NEW YORK STATE
DEPARTMENT OF

ENVIRONMENTAL
CONSERVATION

Public Meeting Invitation

Tuesday,
September 1, 2009
7:00 PM

Stillwater Central School
Auditorium
334 North Hudson Avenue
(Routes 4 and 32)
Stillwater, NY 12170
(518) 373-6100

The New York State Departments of Environmental Conservation and Health (NYSDEC and NYSDOH) will discuss the proposed remedy for the Newland Island/Lock 4 Dredge Spoil Disposal Area located in Schaghticoke, New York. At the meeting, representatives from the NYSDEC and NYSDOH will:

- Describe the sampling results from the Remedial Investigation;
- Explain the proposed remedy;
- Answer your questions about the proposed remedy; and
- Receive your verbal or written comments about the proposal.

PUBLIC COMMENT PERIOD

From: August 26, 2009
To: September 28, 2009

FACT SHEET

August 26, 2009

NEWLAND ISLAND/LOCK 4
DREDGE SPOIL DISPOSAL AREA
Site Number: 442033
Stillwater Bridge Road,
Schaghticoke, New York 12154

Remedy Proposed for the Newland Island/Lock 4 Dredge Spoil Disposal Area

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Public Meeting, Comment Period Announced

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The New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH), has proposed a remedy designed to address contamination identified at the Newland Island/Lock 4 Dredge Spoil Disposal Area in Schaghticoke, New York *(see location map on page 6)*.

The Proposed Action: Highlights of the proposed remedy to address the PCB-contaminated dredge spoil material/soil at Newland Island includes selective excavation and consolidation, construction of appropriate soil covers, construction of a drainage diversion trench, and the implementation of institutional controls and a monitoring program. This proposal is described in the site's Proposed Remedial Action Plan (PRAP) which was developed following a detailed investigation of the conditions at the site. The PRAP evaluates different options to clean up the site and presents the alternative preferred by the NYSDEC and NYSDOH.

See pages 2 through 5 of this fact sheet for a summary of the PRAP, site background, and summary of the site investigation. The full PRAP is available for your review at the document repositories listed on page 5.

Your Opportunities to Comment on the Proposed Remedy: Release of the PRAP begins a process to finalize selection of the remedy for the site. Your comment and input about the proposed remedy are important and encouraged.

Your verbal and written comments about the PRAP are welcome at the **public meeting** *(see sidebar)* and during the **public comment period** which runs until September 28, 2009. Written comments also may be mailed until the end of the comment period to:

William Shaw - Newland Island Project Manager
NYSDEC / Division of Environmental Remediation
Remedial Bureau D - Hudson River Unit - 12th Floor Southwest
625 Broadway / Albany, New York 12233-7013

What Happens Next: All comments received during the public comment period will be considered as the remedy for the Newland Island/Lock 4 Dredge Spoil Disposal Area is finalized. Public input will be factored into the record of decision (ROD) which will describe the remedy selected and why it was chosen. NYSDEC will respond to comments in a responsiveness summary included in the ROD.

Site Background

The Newland Island/Lock 4 Dredge Spoil Disposal Area site is located along the southern and eastern margins of Newland Island in the Town of Schaghticoke (Rensselaer County), just south of Champlain Canal Lock 4 and near the confluence of the Hoosic River with the Hudson River and the navigation channel of the Champlain Canal. The site consists of a series of large basins and earthen containment berms built by the Waterways Maintenance Division of the New York State Department of Transportation (NYSDOT) to hold sediment removed from the Champlain Canal/Hudson River navigation channel between Canal Lock 4 and Canal Lock 3 - with emphasis on the navigation channel in the Hudson River near Canal Lock 4 and the mouth of the Hoosic River - in conjunction with routine maintenance dredging operations of the Canal System. The unlined settling basins at this site were excavated down to shale bedrock during initial construction and the displaced soils and shale debris were graded outward and upward to form the various containment berms. The basin and berm system at this site is between 100 and 500 feet wide and extends about 1,800 feet along the southeastern side of the island with a foot-print covering nearly 12.1 acres on the 28.6 acre parcel owned by New York State. The remainder of the State-owned parcel is undeveloped and unoccupied. The adjoining property on the lower island is privately owned and is occupied by two dwellings, equine stables, equine riding facilities, and several small service structures. There are a pair of private wells on this part of the island that draw water from the bedrock aquifer. The wells are approximately 875 feet away from the northern portion of the site and approximately 1,680 feet away from the southern portion of the site.

The Hudson River and the Champlain Canal surrounding Newland Island are part of the United States Environmental Protection Agency's Hudson River PCBs Superfund Site that is listed on the National Priority List. PCB wastes, sporadically entrained within the sediment of the Hudson River and subsequently removed with some of the sediment from the Champlain Canal/Hudson River navigation channel as dredge spoil material in the past, have contaminated the surface soil, subsurface soil, and groundwater at the Newland Island site.

Available NYSDOT records report that the Newland Island dredge spoil disposal area, known in the past as the Lock 4 site, was used between 1952 and 1984. The records covering the 1970s and forward also report the disposal of dredge spoil material at this site totaling 135,450 cubic yards, 23,960 cubic yards, 21,470 cubic yards, and 44,509 cubic yards for the years 1971, 1977, 1981, and 1984 respectively. At the time of these disposals, the Newland Island site was controlled and operated by the NYSDOT. PCBs were found in shallow surface soil samples collected within the basin complex in 1989 by the NYSDOT while they prepared the site for the disposal of additional dredge spoil material that year. As a result, NYSDOT abandoned plans to use the site in 1989.

State legislation enacted in 1992 transferred the responsibility for all Canal System operations and properties from the NYSDOT to the New York State Canal Corporation, a subsidiary of the New York State Thruway Authority. A subsequent navigational dredging operation completed by the Canal Corporation in 1996, resulted in the disposal of another 35,974 cubic yards of dredge spoil material at this site in the southern basin. These 1996 dredge spoil materials were mingled with the earlier spoils. In 2002, the Canal Corporation modified and improved the southern basin to stage approximately 25,000 cubic yards of dredge spoil material (characterized as sand and gravel) that was removed from the navigation channel near the mouth of the Hoosic River. Prior to removal, environmental sampling verified that the sediments targeted for removal in 2002 did not contain any PCBs. As a result, the 2002 dredge spoil materials were segregated from the previous dredge spoil materials by a layer of geo-textile fabric as a marker making it possible to remove the later materials for reuse under an established beneficial use determination (BUD) from the NYSDEC. In 2006-2007, the Canal Corporation removed nearly 115,000 cubic yards of additional sand and gravel sediment during more navigational dredging near the mouth of the Hoosic and mingled them with the 2002 dredge materials. Again, environmental sampling done prior to removal verified that the targeted sediments did not contain any PCBs. Regardless of this, the mixing of the 2006-2007 and 2002 dredge spoil materials nullified the earlier BUD. Use of Newland Island to stage additional sediment removed from the navigation channel near the mouth of the Hoosic River is expected to continue into the future as sediments from the Hoosic River continue to impact the canal system. Based on recent conditions, the need for channel maintenance dredging operations near the mouth of the Hoosic River occurs every four to six years.

Remedial Site Investigation

The remedial investigation at Newland Island included site reconnaissance and a records search; a surface soil sampling program; exploration borehole and well drilling programs with concurrent subsurface soil sampling elements; groundwater monitoring well installation and groundwater sampling programs; surveying and mapping programs; completion of a human health risk evaluation and a screening-level ecological risk assessment to define and understand the nature and extent of any contamination resulting from previous activities at the site. The results of the various sampling programs to characterize the nature and extent of contamination are summarized below. More detailed information and discussions are provided in the

site's Remedial Investigation Report, available for review at the document repositories listed on page 5.

Surface soil samples (covering the 0 to 2-inch soil depth interval) were collected from 131 locations at this site, including points distributed within each dredge spoil disposal basin, upon each containment berm, and around each basin perimeter. Samples from the surface at each exploration borehole, monitoring well borehole, and ponded surface water/seep sampling point contributed to the overall surface soil assessment. All 131 samples were analyzed for PCBs. Results confirm PCBs at 89 surface soil sampling points with 76 samples reporting concentrations above 0.1 ppm (the unrestricted use Soil Cleanup Objective (SCO)) and 41 samples reporting concentrations above 1.0 ppm (the restricted use - commercial - SCO applicable to this site). The highest PCB concentration in surface soil was 12 ppm. In addition to PCBs, some surface soil samples were also analyzed for metals. Results confirm that lead, mercury, zinc, and manganese were detected in at least one surface soil sample with a concentration above their respective SCOs.

One hundred and ninety subsurface soil samples (deeper than the 0 to 2-inch soil depth interval) were collected from 99 locations at this site. Sampling locations were distributed within the dredge spoil disposal basins, upon the containment berms, and around the perimeter of the disposal areas at the site. Samples from below grade at each exploration borehole, monitoring well borehole, and hand-advanced sampling point contributed to the overall subsurface soil assessment. All 190 samples were analyzed for PCBs. Results confirm PCBs in 110 subsurface soil samples with 82 samples reporting concentrations above 0.1 ppm and 46 samples reporting concentrations above 1.0 ppm. The highest PCB concentration in the subsurface soil was 43 ppm. Some subsurface soil samples were also analyzed for metals. Results confirm that lead, mercury, chromium and cadmium were detected in at least one subsurface soil sample with a concentration above their respective SCOs. In addition, cobalt, copper and zinc exceeded the respective Standards, Criteria and Guidance (SCG) value established for those metals in at least one subsurface soil sample from the site.

A total of 33 groundwater samples were collected from nine shallow groundwater monitoring wells around the site in April, June, September, and December of 2006. Three monitoring wells (MW-03, MW-07, and MW-09) were dry in September and did not yield a sample. All groundwater samples were analyzed for PCBs and metals. Results confirm PCBs above the applicable water quality standard of 0.09 ppb in the April and June samples collected from MW-07 at concentrations of 1.45 ppb and 0.31 J ppb (an estimated result) respectively. These findings may reflect sample turbidity and not represent PCBs dissolved in water. The screen of this well is set in dredge spoil material. For metals that may be attributable to contaminated dredge spoil materials, chromium and lead exceeded their respective SCG values in the June sample from MW-06, barium exceeded its SCG value in the April sample from MW-01, and copper exceeded its SCG value in the June sample from MW-03. These findings may also reflect sample turbidity and not represent occurrences where these metals are dissolved in water. Other metals (iron, magnesium, and manganese) that exceeded their respective SCG values in the shallow groundwater monitoring wells around the site appear to represent natural conditions.

A total of six groundwater samples were collected from the two residential wells near the site in 2006. The wells draw water from the bedrock aquifer and do not show any impact attributable to the site. No PCBs were detected in any of the six water samples.

There are no sustained surface water bodies on this site. When the dredging operations are occurring and sediments are being de-watered in the southern basin, water ponds on the site temporarily, but is not sustained. One area where precipitation collects intermittently was identified in the northern basin and sampled once. One intermittent groundwater seep expression was identified in an area south and outside of the southern basin and sampled once. PCBs were not detected in either sample and the few metals found above the applicable SCG values were inconsequential. No aquatic sediment samples were collected for analysis during this remedial investigation due to the lack of sustained surface water bodies at the site during the remedial program work.

Taking into account that volatile organic compounds were not associated with the known activities at this site and that previous environmental sampling did not indicate any soil contamination by volatile organic compounds, an evaluation of the soil vapor and indoor air conditions at the site during the remedial investigation were not warranted.

Summary of Proposed Remedial Action

The PRAP identifies the remedy preferred by the NYSDEC and NYSDOH to remediate the contaminated dredge spoil material/soil at the site. The proposed alternative was chosen following a detailed investigation of the site and evaluation of alternatives for remediating the contamination.

The elements of the proposed remedy include:

- A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

- A soil excavation and consolidation program would be implemented to reduce the potential for exposure to contaminated soils in specific active areas of the site. Excavated soils would be consolidated and isolated beneath an appropriate soil cover. Excavated areas would be backfilled with clean soil approved for use by the Department and that meets the Division of Environmental Remediation's criteria for backfill.

- An appropriate soil cover would be constructed over the central and northern dredge spoil disposal basins after their consolidation to prevent exposure to contaminated soils. The cover would consist of clean soil placed and compacted to a minimum thickness of twelve inches over an isolation/demarcation indicator (with contrasting color) placed over the consolidated materials to serve as a warning and to delineate between the clean cover and the potentially contaminated materials at depth. The top six inches of soil would be sufficient to support grass. Clean soil would constitute soil approved for use by the Department and that meets the Division of Environmental Remediation's criteria for backfill.

- An appropriate soil cover would be constructed over the eastern part of the southern basin used by the Canal Corporation for sediment de-watering operations, to reduce the potential for exposure to contaminated soils at depth. The cover would consist of clean soil placed and compacted to a minimum thickness of twelve inches over the existing isolation/demarcation indicator on the basin floor and upon the face of the containment berm of this sub-basin. Clean soil would constitute soil approved for use by the Department and that meets the Division of Environmental Remediation's criteria for backfill.

- An appropriate soil cover would be maintained over the western part of the southern basin used by the Canal Corporation for sediment de-watering operations, to reduce the potential for exposure to contaminated soils at depth. An effective, twelve to eighteen inch thick, clean soil cover is already in place and an existing geo-textile fabric marker serves to delineate between clean cover and potentially contaminated materials at depth. The cover would be maintained at a minimum thickness of twelve inches over the existing isolation/demarcation indicator on the basin floor and upon the face of the containment berm for this sub-basin.

- A drainage diversion trench would be constructed along the northwestern margin of the cover area over the northern basin to minimize the potential for migration of contaminants in the local groundwater. The drainage diversion trench would intercept and redirect any intermittent overland water flow in this area and adequately impede/eliminate the migration of this surface water into and through the known, underlying dredge spoil materials. The diversion trench would be constructed in accordance with the Department's New York Standards and Specifications for Erosion and Sediment Control (August, 2005).

- Imposition of an institutional control in the form of an environmental easement that would require:
(a) limiting the use and development of the property to commercial use, which would also permit industrial use;
(b) compliance with the approved site management plan;
(c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined appropriate by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

- Development of a site management plan which would include the following institutional and engineering controls: (a) management of the final cover systems to restrict excavation below the soil cover's demarcation layer. Excavated soil would be tested, properly handled to protect the health and safety of workers and the nearby community, and would be properly managed in a manner acceptable to the Department; (b) monitoring of the groundwater around the site; (c) identification of any use and development restrictions on the site; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.

- The property owner would provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal would: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Cost of the Site Remedy

The total present worth to construct and implement the proposed remedy is estimated at $1,500,000.

Health Issues

Since some contaminated dredge spoil material and soil are present at the surface, people could be exposed to PCBs and metals through prolonged direct contact with the contamination. However, contact with the contaminated spoils and soil is not expected since the site is not occupied on a routine basis. Exposure to contamination in groundwater is not expected since groundwater is not used at the site. Groundwater on an adjacent private property has been tested and has shown no impacts attributable to the site.

Document Repositories: *To review the complete PRAP and other site information, visit any one of these locations:*

Town of Schaghticoke Clerk's Office
Schaghticoke Town Hall
290 Northline Drive
Melrose, New York 12121
(518) 753-6915 extension 101
Review by appointment:
9:00 AM to 4:30 PM - Monday through Friday
extended hours Thursday - 8:30 AM to 5:30 PM
Contact: Town Clerk Janet Salisbury

Town of Stillwater Clerk's Office
Stillwater Town Hall
66 East Street - Riverside
Mechanicville, New York 12118
(518) 664-6148 extension 206
Review by appointment:
8:00 AM to 4:00 PM - Monday through Friday
Contact: Town Clerk Sue Cunningham

NYSDEC Central Office
625 Broadway
Albany, New York 12233
(518) 402-9676
Review by appointment:
8:30 AM to 4:00 PM - Monday through Friday
Contact: William Shaw

Arvilla E. Diver Memorial Library
136 Main Street
Schaghticoke, New York 12154
(518) 753-4344
Open hours:
2:00 PM to 7:00 PM - Monday and Wednesday
1:00 PM to 8:00 PM - Tuesday and Thursday
9:00 AM to 1:00 PM - Saturday
Contact: Suzette Cyr - Librarian

Stillwater Free Library
74 Hudson Avenue (State Routes 4 and 32)
Stillwater, New York 12170
(518) 664-6255
Open hours:
10:00 AM to 7:00 PM - Tuesday through Friday
10:00 AM to 2:00 PM - Saturday
Contact: Sara Kipp - Librarian

For More Information: *Call or write the following staff for more information about:*

Meeting/Comment Period/Technical Information:
William Shaw - Project Manager
NYSDEC Central Office
Environmental Remediation
Remedial Bureau D - Hudson River Unit - 12th Floor
625 Broadway
Albany, New York 12233-7013
Phone: (518) 402-9676

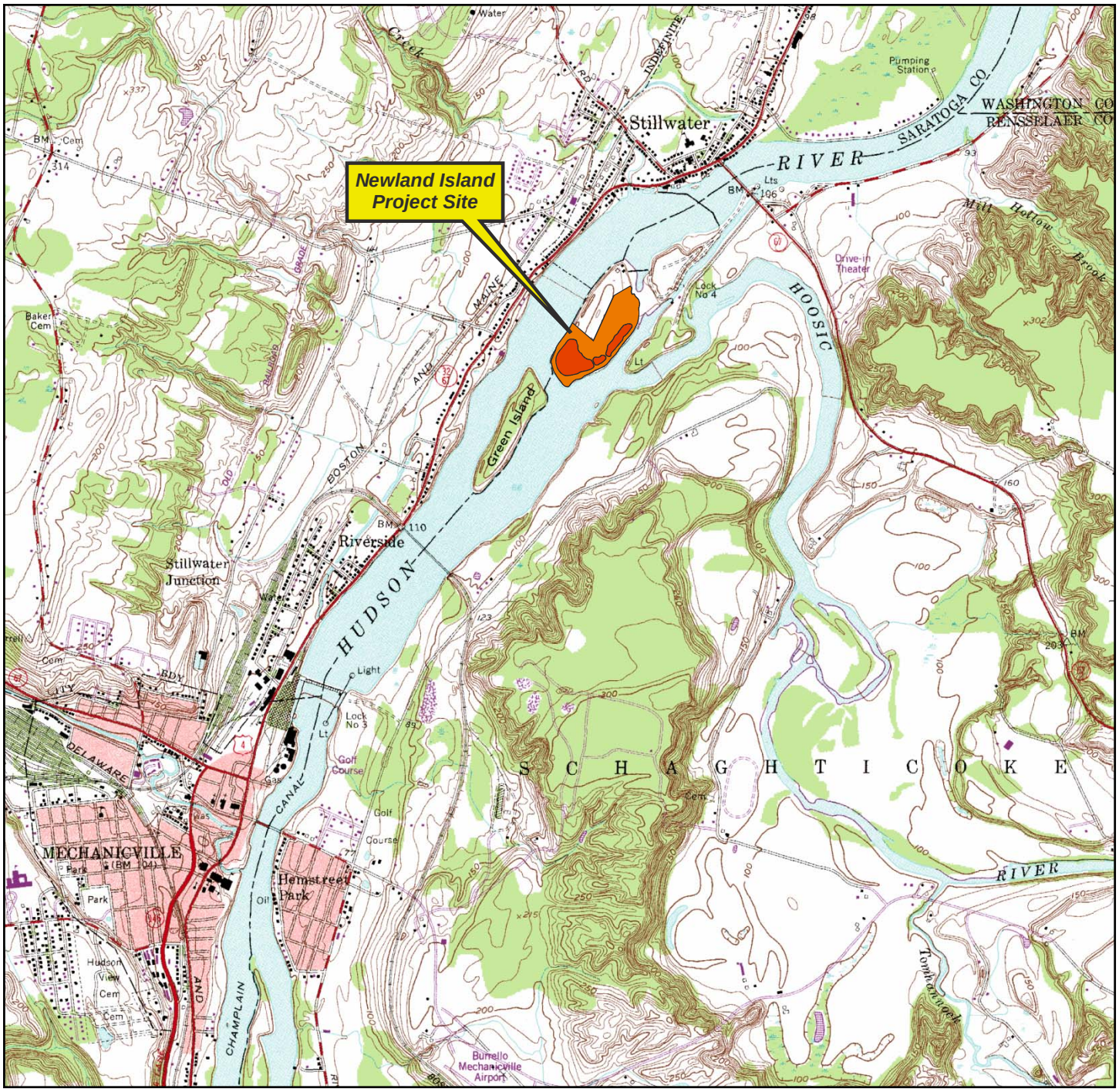
Health-Related Information:
Deanna Ripstein
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216
Phone: (518) 402-7870 or (800) 458-1158

Public Availability Session

In addition to the public meeting scheduled for 7:00 PM on September 1, 2009 at the Stillwater Central School Auditorium located at 334 North Hudson Avenue in Stillwater, New York, the NYSDEC and NYSDOH will also hold a more informal **public availability session** for this project between 3:00 PM and 5:00 PM on September 1st at the same location.

Location Map

Newland Island / Lock 4 Dredge Spoil Disposal Area
Proposed Remedial Action Plan Fact Sheet
August 2009



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Scale in Miles

Excerpt from the Mechanicville Quadrangle
7.5 Minute Topographic Series Map
published by the U.S. Geological Survey
in 1954 and photo-revised in 1980.