within a range of values typically deemed acceptable by regulatory agencies. A determination of significant threat must be based on a finding that contaminants at a site result in, or are reasonably foreseeable to result in, a significant adverse impact to public health (6 NYCRR Part 375-2.7 (a) (1) (vi)). Furthermore, a significant threat determination is required for a site to receive a Class 2 designation (6 NYCRR Part 375-2.7 (b) (3) (ii)). Based on the RI findings that estimated risks for current or future use scenarios are below threshold values and/or fall within an acceptable risk range, there is **no basis** for NYSDEC to: a) determine the site poses a significant threat; b) assign the site a Class 2 designation; and, c) propose a remedial action to protect public health.

RESPONSE 24: The Department disagrees. Exceedances of the SCO for PCB in surface soils, combined with the potential for human exposures to these surface soils, provide a basis for the selected remedy to address these surface soils. The potential for releases from the landfill should hydraulic failure again occur at the site provides the basis for the leachate management element of the remedy.

COMMENT 25: *The RI finding that the site poses little or no risks to communities of terrestrial plants and soil invertebrates but may pose a risk to some wildlife species, amphibians and benthic invertebrates does not meet the standard to justify a determination of significant threat. Hence, there is no basis to support the Class 2 designation and no basis to propose a remedy to protect the environment.*

A Screening-Level Ecological Risk Assessment (SLERA) is a conservative vetting tool whose purpose is to eliminate contaminants of concern from any further consideration of potential ecological risk. It is not intended to support a conclusion that contaminants, which are not eliminated by the screen, presents a significant threat as per 6 NYCRR Part 375-1.2 (1) (a) (i), (ii), (iii), (iv), (v) (i.e. results in significant adverse impacts and/or acute or chronic effects or contributes to significant adverse ecotoxicity from bioaccumulation in flora or fauna or cause human consumption to be limited). While a SLERA to assess potential impacts to ecological receptors may be a useful first step in the assessment of potential ecological risks, the NYSDEC draft DER-10, Fish and Wildlife Resource Impact Assessment [FWRIA] guidance, and the US EPA ecological risk assessment guidelines established offer more thorough methods (qualitative and quantitative) to assess ecological risks that may arise from the presence of contaminants in various settings. According to USEPA (2001) *Eco Update, The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*, SLERAs are not intended to provide definitive estimates of actual risk, generate cleanup goals and, in general, are not

based upon site-specific assumptions. Furthermore, the exposure point concentrations for ponded surface water, which were relied upon to opine that there might be a risk to some wildlife species, amphibians and benthic invertebrates were conservatively high as they: (1) are maximum concentrations; and (2) do not accurately represent the dissolved concentrations.

Based on the above, the SLERA is an insufficient basis for NYSDEC to determine the site poses a significant threat. As a consequence the NYSDEC has no basis to assign the site a Class 2 designation or propose a remedial action to protect the environment.

RESPONSE 25: The Department disagrees, and believes that the available site data support the need to implement the selected remedy.

COMMENT 26: *The RAOs in the PRAP are already met under existing conditions and/or can be assured through institutional controls.*

The PRAP defines three remedial action objectives:
- Prevent ingestion/direct contact with soils
- 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

The risk assessment concludes that potential human health risks are in the acceptable risk range or below a Hazard Index of 1, establishing that this RAO is already met.

As noted in Comment #20, leachate and the landfill itself have not been shown to pose impacts to site groundwater. Consequently, the landfill is currently meeting this objective. In addition, as noted above, there is no confirmed risk to surface water. Furthermore, as documented in the RI Report, elevated chemical concentrations in the ponded surface water in the drainage ditches could be attributed to the high turbidity of these samples. Consequently, the RI Report recommended that remedial decisions not be made based on this unfiltered data.

As indicated in above Comments, potential risks to biota from the identified contaminants were overstated in the SLERA. The assessment included inflated exposure factors (e.g., ingestion rates, bioaccumulation factors), toxicity benchmarks and exposure point concentrations (EPCs).

Given the above, the existing O&M requirements included under USEPA's authorization under TSCA for the placement of dredge spoil material at the Moreau site are adequate to ensure the RAOs are met.

RESPONSE 26: The Department disagrees. As stated above in Responses 22, 23, 24, and 25, the selected remedy is needed to address site conditions and meet the RAOs.

COMMENT 27: In its March 26, 2012 letter GE asserts that the company should not be identified as a PRP for this site for various reasons listed in the letter.

RESPONSE 27: The Department and the State take no formal position in this document on comments received regarding the legal liability of any particular party or the applicability of any affirmative defenses to such liability and hereby reserves all rights thereto.

APPENDIX B

ADMINISTRATIVE RECORD

Administrative Record

Moreau Dredge Spoil Disposal Site

Town of Moreau – Saratoga County - New York

Site No. 546042

March 2012

Documents

1. "Proposed Remedial Action Plan for the Moreau Dredge Spoil Disposal Site - Town of Moreau - Saratoga County - New York - Site No. 546042", dated February 24, 2012, prepared by the Department in consultation with the New York State Department of Health.
2. "Proposed Remedial Action Plan Fact Sheet and Meeting Announcement for the Moreau Dredge Spoil Disposal Site", dated February 2012, prepared by the Department.
3. "Feasibility Study for the Moreau Dredge Spoil Disposal Site - Site Number 546042 - Moreau, New York", dated February 2012, prepared for the New York State Department of Environmental Conservation by Ecology and Environment Engineering.
4. "Remedial Investigation Report for the Moreau Dredge Spoil Disposal Site - Site Number 546042 - Moreau, New York", dated February 2012, prepared for the New York State Department of Environmental Conservation by Ecology and Environment Engineering.
5. "Final Technical Work Plan for the Remedial Investigation and Feasibility Study at the Moreau Dredge Spoil Disposal Site", dated July 2005, prepared by Ecology and Environment Engineering.
6. "Technical Scope of Work for the Remedial Investigation and Feasibility Study at the Moreau Dredge Spoil Disposal Site", dated April 2005, prepared by the Department.
7. "Dredge Spoils Investigation in the Upper Hudson River Valley", Dated July 2001, prepared by the Department.
8. "Report - Hudson River PCB Project - Dredge Spoil Sites Investigation - Special Area 13 - Buoy 212, Old Moreau - Rogers Island - Site 518 - Buoy 204 Annex - Lock 4 - Lock 1", Volume I, dated December 1992, prepared by Malcolm Pirnie, Incorporated.
9. "Removal and Encapsulation of PCB-Contaminated Hudson River Bed Materials", dated 1977 - 1979, prepared for the New York State Departments of Transportation and Environmental Conservation by Malcolm Pirnie, Incorporated - includes a paper entitled "Removal and Disposal of PCB-Contaminated River Bed Materials", prepared by Richard Thomas (Malcom Pirnie, Inc.), Russell Mt. Pleasant (NYSDEC) and Steven Maslansky (Malcolm Pirnie, Inc.), and presented at the 1979 National Conference on Hazardous Material Risk Assessment, Disposal and Management - April 25-27, 1979 - Miami Beach, Florida.
10. "Migration of PCBs from Landfills and Dredge Spoil Sites in the Hudson River Valley, New York - Final Report", dated November 1978, prepared by Weston Environmental.

11. Letter dated September 18, 1978 from USEPA Regional Administrator Eckardt Beck to NYSDEC Commissioner Peter Berle - Approval to Dispose of 14,000 cubic yards of Material from Remnant 3A into the Town of Moreau Dredge Spoil Disposal Site.
12. Letter dated August 1, 1978 from NYSDEC Commissioner Peter Berle to USEPA Regional Administrator Eckardt Beck - Request to Dispose of 14,000 cubic yards of Material from Remnant 3A into the Specially Designed, Contained Spoil Disposal Area located in the Town of Moreau.

Comment Letters

1. Letter dated March 26, 2012 from John G. Haggard, Executive Director of the Remediation and Hudson Programs for General Electric.