Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Maestri Property No. 2 Site
Town of Geddes, Onondaga County, New York
Site Number 734040

March 2008

New York State Department of Environmental Conservation
DAVID A. PATERSON, *Governor* ALEXANDER B. GRANNIS, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Maestri Property No. 2 Inactive Hazardous Waste Disposal Site
Town of Geddes, Onondaga County, New York
Site No. 734040

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Maestri Property No. 2 site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law 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 Maestri Property No. 2 inactive hazardous waste disposal site, and the public's input to the Proposed Remedial Action Plan (PRAP) 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.

Assessment of the Site

Actual or threatened releases of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this ROD, present a current or potential significant threat to public health and/or the environment.

Description of Selected Remedy

Based on the results of the Remedial Investigation and Feasibility Study (RI/FS) for the Maestri Property No. 2 site and the criteria identified for evaluation of alternatives, the Department has selected consolidation and soil cover with institutional controls.

The components of the remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. This will include supplemental wetland sediment sampling and analysis to better define the areas and depths of sediments that will require excavation.

2. Contaminated sediment, defined based on chromium concentrations that exceed 26 ppm, will be excavated along the edge of the fill to a depth of two feet and consolidated on the upland

fill area. Confirmatory sampling will be performed in the area of excavation to confirm that the remaining sediment is below the sediment criteria (26 ppm) for chromium, and below1 ppm for PCBs. Construction and restoration in the wetland will be consistent with the requirements of ECL Article 24 and 6 NYCRR Part 663.

3. A demarcation layer (e.g., snow fence) will be laid over the consolidated material. A soil cover will then be constructed over the consolidated material and the remaining fill area to prevent exposure to contaminated soils and waste and to reduce infiltration of water. The two foot thick cover will consist of clean soil laid over the entire waste mass, including 6 inches of top soil, sloped to the wetland. The topsoil and all soil within 100 ft of the wetland will be of sufficient quality to support vegetation. Clean soil will comply with Part 375-6.8 unrestricted use criteria.

4. Development of a site management plan to: (a) address residual contaminated soils that may be excavated from the site during future redevelopment. The plan will require soil characterization and, where applicable, disposal/reuse in accordance with NYSDEC regulations; (b) identify any use restrictions; and (c) provide for the operation and maintenance of the components of the remedy.

5. Imposition of an institutional control in the form of an environmental easement that will (a) require compliance with the approved site management plan; (b) limit the use and development of the property to restricted residential, commercial or industrial uses only; (c) restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; (d) require that no removal of or digging be done into the waste mass, (identifiable by the high density and hardness of the material) or below the demarcation layer, except in accordance with the site management plan; and (e) require the property owner to complete and submit to the NYSDEC a periodic certification.

6. The property owner will provide a periodic certification, prepared and submitted by a professional engineer or other such expert acceptable to the NYSDEC, until the NYSDEC notifies the property owner in writing that this certification is no longer needed. This submittal will certify that the institutional controls and engineering controls are still in place, allow the NYSDEC access to the site, and indicate that nothing has occurred that will impair the ability of the controls to protect public health or the environment, or constitute a violation or failure to comply with the site management plan.

7. Since the remedy will result in untreated hazardous waste remaining at the site, a long term monitoring program will be instituted. The components of the long-term monitoring of the site will include but not necessarily be limited to: monitoring of the biota and soil cover to determine its effectiveness and integrity, and monitoring the establishment and growth of the restored wetland. This monitoring program will be a component of the long-term management of the site.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected 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.

MAR 3 1 2008

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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SECTION 1: SUMMARY AND PURPOSE OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the Maestri Property No. 2 Site. The presence of hazardous waste has created significant threats to human health and/or the environment that are addressed by this remedy. As more fully described in Sections 3 and 5 of this document, placement of waste materials from a nearby steel manufacturing facility and an automotive shop has resulted in the disposal of hazardous wastes, including semi-volatile compounds, polychlorinated biphenyls (PCBs) and metals (especially chromium). These wastes have contaminated the soil, surface water and sediments at the site, and have resulted in:

- a significant threat to human health associated with current and potential exposure to soil (including fill); and

- a significant environmental threat associated with the impacts of contaminants to terrestrial and aquatic animals from exposure to impacted soil, sediments, and surface water.

To eliminate or mitigate these threats, the NYSDEC proposes excavation of contaminated sediments, with consolidation and covering of the disposal area.

The selected remedy, discussed in detail in Section 8, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially 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.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Site is located in the Town of Geddes, Onondaga County, just east of State Fair Boulevard in the hamlet of Lakeland. The site consists of 4.5 acres of fill material placed in a wetland area. The area is bounded by a railroad corridor and Interstate 690 to the east; state regulated wetland SYW-10 to the north and south; and vacant land, the former Val's Dodge facility and State Fair Boulevard to the west. The surrounding area is mainly residential with a few light commercial facilities. Figures 1 and 2 indicate the location and areal extent of the site, and the surrounding features.

Bedrock underlying the site is of the Vernon formation, which is largely comprised of shale and shalely dolomite rock of the late Sulurian age. Glacial retreat and advance have significantly influenced the geology of the area. Bedrock in the region generally dips to the south at about 50 feet per mile. Overburden in the vicinity of the site is comprised of lacustrine silts and clays that were deposited in glacial Lake Iroquois.

The site geology consists of fill/soil from the ground surface to approximately 10 feet deep, which is underlain by 1 to 5 feet of fibrous peat. The peat is underlain by marl (calcareous clay). The deepest boring (40 feet below grade) identified a dense clay beneath the marl.

The prevailing direction of groundwater flow is from west to east. However, there is localized radial flow of shallow groundwater across the site, with groundwater discharging to the adjacent wetland. Groundwater at the site is approximately 6 feet below the ground surface. There is an upward gradient between the deep and shallow groundwater which has minimized the downward migration of groundwater.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Crucible Materials Corporation (formerly a division of Colt Industries, Inc.), was reported to have disposed of steel manufacturing waste, including caustic-coated mill scale at the site between 1968 and 1973. Caustic-coated mill scale is generally comprised of iron oxides and other metals mixed with caustics from cleaning baths. In 1986, the NYSDEC inspected the site and found the area had been filled with such materials, and also that the area was littered with junk cars, used auto parts, drums and containers.

3.2: Remedial History

In 1986, the NYSDEC first listed the site (then known as the Val's Dodge Site) as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a is a temporary classification assigned to a site that has inadequate and/or insufficient data for inclusion in any of the other classifications. In 1996, the NYSDEC listed the site as a Class 2 site in the Registry and subsequently changed the name of the site to Maestri Property No. 2. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. These parties may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and Crucible Materials Corp., Coltech Industries and Val's Motors entered into an amended Consent Order in January 2000. The Order obligates the responsible parties to implement a RI/FS only. After the remedy is selected, the NYSDEC will approach the PRPs to implement the selected remedy under an Order on Consent.

SECTION 5: SITE CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate the alternatives for addressing the significant threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted between March 1999 and June 2002. The field activities and findings of the investigation are described in detail in the RI report.

Activities that were performed during the RI included: excavation of test pits to determine the nature of the fill; soil boring and monitoring well installation for laboratory analysis of soils and groundwater as well as for determining physical properties of the soil and hydrogeologic conditions; collection and analysis of surface and subsurface soils, surface water and groundwater, and sediment to determine contaminant types and levels in each; and a cultural resource survey to identify culturally sensitive or archeologically sensitive areas proximate to the site. No such sensitive areas were found in the vicinity of the site.

A number of metals and organic compounds were detected on site during the investigation. However, many of the constituents found on site were also found upstream or in background locations. Wetland sediments in areas along the waste edge show signs of localized impact with respect to metals and PCBs.

In 2004, an interim remedial measure (IRM) was implemented which involved the removal of all soil/waste that contained greater than 10 parts per million (ppm) of PCBs. This IRM attained the soil cleanup criteria required for sub-surface soil (TAGM 4046).

Based on the RI results, in comparison to the Standards, Criteria and Guidance (SCGs) and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized below. More complete information can be found in the RI report.

5.1.1: Standards, Criteria and Guidance (SCGs)

To determine whether the soil, groundwater, surface water or sediments contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.

- Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels" and 6 NYCRR Subpart 375-6 - Remedial Program Soil Cleanup Objectives.

- Sediment SCGs are based on the NYSDEC "Technical Guidance for Screening Contaminated Sediments."

- Background soil samples were taken from four locations outside of the influence of the site. In addition, background samples of surface water and sediment were taken at location SW/SED -9, SED-10, and SED-11 (West Swale) (see Figure 2 for location of swale). These locations were upgradient of the site and were unaffected by the current or historic operations at the site. The samples were analyzed for the full suite of potential contaminants. The results of the background samples were compared to relevant RI data to determine appropriate site remedial goals.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the RI report, many soil, groundwater, surface water and sediment samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, the main categories of contaminants that exceed the SCGs are: semi-volatile organic compounds (SVOCs), PCBs, and metals. For comparison purposes, where applicable, SCGs are provided in Table I for each medium.

Chemical concentrations are reported in groundwater and surface water in parts per billion (ppb) and in parts per million (ppm) for waste, soil and sediment. The following narrative discusses the media which were investigated along with a summary of the findings.

The SVOCs of concern are: benzo(a)anthracene, benzo(a)pyrene and dibenzo(a,h)anthracene. Metals of concern are: arsenic, beryllium, chromium, cobalt, copper, iron, nickel, selenium, vanadium and zinc. Chromium is the major metal of concern. Chromium is present in the environment in several different forms. The most common forms are chromium(III), and chromium(VI). Chromium (VI), the most toxic form of this metal was not found in surface soils and found at very low levels in the subsurface soil at the site. PCBs were detected in a limited area on the fill site and along the edge of the fill.

Surface Soil

Surface soil at this site is considered to be the material, either soil or waste, that is within the top 6 inches of the surface. Thirteen samples of the surface soils were taken during the RI. Table 1 indicates the applicable SCG. Surface soils contain semi-volatile compounds, metals and PCBs. VOCs were not detected in the surface soils.

Total SVOC concentration in surface soil ranged from 0.058 ppm (SS-1) to 24.7 ppm (SS-5). The specific SVOCs that were found above individual cleanup objectives are: benzo(a)anthracene (nd-8.2 ppm), chrysene (nd- 9.2 ppm), benzo(b)fluoranthene (nd-5.2 ppm), benzo(k)fluoranthene (nd-8.7 ppm), benzo(a)pyrene (nd- 7.8 ppm), indeno (1,2,3-cd) pyrene (nd-6.3)and dibenzo(a,h)anthracene (nd-2.9 ppm). PCBs (Aroclor 1254) were found at SS-5 at levels exceeding the surface soil cleanup objective of 1 ppm (TAGM 4046). Additional delineation of the extent of these higher levels was performed in 2002. A 3600 square feet (sq. ft.) area that had levels of PCBs above 10 ppm was delineated. The maximum PCB concentration was 144 ppm. This area was subsequently addressed through an interim remedial measure discussed under the Interim Remedial Measure discussion (Section 5.2.) Pesticides were not found in the surface soil at levels above soil cleanup objectives.

Metals exceeding the SCGs (range is indicated in parentheses) in surface soil included arsenic (5.5 -44.9 ppm), barium (104-3020 ppm), cadmium (nd-14.1 ppm), cobalt (23.5 -2150 ppm) total chromium (298-28300 ppm), copper (71.5 -1660 ppm), iron (22,200- 251,000 ppm), lead (46.6-1990 ppm) mercury (nd-1.4 ppm), nickel (142 -13,300 ppm), selenium (nd-19.2 ppm), vanadium (35.2 -932 ppm) and zinc (24.6 -390 ppm). The metals most commonly found in the surface soils/waste were arsenic, chromium, cobalt, copper, lead, nickel, iron and zinc. This is expected as these metals are commonly found in mill scale from steel manufacturing.

Surface soil contamination identified during the RI/FS will be addressed in the remedy selection process.

Subsurface Soil/ Waste Materials

The source area at the site is composed of waste materials (mill-scale) from the Crucible Materials Corporation facility. This waste material is very hard and compact. The waste material was originally contaminated with chromium and other metals. It appears that, subsequent to placement of the material, additional contaminants such as PCBs, pesticides and SVOCs were disposed at the site, as these contaminants are found generally at the surface or in localized areas. The highly compact waste material extends to a depth of 8-10 feet below ground surface at the center of the site. The lower portion of the waste mass is in contact with groundwater. The waste thins toward the outer edges of the fill mass.

Twelve test pits were completed to determine the depth of the fill material and to gather information concerning the types of contaminants contained within the fill material. Nine samples (FL-1 through FL-7, FL-7a and FL-8) were collected and analyzed. In addition to the

test pits, the two soil borings were performed to provide additional information regarding subsurface features, depth of waste and potential contamination at depth. Volatile organic compounds (VOCs) were not detected at levels of significance within the fill. SVOCs were found in all of the test pits samples. The detected SVOC concentrations in the subsurface soil boring and test pit samples that exceed individual soil cleanup objectives are: phenols (nd-.091 ppm), trichlorobenzene (nd-6.5 ppm), benzo(a)anthracene (0.072-0.67 ppm), benzo(a)pyrene (nd-0.66 ppm), chrysene (nd- 0.68) and dibenzo (a,h)anthracene (nd-0.087 ppm). However, none of the samples exceeded the total SVOC soil cleanup objective of 500 ppm.

Several metals were detected in the fill at concentrations exceeding the SCGs, The metals found at levels above SCGs in the subsurface soil borings and test pits include: arsenic (7.9- 25.6 ppm), barium (97.5-2720 ppm), chromium (2640- 38,000 ppm), cobalt (8.5 - 3400 ppm), copper (191 - 887 ppm), iron (63,400 - 300,000 ppm), lead (62.8 - 661 ppm), nickel (1190 - 19,300 ppm), selenium (8.2 - 33.8 ppm), vanadium (295 - 2150 ppm) and zinc (59 - 1000 ppm). The metals of most concern in the waste/subsurface soil based upon detected levels of metals being consistently above SCGs are: arsenic, chromium, cobalt, copper, iron, lead, nickel, vanadium and zinc.

Refer to Table 1 for the specific SCGs. Table 1 combines the analytical information from the test pits and the soil borings.

Subsurface soil contamination identified during the RI/FS will be addressed during the remedy selection process.

Groundwater

Groundwater is found at a depth of 6-8 feet below ground (fill) surface. Groundwater flows radially from the site and discharges to the wetland in which the waste materials were placed. The first rounds of groundwater sampling (March and June 2000), which were unfiltered samples, were deemed to be unrepresentative due to the high turbidity levels. The results that are indicative of the actual contaminant levels are those from the last two rounds of sampling (August 2002 (shallow on-site wells) and December 2002 (deep on-site and off-site wells)). These samples were analyzed both as unfiltered and filtered for comparison purposes. The groundwater (unfiltered) within the fill (MW-7 through MW-12S) has the following contaminants of concern above groundwater standards: chromium (2.2 - 195 ppb), iron (270 - 14,500 ppb), lead (nd - 27.7 ppb) magnesium (12,700 - 60,200 ppb), manganese (253 - 1660 ppb), selenium (nd - 19.1), sodium (18,800 - 83,600 ppb) and PCBs (nd- 2.7). Comparison of the analytical results of the filtered and unfiltered samples suggest that most of the contaminants exceeding the groundwater criteria in the unfiltered samples are likely influenced by suspended material (turbidity). The following contaminants were found in the filtered samples above standards: iron, magnesium, manganese, selenium, and sodium.

The sampling performed in August 2002 (on-site shallow wells) and December 2002 (filtered) at the on-site deep well, MW-12D, indicated that polyaromatic hydrocarbons (PAHs) are not above groundwater standards on site. Cadmium, not believed to be a site related contaminant, was

found in the one of the two downgradient wells but not in the on-site wells. PCBs were not found in the final rounds of sampling in any of the on-site or off-site wells.

The metals that are found above SCGs in the on-site wells can be found naturally in the environment. These naturally occurring metals (iron, manganese, magnesium, selenium and sodium) are found on-site at levels similar to or less than those in the off-site wells. Migration of contaminants via groundwater is not occurring. Deep groundwater and groundwater downgradient of the site has not been impacted by the waste disposal.

On-site groundwater contamination identified during the RI/FS will be addressed in the remedy selection process.

Surface Water

Twelve surface water samples, specifically wetland water, were taken along the edge of the fill and outward from the fill area. The surface water had exceedances of the surface water standards for metals only. The exceedances were found mainly near the boundary of the fill/wetlands. The ranges of contamination levels were: aluminum (nd - 7380 ppb), antimony (nd- 11.8 ppb), beryllium (nd- 4.5 ppb), chromium (nd - 467 ppb), cobalt (nd -100 ppb), iron (nd -326,000 ppb), lead (nd - 119 ppb), manganese (128 -6980 ppb), nickel (nd - 674 ppb), thallium (nd- 26.5 ppb) and vanadium (nd -60.8 ppb).

Table 1 shows the detected types and levels of contaminants which exceeded the surface water quality standards.

Surface water contamination identified during the RI/FS will be addressed as part of the remedy selection process.

Sediments

Sediment samples were collected at 26 locations adjacent to the fill area and 20 additional locations along four transects extending out from the fill area into the wetland. Wetland sediments were found to be impacted by the fill materials along the boundary of the fill/wetland. The area of substantive contamination is localized within 10-20 feet of the edge of the fill area. Levels of contaminants were shown to decrease significantly further out from the fill area. There were no volatile or semi-volatile compounds found in the sediments above ecological sediment criteria. PCBs and pesticides were found at levels that exceeded some of the SCGs, especially along the eastern edge of the fill, between the railroad tracks and the site. The ranges of concentrations for PCBs and pesticides exceeding SCGs are as follows: DDD (nd- 2.22 ppm), chlordane (nd- .051 ppm) and PCBs (nd-13 ppm).

Metals that exceeded the lowest effect level (LEL) included: arsenic, chromium, copper, iron, lead, manganese, nickel, and zinc. Site related metals found in the sediments above the severe

effects level (SEL) were limited to: nickel, chromium, iron, zinc and arsenic. The samples that exceeded the SEL were primarily from samples within 10-20 feet of the fill. The contamination in the wetland sediments along the edges of the fill exceed SCGs for biota and is a significant risk to the environment.

Wetland sediment contamination found during the RI/FS will be addressed during the remedy selection process.

5.2: Interim Remedial Measures

An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS. At this site, there were hazardous waste levels of PCBs in the soil/fill in a limited area. An IRM work plan dated April 2004 was approved by the NYSDEC and work was completed in July 2004. Approximately 300 tons of PCB contaminated fill material were removed from the site and disposed at a secure landfill. Post-IRM confirmatory sampling indicated that the IRM goal of removing all PCBs above the subsurface cleanup level of 10 ppm had been met. The excavated area was then backfilled with clean material.

5.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Chapter 8 of the RI report.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

The following exposure pathways were found to be complete for the following media and receptors.

- Surface soil: Trespassers, via dermal contact and incidental ingestion.
- Wetland water: Trespassers via dermal contact and incidental ingestion.
- Wetland sediment: Trespassers via dermal contact.

The following are potential pathways for the following media and receptors:
- Groundwater: Via the remote possibility of usage as a potable water supply and to construction workers via incidental ingestion and dermal contact.
- Subsurface soils: Construction workers via incidental ingestion and dermal contact.

Refer to Table 1 for a list of the specific contaminants for each media.

5.4: Summary of Environmental Impacts

This section summarizes the existing and potential future environmental impacts presented by the site. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

The Fish and Wildlife Impact Analysis, which is included in the RI report (Appendix H) presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors. The following environmental exposure pathways and ecological risks have been identified:

- The surface of the site fill/waste is an exposure route to terrestrial wildlife through ingestion of site soils. Contaminants of particular concern are: chromium, arsenic, lead, and nickel. PCBs were initially a concern in the surface soil but the exposure route was eliminated via the IRM.
- Direct contact is an exposure route within the wetland. Contact with wetland water contaminated by metals is a concern related to fish.
- The sediment is an exposure route via direct contact for macroinvertebrates, due to metals.
- Ingestion of wetland water or sediment is an exposure route for aquatic wildlife for metals, PCBs, and pesticides.
- The maximum levels of contaminants found in the wetland water and sediments and in the surface soils are known to affect the survival of benthic organisms and to bioaccumulate in fish, mink and terrestrial wildlife. This results in reduced availability of food for forage species and in reproductive effects, in fish, terrestrial wildlife, and birds.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The remediation goals for this site are to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to SVOCs, PCBs, pesticides and metals in soil, metals and PCBs in sediment and metals in surface water:
- environmental exposures of flora or fauna to SVOCs, PCBs, pesticides and metals in soil, metals and PCBs in sediment and metals in surface water;
- the release of PCBs and metals from soil into groundwater that may create exceedances of groundwater quality standards; and
- the release of contaminants from sediment into surface water, and from surface soil to ambient air through erosion, and wind borne dust.

The main SCGs applicable to this project are as follows:

- surface water standards;
- ambient groundwater quality standards; and
- soil cleanup standards.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected 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. Potential remedial alternatives for the Maestri Property No. 2 Site were identified, screened and evaluated in the FS report which is available at the document repositories identified in Section 1.

A summary of the remedial alternatives that were considered for this site is provided below. The present worth 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.

7.1: Description of Remedial Alternatives

The following potential remedies were considered to address the contaminated soils, sediments, and groundwater and surface water at the site.

Alternative 1: No Further Action

The No Further Action alternative recognizes remediation of the site conducted under a previously completed IRM. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Present Worth: *$0*
Annual OM&M:
(Years 1-30): *$0*

This is not an appropriate option for this site because it does not meet the threshhold criteria of being protective of human health and the environment and in compliance with SCGs. Exposure pathways and risks are not reduced, eliminated, or controlled. Additionally, it would not limit, reduce, or eliminate toxicity, mobility or volume of impacted media.

Alternative 2: Consolidation, Soil Cover and Institutional Controls

Capital Cost: *$554,000*
Annual OM&M: $5,000/yr
Present Worth(Years 0-30): *$77,000*

Total Present Worth Cost ***$631,000***

This alternative implements consolidation and barrier technologies, coupled with institutional controls. Impacted wetland sediments, defined based on chromium concentrations that exceed 26 ppm, and waste located at the wetland edge would be excavated and placed within the fill area. Approximately twenty-four inches of sediment along the edge of the fill area would be excavated (see figure 3 for approximate areal extent) and confirmed to have met the cleanup criteria of less than the low effect level for chromium (e.g., 26 ppm) and less than1 ppm of PCBs by confirmatory sampling.

The volume of sediment and fill material to be consolidated would be approximately 4,400 cubic yards. The final volume to be consolidated may change as supplemental wetland sediment sampling and analysis to better define the areas and depths of sediments that would require excavation would occur during design. After clearing, grubbing and grading, a synthetic demarcation layer (e.g., snow fence) would be laid over the consolidated material and a soil cover would be installed over the consolidated material and the remaining fill area. The soil cover would include a 24 inch soil layer, including a 6 inch vegetative cover to reduce infiltration. The alternative also includes wetland restoration of impacted areas in accordance with ECL Article 24 and 6 NYCRR Part 663 (Figure 4). Because contamination above SCGs would remain on-site, institutional controls, including an environmental easement would be applied.

This alternative would require three months for construction and six months for restoration and stabilization of the wetland and six months for wetland backfill and initial restoration planting. Removal of the contaminated sediment would limit the exposure pathways for aquatic wildlife. The soil cover would eliminate the surface soil exposure pathways for wildlife and humans and

would reduce infiltration of water and thus reduce the potential for leaching of fill contaminants into the groundwater.

Alternative 3: Consolidation, NYSDEC Part 360 Cap and Institutional Controls

Capital Cost: *$1,257,000*
Annual OM&M: $20,000/yr
Present Worth(Years 0-30): *$307,000*

Total Present Worth Cost ***$1,564,000***

This alternative includes the consolidation and covering measures that are protective to human health and the environment in Alternative 2 but includes a cover design to prevent infiltration of surface water by installing an impermeable geomembrane layer. Impacted wetland sediments, defined based on chromium concentrations that exceed 26 ppm, and waste located at the wetland edge would be excavated and placed within the fill area. Approximately twenty-four inches of sediment along the edge of the fill area would be excavated (see Figure 3 for approximate areal extent) and confirmed to have met the cleanup criteria of less than the low effect level for chromium (26 ppm) and less than 1 ppm PCBs by confirmatory sampling. The volume of sediment and fill material to be consolidated would be approximately 4,400 cubic yards. The final volume to be consolidated may change as supplemental wetland sediment sampling and analysis to better define the areas and depths of sediments that would require excavation would occur during design. The cap would consist of a gas venting layer and geocomposite material, and impermeable layer, a 12 inch layer of barrier protection material along with an additional six inches of barrier protection material in the area within 100 feet of the wetland and lastly a six inch vegetative cover. This alternative would also include wetland restoration of impacted areas in accordance with ECL Article 24 and 6 NYCRR Part 663 requirements. Because contamination above SCGs would remain on-site, institutional controls, including an environmental easement would also be applied.

This alternative would protect against direct exposure contact with impacted soils and sediment, significantly reduce vertical and horizontal groundwater migration, and reduce adverse impacts to fish and wildlife resources. The time frame to implement this alternative would be 4 months for construction and 6 months for wetland backfill and initial restoration planting.

Alternative 4: Complete Excavation and Disposal

Capital Cost: *$9,739,000*
Annual OM&M: $5,000/yr
Present Worth(Years 0-30): *$77,000*

Total Present Worth Cost ***$9,816,000***

This alternative includes the complete excavation and disposal of impacted soil, fill materials and sediments. This work would include separation of soils and fill materials prior to disposal. Dewatering of the impacted area of the wetland and potentially, groundwater within the fill area,

might be required. Wastewater from the sediments would be pumped to tankers and treated to NYSDEC issued limits prior to discharge. The wetland area disturbed during construction would be restored in accordance with ECL Article 24 and 6 NYCRR Part 663 requirements.

The time frame to complete this alternative would be six months to one year for construction and six months for wetland backfill and initial restoration planting. This alternative would be a permanent remedy and would mitigate all exposures to fish and wildlife and to humans, related to direct contact with the waste and sediments.

7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which governs the remediation of inactive hazardous waste disposal sites in New York State. 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.

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 NYSDEC has determined to be applicable on a case-specific basis.

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

3. Short-term 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.

4. 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.

5. 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.

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.

7. Cost-Effectiveness. Capital costs and 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 for each alternative are presented in Table 2.

This final criterion 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.

8. Community Acceptance - Concerns of the community regarding the RI/FS reports and the PRAP have been evaluated. The responsiveness summary (Appendix A) presents the public comments received and the manner in which the Department addressed the concerns raised. In general, the public comments received were supportive of the selected remedy.

SECTION 8: SUMMARY OF THE PROPOSED REMEDY

Based on the Administrative Record (Appendix B) and the discussion presented below, the Department has selected Alternative 2, Consolidation, Soil Cover and Institutional Controls as the remedy for this site. The proposed remedy is based on the results of the RI and the evaluation of alternatives presented in the FS. The elements of this remedy are described at the end of this section.

The selected remedy is based on the results of the RI and the evaluation of alternatives presented in the FS.

Alternative 2: Consolidation, Soil Cover and Institutional Controls, was selected because, as described below, it satisfies the threshold criteria and provides the best balance of the primary balancing criteria described in Section 7.2. It will achieve the remediation goals for the site by greatly reducing the potential for contaminants to leach into the groundwater, and eliminating the soil and sediment exposure pathways for humans and wildlife.

All alternatives, except Alternative 1 (No Further Action) satisfy the threshold criteria of being protective of human health and the environment and compliance with SCGs. Thus, the five balancing criteria are particularly important in selecting a final remedy for the site.

Alternatives 2 (soil cover), 3 (capping), and 4 (excavation and removal) all have short-term impacts which can easily be controlled. The time needed to achieve the remediation goals would be longest for Alternative 4 (12-18 months) and shorter for Alternatives 2 and 3 (nine months and ten months).

Achieving long-term effectiveness is best accomplished by excavation and removal of the contaminated overburden soils and sediments (Alternative 4). Alternative 4 would result in the removal of all of the contaminated soil and sediment at the site. Excavation would eliminate the need for property use restrictions and long-term monitoring. However, long-term effectiveness can be accomplished for Alternative 2 and 3 via an environmental easement and long-term monitoring of the cover/cap.

Alternative 2 is favorable in that it is readily implementable. Alternative 3 is also implementable. Alternative 4 would be relatively difficult to implement as the fill material is extremely hard (similar to concrete and less friable) and is not amenable to routine excavation. Excavation would also be required below the water table. Thus creation of a barrier, dewatering, and collection and treatment of the water would be necessary. These difficulties would increase the time for both design and implementation.

Alternative 4, excavation and removal, would reduce the volume of waste on-site. Approximately 75,000 cubic yards of material would be removed under Alternative 4. Alternatives 2 and 3 would not reduce the volume, but would greatly reduce the mobility of contaminants by removing contaminated sediment from within the wetland; preventing the movement of contaminated materials via soil erosion and reducing groundwater migration by covering or capping the fill area.

The cost of the alternatives varies significantly. Alternative 2 is very favorable because it would reduce migration of contaminants into the groundwater at the site, would eliminate the exposure pathways and is the most cost effective remedy. Both Alternatives 2 and 3 would create a barrier to prevent exposure and to reduce migration of contaminants. While Alternative 3 is more robust than Alternative 2, Alternative 3 is more expensive and would not be a more protective or a more permanent remedy than Alternative 2 because leaching of the contaminants into the groundwater has not occurred and is not likely in the future at this site. Removal (Alternative 4) is the most costly remedy and is the most difficult to implement. Designing the remedy, mobilizing the equipment, preparing the site, and construction management are substantial costs associated with each of these remedies. These costs are similar for Alternatives 2 and 3, but are significantly more for Alternative 4. For Alternative 4, by removing all of the waste from the fill area and removing the sediment, restrictions of on-site use would not be necessary.

Alternative 2 is most favorable due to its short implementation period, ability to achieve long-term effectiveness, ease of implementation, ability to reduce mobility of contaminants, and cost effectiveness.

The estimated present worth cost to implement the proposed remedy, Alternative 2, Consolidation, Soil Cover and Institutional Controls, is $631,000. The cost to construct the

remedy is estimated to be $554,000 and the estimated average annual operation, maintenance, and monitoring costs for 30 years is $5,000.

The elements of the selected remedy are as follows:

Consolidation and Soil Cover with Institutional Controls

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. This will include supplemental wetland sediment sampling and analysis to better define the areas and depths of sediments that will require excavation.

2. Contaminated sediment, defined based on chromium concentrations that exceed 26 ppm, will be excavated along the edge of the fill to a depth of two feet and consolidated on the upland fill area. Confirmatory sampling will be performed in the area of excavation to confirm that the remaining sediment is below the sediment criteria (26 ppm) for chromium, and below1 ppm for PCBs. Construction and restoration in the wetland will be consistent with the requirements of ECL Article 24 and 6 NYCRR Part 663.

3. A demarcation layer (e.g., snow fence) will be laid over the consolidated material. A soil cover will then be constructed over the consolidated material and the remaining fill area to prevent exposure to contaminated soils and waste and to reduce infiltration of water. The two foot thick cover will consist of clean soil laid over the entire waste mass, including 6 inches of top soil, sloped to the wetland. The topsoil and all soil within 100 ft of the wetland will be of sufficient quality to support vegetation. Clean soil will comply with Part 375-6.8 unrestricted use criteria.

4. Development of a site management plan to: (a) address residual contaminated soils that may be excavated from the site during future redevelopment. The plan will require soil characterization and, where applicable, disposal/reuse in accordance with NYSDEC regulations; (b) identify any use restrictions; and (c) provide for the operation and maintenance of the components of the remedy.

5. Imposition of an institutional control in the form of an environmental easement that will (a) require compliance with the approved site management plan; (b) limit the use and development of the property to restricted residential, commercial or industrial uses only; (c) restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; (d) require that no removal of or digging be done into the waste mass, (identifiable by the high density and hardness of the material) or below the demarcation layer, except in accordance with the site management plan; and (e) require the property owner to complete and submit to the NYSDEC a periodic certification.

6. The property owner will provide a periodic certification, prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, until the NYSDEC notifies the property owner in writing that this certification is no longer needed. This submittal will certify that the institutional controls and engineering controls are still in place, allow the NYSDEC access to the site, and indicate that nothing has occurred that will impair the ability of the controls to protect public health or the environment, or constitute a violation or failure to comply with the site management plan.

7. Since the remedy will result in untreated hazardous waste remaining at the site, a long term monitoring program will be instituted. The components of the long-term monitoring of the site will include but not necessarily be limited to; monitoring of the biota and soil cover to determine its effectiveness and integrity, and monitoring the establishment and growth of the restored wetland. This monitoring program will be a component of the long-term management of the site.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted at the site:

- **Repositories for documents pertaining to the site were established.**
- **A public contact list, which included nearby property owners, elected officials, the local media and other interested parties, was established.**
- **A public meeting was held on March 12, 2008 to present and receive comment on the PRAP.**
- **A responsiveness summary (Appendix A) was prepared to address the comments received during the public comments period for the PRAP.**

TABLE 1

Nature and Extent of Contamination

Surface Soil

Contaminant of Concern	Concentration Range Detected	SCG **	Frequency Exceeding SCG
Volatile Organic Compounds (VOCs) (ppm) – None Detected			
Semi-Volatile Organic Compounds (SVOCs) (ppm)			
Benzo(a)anthracene	ND – 8.2	**1**	5/13
Chrysene	ND – 9.2	**1**	5/13
Benzo(b)fluoranthene	ND – 5.2	**1**	5/13
Benzo(k)fluoranthene	ND – 8.7	**0.8**	6/13
Benzo(a)pyrene	ND – 7.8	**1**	5/13
Ideno(1,2,3-cd)pyrene	ND – 6.3	**0.5**	5/13
Dibenzo(a,h)anthracene	ND – 2.9	**0.33**	5/13
Inorganics (ppm)			
Aluminum	1190 – 14,800	SB (**9813***)	6/13
Arsenic	5.5 – 44.9	**13**	7/13
Barium	104 – 3020	**350**	3/13
Cadmium	ND – 14.1	**2.5**	3/13
Calcium	3020 – 68,100	SB (**7288**)	12/13
Chromium, Total	298 – 28,300	**30**	13/13
Cobalt	23.5 – 2150	**30**	13/13
Copper	71.5 – 1660	**50**	13/13
Iron	22,200 – 251,000	**2000**	13/13
Lead	46.6 – 1990	**63**	10/13
Magnesium	1020 – 24,900	SB (**5005**)	11/13
Manganese	440 – 12,900	**1600**	8/13
Mercury	ND – 1.40	**0.18**	8/13
Nickel	142 – 13,300	**30**	13/13
Selenium	ND – 19.2	**3.9**	8/13
Sodium	ND – 1380	SB (**615.8**)	5/13
Vanadium	35.2 – 932	**150**	9/13
Zinc	24.6 – 390	**109**	7/13
*SB-Site Background values (in parentheses)based on average concentrations in BS-1 through BS-4. **SCGs are either the Part 375 unrestricted use criteria or TAGM 4046 criteria, as applicable.			
Pesticides & PCBs (ppm)			
Total PCBs (prior to IRM)	.037 – 144	**0.1**	7/13

TABLE 1

Nature and Extent of Contamination

Subsurface Soil

(DATA FROM TEST PIT AND SOIL BORING SAMPLES)

Subsurface Soil Contaminant of Concern	Concentration Range Detected	SCG**	Frequency Exceeding SCG
Volatile Organic Compounds (VOCs) (ppm)			
None above Soil Criteria			
Semi-Volatile Organic Compounds (SVOCs) (ppm)			
phenol	ND – .091	**0.33**	1/11
1,2,4-trichlorobenzene	ND – 6.5	**3.4**	1/11
4-chloro-3-methylphenol	ND – .530	**0.24**	1/11
benzo(b)fluoranthene	ND – 1.300	**0.8**	1/11
Inorganic (ppm)			
Arsenic	7.9 – 25.6	**13**	6/11
Barium	180 – 2720	**350**	7/11
Cadmium	ND – 4.5	**2.5**	1/11
Chromium, Total	2640 – 38,000	**30**	11/11
Cobalt	8.5 – 3400	**30**	10/11
Copper	191 – 887	**50**	11/11
Iron	63,400 – 300,000	**2000**	11/11
Lead	62.8 – 661	**63**	10/11
Mercury	0.06 – 0.6	**0.18**	4/11
Nickel	1190 – 19,300	**30**	11/11
Selenium	8.2 – 33.8	**3.9**	11/11
Vanadium	295 – 2150	**150**	11/11
Zinc	59 – 1,000	**109**	5/11
*SB- Site Background value (in parentheses) based on average concentrations in BS-1 through BS-4. **SCGs are either the Part 375 unrestricted use criteria or TAGM 4046 criteria, as applicable			
Pesticides (ppm)			
aldrin	ND – .045	**0.041**	1/11
heptachlor epoxide	ND – .084	**0.020**	2/11
PCBs (ppm)			
total PCBs	ND – 5	**0.1**	8/11

TABLE 1

Nature and Extent of Contamination

Groundwater (Filtered) – August 2002

Groundwater Contaminant of Concern	Concentration Range Detected	SCG (ppb) Class GA Water Quality Standard – TOGs 1.1.1	Frequency Exceeding SCG (On-site wells only)
Volatile Organic Compounds (VOCs) - none above groundwater standards			
Semi-Volatile Organic Compounds (SVOCs) -none above groundwater standards			
Pesticides - none above groundwater standards			
PCBs – none above groundwater standards			
Inorganics (ppb)			
Iron	ND-15,900	300	5/7
Magnesium	13,200-254,000	35,000	5/7
Manganese	62.4-1600	300	4/7
Selenium	ND-19.4	10	2/7
Sodium	25,400-1,801,200	20,000	7/7

TABLE 1.

Nature and Extent of Contamination

Surface Water

(WETLAND WATER DATA AND EAST SWALE DATA FROM JUNE 2000 AND NOVEMBER 2002)

Contaminant of Concern	Concentration Range Detected	SCG Surface Water Standard – TOGs 1.1.1	Frequency Exceeding SCG
Volatile Organic Compounds (VOCs) (ppb)-None above surface water standards			
Semi-Volatile Organic Compounds (SVOCs) (ppb)-None above surface water standards			
Inorganic (ppb)			
Aluminum	ND – 7380	100	7/15
Antimony	ND – 11.8	3	4/15
Arsenic	ND – 59.5	50	1/15
Beryllium	ND – 4.5	3	3/15
Cadmium	ND – 16.8	5	1/15
Chromium, Total	ND – 467	50	7/15
Cobalt	ND – 100	5	8/15
Iron	117 – 326,000	300	10/15
Lead	ND – 119	50	5/15
Magnesium	26,700 – 61,200	35,000	4/15
Manganese	157 – 6980	300	10/15
Nickel	ND – 674	100	5/15
Vanadium	ND – 60.8	14	7/15
Pesticides & PCBs (ppb)-None above surface water standards			

TABLE 1

Nature and Extent of Contamination

Wetland Sediment

Wetland Sediment Contaminant of Concern	Concentration Range Detected (ppm)	SCG* NYSDEC Technical Guidance for screening contaminated sediments (ppm)	Frequency Exceeding SCG
Volatile Organic Compounds VOCs -			
	None Detected		
Semi-Volatile Organic Compounds (SVOCs)			
	None above SCGs		
Inorganic			
		(lowest effect level – severe effect level (ppm))	
Antimony	ND – 8.1	2.0 – 25	4/30
Arsenic	3.3 – 34.1	6 – 33	22/30
Cadmium	ND – 0.71	0.6 – 0.9	2/30
Chromium, Total	14.8 – 7090	26 – 110	16/30
Copper	20.2 – 184	16 – 110	30/30
Iron	8400 – 73,800	2.0 %– 4.0%	N/A
Lead	7.1 – 105	31 – 110	16/30
Manganese	123 – 6630	110-460	5/30
Mercury	ND – 1.2	0.15 – 1.3	9/30
Nickel	19.9 – 3180	16 – 50	30/30
Zinc	26 – 962	120 – 270	10/30
*SCG based on Ecological Risk			

TABLE 1

Nature and Extent of Contamination (continued)

Wetland Sediment Contaminant of Concern	Concentration Range Detected (normalized to carbon)	SCG NYSDEC Technical Guidance for screening contaminated sediments: (ug/g-oc) (normalized to carbon)			Frequency Exceeding SCG
	(ug/g-oc)	Benthic Chronic	Benthic Acute	Wildlife	
Pesticides					
4,4' –DDD	ND-2.22	--	--	1	4/30
alpha chlordane	ND – 0.051	0.03	1.4	0.006	4/30
PCBs - Total					
Total PCBs	ND – 59.63	19.3	2760	1.4	9/30

TABLE 2

Remedial Alternative Costs

Remedial Alternative	Capital Cost	Present Worth 0f Annual OM&M	Total Present Worth
1. No Action	$0	$0	$0
2. Institutional Controls, Consolidation and Soil Cover	$554,000	$77,000	$631,000
3. Institutional Controls, Consolidation and Geotextile Cap	$1,257,000	$307,000	$1,564,000
4. Excavation, Off-site disposal	$9,739,000	$77,000	$9,816,000

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Maestri Property No. 2
Town of Geddes, Onondaga County, New York
Site No. 734040

The Proposed Remedial Action Plan (PRAP) for the Maestri Property No. 2 site, 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 28, 2008. The PRAP outlined the remedial measure proposed for the contaminated sediment and soil at the Maestri Property No. 2 site.

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

A public meeting was held on March 12, 2008, which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 28, 2008.

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

COMMENT 1: Who will pay for the cleanup of the site?

RESPONSE 1: The potentially responsible parties (PRPs) will be approached by the Department and requested to perform the design, remedial action, and maintenance of the site. If, after due diligence by the Department, the PRPs decline to sign or implement a consent order, the Department will consider implementing the remedy under the State Superfund program. The PRPs may be subject to legal action related to cost recovery of response costs.

COMMENT 2: How long will the cap last?

RESPONSE 2: The remedy includes placement of a demarcation layer (identification layer) and two foot thick soil cover over the site. This soil cover will be seeded, mowed and maintained in accordance with a site management plan. The soil cover will remain in place indefinitely.

COMMENT 3: What could be the future use of the site? Must it stay vacant?

RESPONSE 3: The site remedy meets requirements for "Restricted Residential" use (as well as commercial or industrial use), as defined in 6 NYCRR Part 375. If there is a desire to utilize the site in the future consistent with these uses and the environmental easement, the Department may permit such a use upon submittal and approval of a request from the local permitting agency. The

local permitting agency would need to determine if the proposed use was in compliance with local zoning requirements.

COMMENT 4: What type of chromium was detected at the site? Was it hexavalent chromium?

RESPONSE 4: Surface and subsurface soils from the site were tested for hexavalent chromium. Very low levels of hexavalent chromium were found in the subsurface soils. Hexavalent chromium was not found in the surface soil samples.

COMMENT 5: If the site were to be excavated, where would the material be disposed?

RESPONSE 5: Excavation is not the selected remedy. If it was, following the characterization of the excavated material, the waste would be transported and disposed at a landfill that is approved to accept the waste material.

COMMENT 6: Could the property be donated for public use as long as the remedy was protected?

RESPONSE 6: Yes. The owner is allowed to transfer the property as long as the site will continue to be properly maintained and the use is consistent with the environmental easement.

COMMENT 7: Is CSX involved in this site? Do they own the East Swale?

RESPONSE 7: CSX is not directly involved with the site's remedial program. During design, a review of property owners will be performed. If the remedial action encroaches upon CSX property or right of way, access permission will be sought from CSX. Whether this will be required will be determined during design.

COMMENT 8: Where did the cadmium come from in the groundwater, if not from the site?

RESPONSE 8: Cadmium is a metal that naturally occurs in the environment in this area. This is the likely reason for the low level of cadmium detected in one groundwater sample. The cadmium is not site related as the groundwater from which this sample was taken is not hydraulically connected with the contaminated fill.

APPENDIX B

Administrative Record

Administrative Record

Maestri Property No. 2
Site No. 734040

1. "Proposed Remedial Action Plan for the Maestri Property No. 2 site", February 2008, prepared by the New York State Department of Environmental Conservation.

2. Order on Consent, Index No.D7-0001-00-01, between the Department and Crucible Material Corporation, Coltech Industries, and Val's Motors, Inc., executed on January 25, 2000 (as amended on September 22, 2003).

3. "Phase II Investigation Val's Dodge" August 1992, URS Consultants, Inc.

4. "Phase II Investigation Supporting Documentation Val's Dodge", August 1992, URS Consultants.

5. "Work Plan for Remedial Investigation/Feasibility Study for the Maestri II Site", June 1999, C & S Engineers, Inc.

6. "Health and Safety Plan Remedial Investigation/Feasibility Study Crucible Materials Corp.", February 2000, Stearns & Wheler, LLC.

7. "Supplemental Work Plan Maestri II Site", March 2002, Stearns & Wheler Companies.

8. "Work Plan Interim Remedial Measure Maestri II Site", April 2004, Stearns & Wheler Companies.

9. "Interim Remedial Measure Health and Safety Plan" July 2004, Conestoga-Rovers & Associates.

10. "Report for the Remedial Investigation Maestri II Site", Volume I of III, October 2004, Stearns & Wheler Companies.

11. "Report for the Remedial Investigation Maestri II Site", Volume II of III, October 2004, Stearns & Wheler Companies.

12. "Report for the Remedial Investigation Maestri II Site", Volume IIII of III, October 2004, Stearns & Wheler Companies.

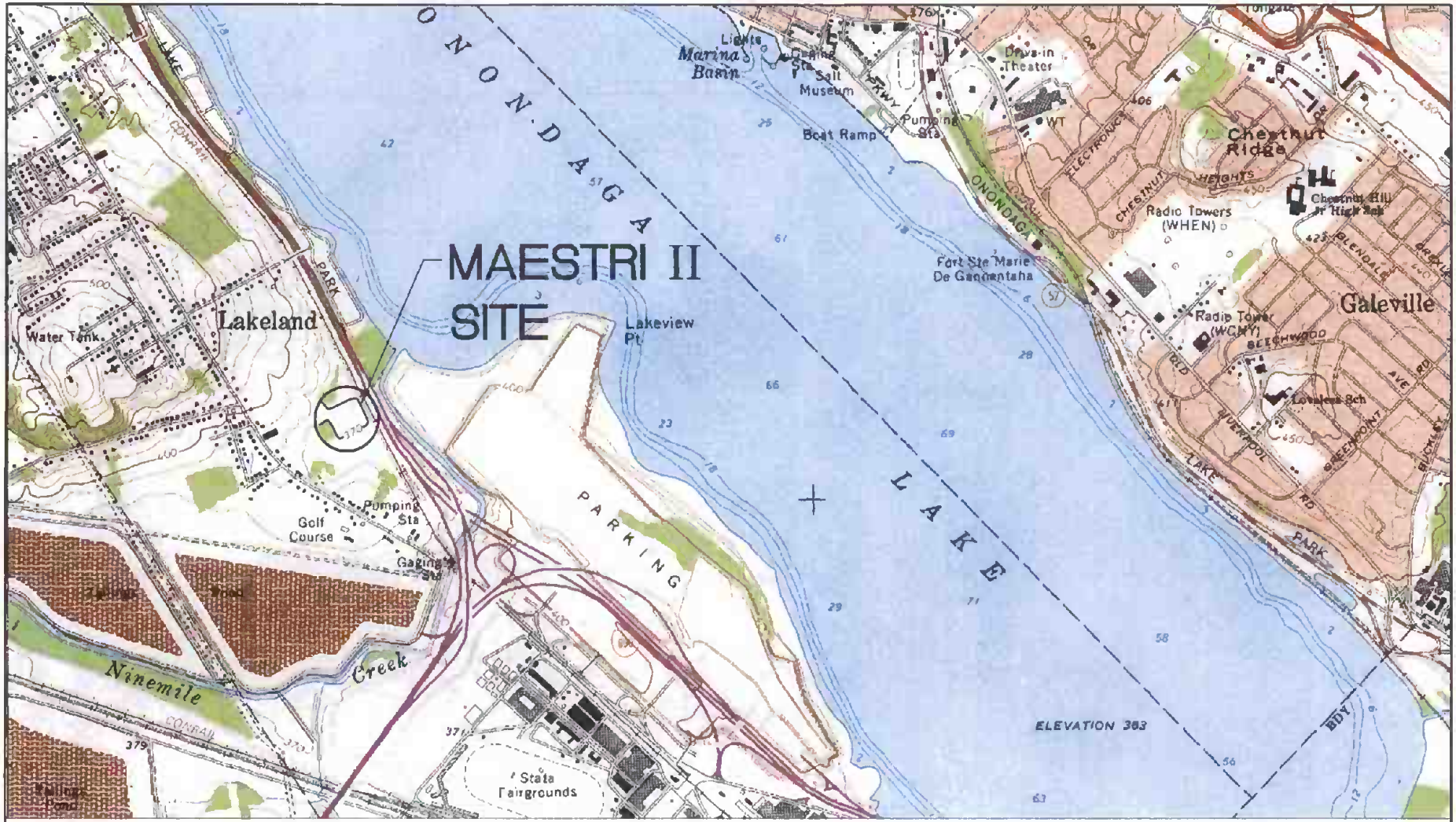
13. "Interim Remedial Measure Report Maestri II Site", November 2004, Stearns & Wheler Companies.

14. "Feasibility Study Report Maestri II Site, as revised September 2006, Stearns & Wheler Companies.

15. "Fact Sheet Proposed Remedial Action Plan announced for Maestri Property No. 2 Site" February 2008, New York State Department of Environmental Conservation.

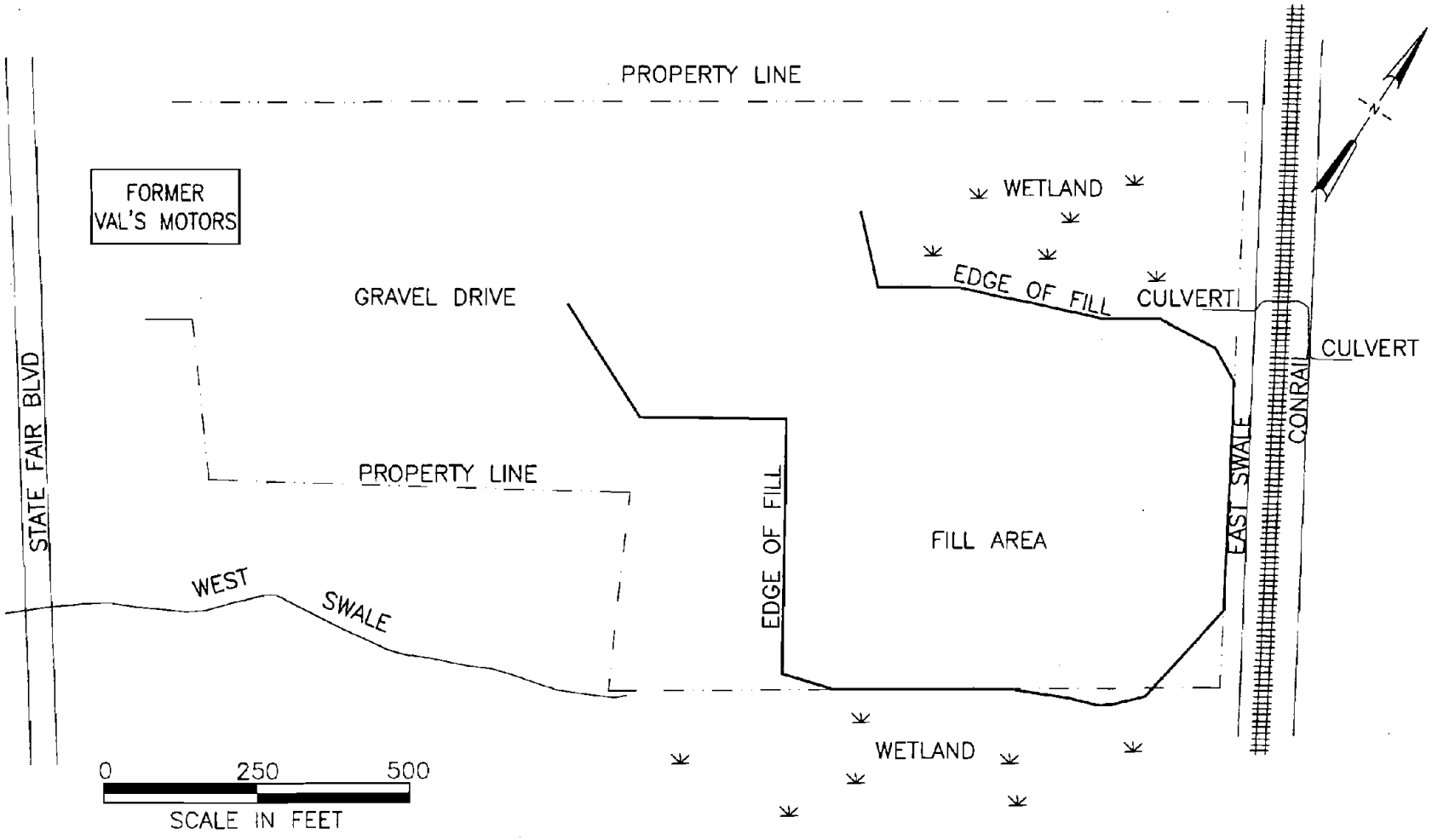
16. Letter regarding concurrence with the Proposed Remedial Action Plan, Maestri No. II, February 22, 2008, NYSDOH.

FIGURES



Topographic Map: Syracuse West Quadrangle, State of New York, Department of Transportation, New York – Onondaga Co., 7.5 Minute Series, 1973, Photorevised 1978.

Figure 1. Site Location



Source: Modified from Stearns & Wheler, 2007

Figure 2. Site Plan

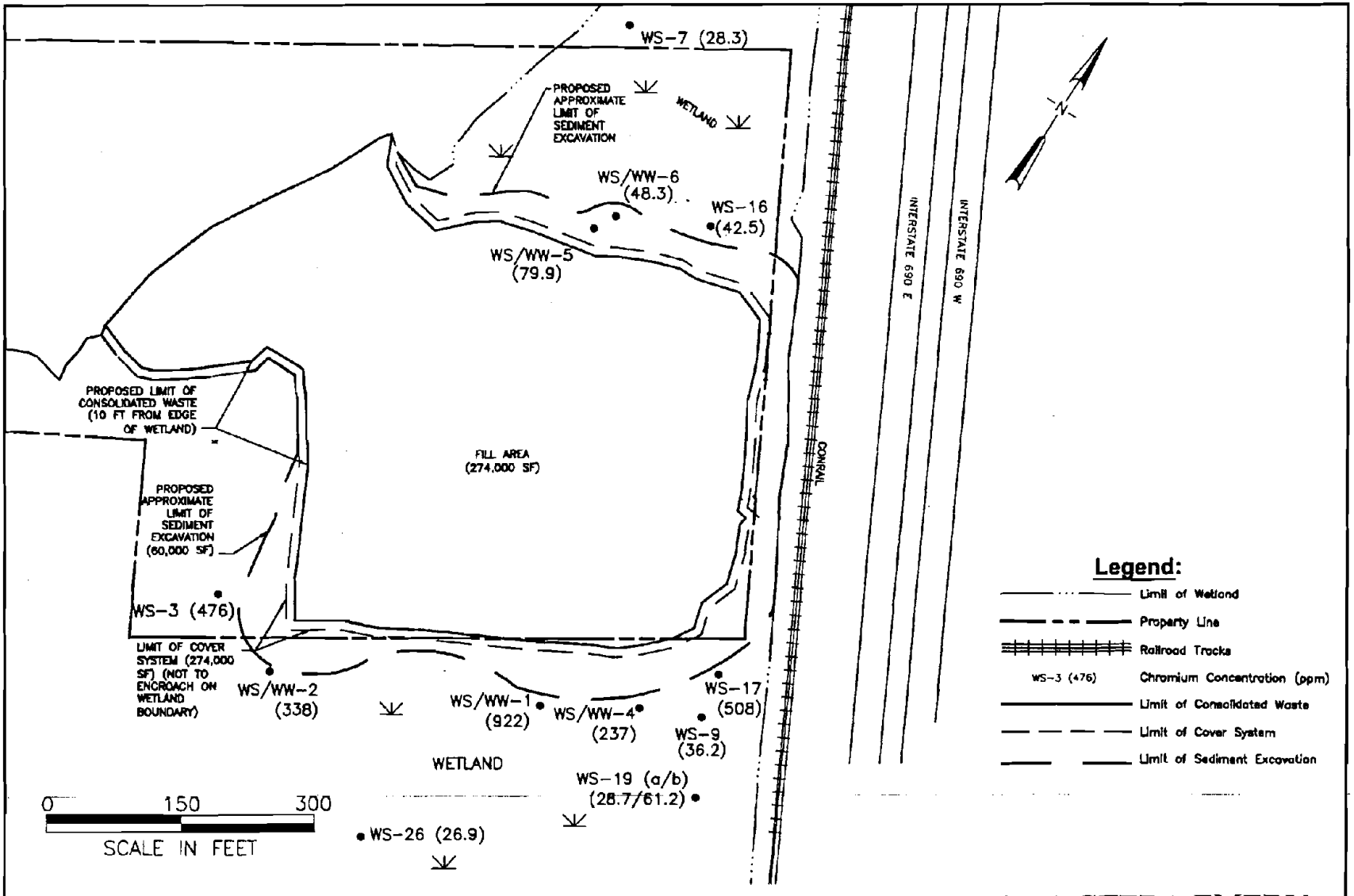


Figure 3. SELECTED REMEDY

Institutional Controls, Consolidation, and Soil Cover

Source: Modified from Stearns & Wheler, 2007

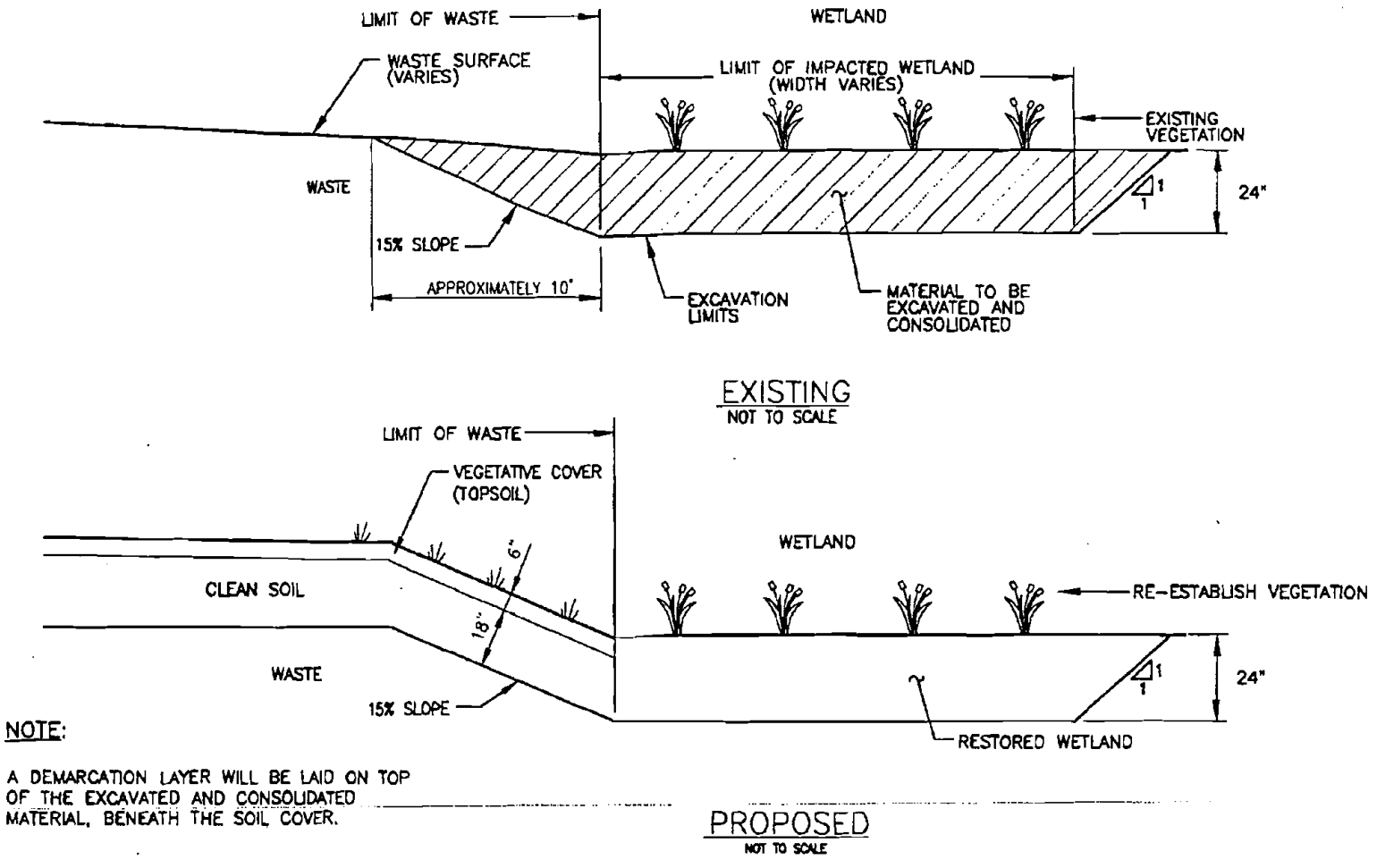


Figure 4. SELECTED REMEDY
Consolidation and Soil Cover

Source: Modified from Stearns & Wheler, 2007