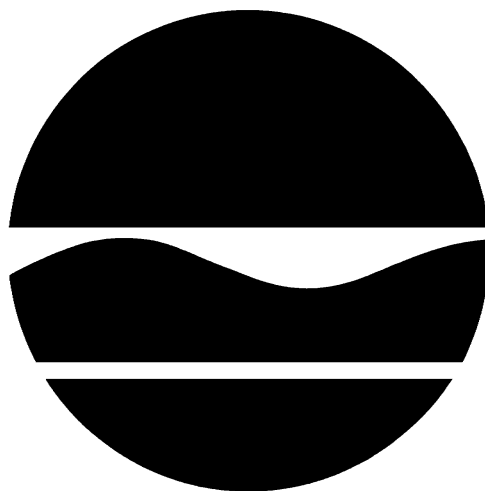


PROPOSED REMEDIAL ACTION PLAN
RCA - ROCKY POINT
Town of Brookhaven, Suffolk County, New York
Site No. 1-52-011

FEBRUARY 2007



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the RCA-Rocky Point Site. As more fully described in Sections 3 and 5 of this document, PCB containing electrical equipment including capacitors and transformers, were operated at the RCA - Rocky Point site for half of a century by the former operator General Electric Company - RCA Global Communications, Inc. (GE/RCA). A PCB spill occurred in the early 1980 outside of a former transformer building (Building #9) which resulted in the disposal of hazardous wastes, including PCBs. These wastes contaminated the soil at the site, and resulted in:

- a significant threat to human health associated with potential exposure to PCBs present in the on-site soil.
- a significant environmental threat associated with the potential impacts of PCB contamination to on-site soils.

The Department and GE/RCA implemented several remedial actions to remediate the on-site soil contamination at the RCA-Rocky Point site. As discussed in Section 3.2, the remedies implemented by the Department and a former site owner/operator were effective in remediating the soil contamination. These remedies consisted of the following:

- Excavation of contaminated soil in the PCB spill area at former Building #9.
- Cap construction over the spill area.
- Access to the spill area is restricted by a chain-link fence at the former location of Building #9.
- Former landfill on-site was covered with 18 inch of clean sand.

Based on the implementation of the above remedies and the findings of the investigation of this site, the site no longer poses a significant threat to human health or the environment; therefore, No Further Action with institutional controls/engineering controls (ICs/ECs) is proposed as the remedy for this site:

The proposed remedy, discussed in detail in Section 6, 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.

This Proposed Remedial Action Plan (PRAP) identifies the preferred remedy and discusses the reasons for this preference. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

The Department has issued this PRAP as a component of the Citizen Participation Plan developed pursuant to 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. This document is a summary of the information that can be found in greater detail in the January 26, 2006 "Remedial Investigation Work Plan",

the August 2, 2006 “Remedial Investigation Report”, and other relevant documents. The public is encouraged to review the project documents, which are available at the following repositories:

Document Repositories:

- 1) North Shore Public Library
250 Route 25A
Shoreham, NY 11786-2190
Phone: (631) 929-4488
Hours: Mon.-Fri. 10:00 a.m. to 9:00 p.m.
Sat. 10:00 a.m. to 5:00 p.m.
Sun. 1:00 p.m. to 5:00 p.m.

- 2) NYS Department of Environmental Conservation - Region 1 Office
Division of Environmental Remediation
SUNY at Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409
Contact: Abdur Rahman (Project Manager)
Phone: (631) 444-0247
Hours: Mon.-Fri., 8:30 a.m. to 4:45 p.m.

The Department seeks input from the community on all PRAPs. A public comment period has been set from February 21, 2007 to March 22, 2007 to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for March 7, 2007 at the North Shore Public Library, 250 Route 25 A, Shoreham, NY 11786 beginning at 7:00 p.m.

At the meeting, the results of the Remedial Investigation (RI) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Mr. Rahman at the above address through March 22, 2007.

The Department may modify the proposed remedy or select another based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here.

Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department’s final selection of the remedy for this site.

SECTION 2: SITE LOCATION AND DESCRIPTION

SITE DESCRIPTION:

The RCA Rocky Point site, located in the Town of Brookhaven, Suffolk County, New York, is currently owned by the New York State Department of Environmental Conservation (see Figure 1). The size of the property is 5,100 acres and the area surrounding the site is wooded. The current use of this resource management area includes hiking, bicycling, horseback riding and hunting. The nearest residential area, the hamlet of Rocky Point, is approximately 1.5 miles to the north. There is one public water supply well approximately 7,000 feet south of the landfill site. There are two United States Geological Survey (USGS) observation wells: one 5,000 feet southeast and one 3,500 feet south southwest. The nearest domestic well is approximately 5,000 feet southeast of the landfill site. Since the groundwater flow direction is generally to the north, none of these wells is hydraulically downgradient of the site.

Approximately two acres of this property, consisting of a landfill and a capped area, are included in the listed Class 2 site. The landfill area is approximately one acre in size and is heavily vegetated. It slopes downwards toward the south in a two-acre natural depression. The wastes were buried under and along this sloped area. The vegetation consists of grasses, weeds, shrubs, well-established pine trees and scrub oak of varying heights and thicknesses. Many trees stand ten feet tall and four inches in diameter. Approximately 75% of the landfill area is covered with this natural vegetation. The capped area is located

in the vicinity of former Building #9. Residual contamination in subsurface soil beneath this area is covered with a high density polyethylene (HDPE) cap, and 30 inches of soil cover.

SITE HYDROGEOLOGY:

Beneath the site, the upper glacial aquifer begins at the water table and extends to the base of the Pleistocene outwash deposits, located at about 400 feet below sea level. These outwash deposits are composed of fine to coarse sand and gravel and have a high permeability.

The outwash deposits overlie the Magothy Formation. The Magothy Formation consists of fine to coarse sand with finer material and interbedded lenses of silt and clay. The formation is composed of coarse sand to gravel at the base. The Magothy is hydraulically connected to the upper glacial aquifer, and together they are the sole source aquifer for Long Island.

The Magothy overlies the Raritan clay at about 775 feet below sea level at Rocky Point. This clay is the confining unit for the underlying Lloyd aquifer.

The Lloyd aquifer is the sand member of the Raritan Formation. It underlies the Raritan clay at approximately 920 feet below sea level. Confined by the Raritan clay, this aquifer is under artesian pressure. The Lloyd sand member consists of fine to coarse sand and gravel containing lenses of finer-grained material.

Horizontal groundwater flow direction is to the north to northwest; however, due to the regional groundwater hydraulics and the high permeability of the native soils, a strong vertical flow component is anticipated. Depths to groundwater are 45 feet at the landfill area and 102 feet at the capped area.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site was a transcontinental radio communication station from 1921 to 1978. The majority of the property was covered by a grid work of timber antenna supports. In its time, it was the most powerful radio transmitter in the world. The station became obsolete with the advent of communication satellites. In 1978, the station was closed and RCA turned the facility over to the Department. All known hazardous waste disposal at this site involved the spilling of PCB fluids contained in the many electrical transformers that were used at the site. Figures 2 and 3 are aerial photographs of the site that illustrate the locations of the key features.

Building # 9 was the main transformer building of the RCA transcontinental radio communication station. Commencing in 1927, until 1975, Rocky Point had been used solely as a transmitting station (there was a receiving station at Riverhead). The PCB containing electrical equipment, including capacitors and transformers, had been operated at this part of the Rocky Point facility for approximately 50 years. During the period of August 1982 to January 1983, a limited remedial activity was performed to remove electrical equipment containing PCBs. During the removal operations, a PCB spill occurred outside of Building #9 which resulted in soil contamination

Building #1 was the primary control and communication center, with ancillary buildings and structures around the site providing support services. In 1992, all of these buildings were demolished. All concrete and masonry construction and demolition material from the main building complex, the tower, the three electrical substations and two underground basement areas were disposed of in the landfill area.

RCA used a natural kettle hole area in the southwest portion of the site as a landfill. It is alleged that part of the landfill area (approximately 200 ft. x 200 ft. x 20 ft. deep) received an unknown quantity of discarded capacitors containing PCBs. It has been estimated that about one dozen capacitors were buried in the landfill. It is also alleged that there were condensers containing PCBs disposed of in this landfill. Additionally, the landfill is comprised of bulk debris including old cable, telephone poles, porcelain insulators, wood scraps, hinges, remains of old radios and transmitters, rusted drums, and other assorted debris.

3.2: Remedial History

In 1984, the Department first listed the site as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a was a temporary classification assigned to a site that had inadequate and/or insufficient data for inclusion in any of the other classifications. In 1985, the Department reclassified the site from a Class 2a to a Class 2 in the Registry of Inactive Hazardous Waste Disposal Sites in New York. 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.

The following is a history of the remedial activities that were performed at the RCA-Rocky Point site:

1980:

The Suffolk County Department of Health Services (SCDHS), in cooperation with the Department, drilled soil borings and installed four monitoring wells in and around the landfill. Seventeen shallow soil borings (between 2.5 and 5 feet), were installed through the filled area. Garbage was encountered in all but three of these borings. One 20-foot boring was drilled through the fill area, and encountered glass, brass, mica, copper wiring and other debris. Three forty-foot borings, completed outside of the fill area were free of debris. Four 2-inch inside diameter steel monitoring wells were also installed as part of this investigation. PCBs were not detected in the groundwater samples collected from these monitoring wells. Three of these monitoring wells were identified and decommissioned during the March 2006 remedial investigation.

August 1982 - January 1983:

GE/RCA commenced testing and removal of all suspect electrical equipment. During the removal of the electrical equipment from Building #9, PCB fluids were spilled onto the ground outside of the building which resulted in soil contamination.

1985:

GE/RCA removed approximately 2,200 cubic yards of soil and completed the initial decontamination of spill areas outside of Building # 9. The excavation was backfilled with clean soil.

August, 1988:

The following remedial work was performed by GE/RCA

1. Removal and proper disposal of all above and underground fuel tanks
2. Removal and proper disposal of PCB contaminated concrete at Building #9
3. Removal of all electrical equipment
4. Removal of PCB contaminated soil to a permitted disposal facility in Model City, New York
5. Removal of drums and other contaminated vessels
6. Installation of two groundwater monitoring wells in the vicinity of Building #9 and analytical testing of groundwater samples
7. Installation of a HDPE cap over the area in the vicinity of Building #9 where subsurface soils contain residual PCB contamination.
8. All areas of the site including stains and soil near electrical equipment were visually inspected for evidence of contamination. Contaminated concrete found inside Building #1 was tested and found to have a PCB level of 50 ppm. The concrete was excavated and disposed of off-site at a permitted disposal facility.

September, 1989:

All of the concrete floor inside Building #9 was removed. The contaminated soil was also excavated but residual contamination remained. Additional remedial work could not proceed until the building was demolished. This remedial work was funded by GE/RCA.

1989:

A Phase II investigation of the landfill area performed by the Department did not detect contamination in soil or groundwater. This investigation included a geophysical survey, soil boring, soil sampling, monitoring well installation (four PVC monitoring wells), and groundwater sampling.

February 1990:

Building # 9 was demolished by the Department but the foundation was left in the ground.

November 1990:

The north wall of the foundation (which was contaminated) and 1,100 tons of contaminated soil were excavated and shipped to a permitted hazardous waste landfill in Utah. This remedial work was funded by GE/RCA.

September 1992:

Building #1 (Figure 2) and all of the remaining buildings and structures were demolished. All construction and demolition materials from Building #1 (the main building), the tower, the diesel building, three electrical substations and two underground basement areas were disposed of in the natural kettle hole that was used by RCA as a landfill. The landfill was covered with a surface layer of 18 inches of clean sand. Prior to demolition, all areas including oil-stained soil near electrical equipment were investigated by a departmental engineer. Oil-stained soil found inside Building #1 was sampled and found to contain no PCBs. This remedial work was performed by the Department.

SECTION 4: ENFORCEMENT STATUS

Potential 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: The General Electric Co. (RCA Global Communications, Inc.). The Department and the General Electric Company (RCA Global Communications, Inc.) entered into a Consent Order (#T0061885) on November 16, 1989. The Order obligates the General Electric Co. (RCA Global Communications, Inc.) to implement a remedial action program. GE completed the remedial activities discussed in Section 3.2. The Department owns the property since RCA Globcom made a gift of the site to the Department in 1978. In March 2006, a remedial investigation was conducted to determine the effectiveness of past remedial actions that have occurred at the site. Additionally, under the terms of the consent order, the Department may seek cost recovery for previous investigation of the site.

SECTION 5: SITE CONTAMINATION

During March 2000, the Department received a notification of alleged disposal of buried drums at the site. A remedial investigation has been conducted to determine if prior remedial actions were sufficient to remediate this state owned Class 2 inactive hazardous waste disposal site.

5.1 Summary of the Remedial Investigation

A remedial investigation work plan with input from the State and County health departments was developed by the Department. The remedial investigation was conducted by a standby contractor using state funds under the Department's oversight. Prior to the start of field work, a fact sheet was distributed to a public contact list that was developed specifically for this site to inform the public of the proposed investigation. Field work began on March 3, 2006 and was completed on March 28, 2006.

During the preparation of the work plan, the Department acquired copies of aerial photographs from 1947, 1962, 1972, 1994 and 1995 of the site. These aerial photographs were reviewed to identify potential areas where wastes may have been landfilled at the site. As shown on Figure 4, nine locations were selected for further evaluation. These areas were visually inspected and a metal detector was used to determine the presence of metallic objects which might indicate the presence of buried drums. Of the areas evaluated, only the historical landfill area was determined to contain significant amounts of buried metallic objects. Consequently, the work plan only included tasks to determine the nature of the fill in that area.

The RI focused on two areas:

Capped Area:

The first area is by the former location of Building #9 (Figure 3), where PCBs were spilled. The PCBs in this area were initially addressed by excavation and off-site disposal at a permitted facility. Residual soil contamination (PCB levels <10 ppm) was then capped. During the RI, two damaged monitoring wells were properly decommissioned and replacement wells were constructed. The replacement wells were developed and sampled for PCBs during the RI. A buffer zone was constructed around these monitoring wells to

eliminate the growth of vegetation in the area of the monitoring wells and to create a clear work area for future sampling.

Landfill Area:

The other area that was investigated during the RI is a small landfill in the middle of woods. The landfill is in a natural depression. Based on an unconfirmed allegation, there was a slight possibility that drums may have been buried at this landfill. It was anticipated that there would be some capacitors and condensers that contain limited amounts of PCBs in the fill. It is unknown whether waste transformers were ever buried in the landfill. The concrete foundations of a former building (Building #1) and associated construction and demolition (C&D) debris are known to be buried in this landfill.

In order to determine the nature of the fill and to investigate the buried drum allegation, three ten feet deep test pits (TP-1, TP-2, & TP-3 in Figure 3) were excavated at three locations in a mildly sloping area of the kettle hole. The nature of the fill discovered in the test pits was recorded. One soil sample was collected from each of the three test pits. Three soil samples collected from the three test pits plus one duplicate soil sample collected from Test Pit #2 (Figure 3) were analyzed for VOCs, SVOCs (Base/Neutrals only), PCBs and metals. The soil samples were collected from those soils that, based on visual appearance, may have contained chemical contamination.

Three two - inch steel monitoring wells that had been installed around the perimeter of the kettle hole during the 1980 investigation by SCDHS were decommissioned. These wells no longer met the established protocol for monitoring wells.

Four existing PVC monitoring wells installed during a Phase II Investigation in 1989 were renovated to make them better suited for future sampling events. The wells were converted to flush mounted wells and a buffer zone was installed around all monitoring wells.

A GPS survey was performed to determine the GPS coordinates of the two new monitoring wells at the capped area, four monitoring wells at the landfill area and the three test pit locations in the landfill area (Figure 3).

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil and groundwater 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 the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on the Department's Soil Cleanup Objectives "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.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized in Section 5.1.2. More complete information can be found in the RI report.

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 and groundwater samples were collected to characterize the nature and extent of contamination. The main categories of contaminants that exceed their SCGs are PCBs and metals. For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil.

The following are the media which were investigated and a summary of the findings of the investigation.

Surface Soil

During the period of cap construction over the PCB spill area near former Building #9, samples were taken to evaluate PCB concentrations in the soil structure. Two samples were taken at each location, at depths of 6 inches and 24 inches. All samples exhibited PCB concentrations lower than the 10 ppm TAGM value. Residually contaminated soil (lower than the 10 ppm TAGM value) at the PCB spill area has been covered with 36 inches of compacted general fill, 40 millimeter HDPE cap, 12 inches of drainage sand and 18 inches of top soil. The former landfill on-site was also covered with 18 inches of clean sand. Consequently, no sampling was done for the exposed surface soil. No site-related surface soil contamination of concern was identified during the RI. Therefore, no remedial alternatives will be evaluated for surface soil.

Subsurface Soil

The PCB spill area near Building #9 has been remediated. The residual PCB-contaminated soil (PCB levels <10 ppm) was covered with HDPE cap, and 30 inches of clean soil. Consequently, no subsurface soil sampling was done at this location.

Three test pits were excavated at the landfill area to determine the nature of the fill. The fill was mainly composed of rolled-up electric cables, porcelain insulators, masonry debris, wood scraps, metallic scraps, plastic pieces, old cables, hinges, remains of old radios and transmitters, rusted steel and other assorted debris.

The analytical results of soil samples collected in the landfill area as part of this investigation indicate that there is a limited amount of PCB contamination in the landfill area. A sample collected at Test Pit #2 from a depth of 7 feet detected 3.8 ppm of PCBs. The duplicate sample from the same sampling location in Test Pit #2 (Figure 3) detected PCBs at 23 ppm. This is above the Department's recommended cleanup objective value of 10 ppm for sub-surface soils. However, visual observations in the field during the collection of the test pit samples suggest that the amount of PCBs in the buried wastes may be extremely limited. The one sample that detected PCBs was collected immediately adjacent to a few small condensers that had apparently leaked a small amount of dielectric fluid. No other signs of leaking dielectric fluids were evident in the rest of the fill observed in the three test pit locations. This data further supports the premise that the amount of PCBs present in the wastes is limited.

In Test Pit #2, the highest concentration of copper and zinc in the two soil samples from the same sample location were 643 ppm and 649 ppm, respectively. These concentrations are above the soil cleanup objective values for copper and zinc of 25 ppm or site background (SB) and 20 ppm or SB, respectively.

Groundwater

Two groundwater samples were collected from monitoring wells in the capped area and were analyzed for PCBs. These samples did not detect any PCB compounds. Four groundwater samples and a blind duplicate sample collected from the landfill area were analyzed for VOCs, SVOCs (base/neutrals only), PCBs and metals. There were no detections of PCBs and semi-volatile organic compounds in any of the groundwater samples collected from the landfill area.

For VOCs, the groundwater sample collected from MW-3, located downgradient of the landfill area, detected 2-butanone at a concentration of 1000 ppb. This detection exceeds the GA groundwater standard of 50 ppb. However, 2-butanone is a common laboratory contaminant and may not be a site-related contaminant.

In the inorganic analyses, iron was detected in the groundwater sample from MW-4, located downgradient of the landfill, at a concentration of 348 ppb. The GA groundwater standard for iron is 300 ppb. However, it should be noted that ambient groundwater on Long Island often exceeds the standard for iron due to the natural occurrence of iron as a constituent of the soil.

5.2: 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 completion of the RI/FS. No IRMs were conducted at this site.

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.

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.

On-site soil in the area of Building #9 is contaminated. However, this area was covered with a high density polyethylene cap during previous remedial activities at the site therefore, direct contact exposure is not expected. In addition, this capped area is surrounded by a chain-link fence thereby further reducing the potential for direct contact exposure.

On-site soil within the landfill is contaminated with PCBs and inorganic compounds. However, this area was covered by 18 inches of clean sand during previous remedial activities therefore, direct contact exposure is not expected.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of 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 PCB spill area around Building #9 has been remediated. The residual PCB-contaminated soil (PCB levels <10 ppm) was capped with HDPE and 30 inches of clean soil. The landfill area was also covered with 18 inches of clean sand. The landfill area is covered with vegetation consisting of grasses, weeds, shrubs, pine trees and scrub oak of varying heights and thicknesses. Since there is currently no exposed surface soil contamination, there are currently no exposure pathways to wildlife receptors and no wildlife impacts are associated with the site. Maintenance of the PCB cap and the 18-inch sand cap over landfill area would be necessary to prevent potential future exposures to wildlife to the wastes buried in these areas.

There may be slight impacts to the underlying groundwater, which is a sole source aquifer, in the vicinity of the landfill area. Iron was detected slightly above the groundwater standard in one sample collected from a well downgradient of the landfill area. Another groundwater sample downgradient of the landfill area detected 2-butanone, a common laboratory contaminant, at a concentration above the groundwater standard. Neither of these detections is considered to be significant.

There is no surface water body immediately adjacent to the site. Consequently, site-related contamination has not impacted any surface water body or wetland.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND PROPOSED REMEDY

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 wastes disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the remediation described in Section 3.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to PCBs in the soil at the site,
- environmental exposures of flora or fauna to PCBs in the site soil,
- the migration of the on-site soil contamination,
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards, and
- the release of contaminants from subsurface soils into ambient air through storm water erosion and wind borne dust.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards;
- TAGM #4046 Recommended Soil Cleanup Objectives, and 6 NYCRR Subpart 375-6 - Remedial Program Soil Cleanup Objectives

The Department believes that the previous remedial activities at the site have met the remedial goals for the site. The 18-inch soil cover that was placed on the landfill in 1992 has been reducing infiltration and is supporting vegetation. The landfill area is covered with grown trees and shrubs and has created a wildlife habitat. The trees and shrubs on the landfill area act as phyto-technology plantings and are meeting its functional objectives of reducing infiltration of precipitation into the landfill material.

Based on the results of the investigations at the site, the remediation that has been performed, and the evaluation presented here, the Department is proposing No Further Action with the following IC/ECs as the preferred alternative for the site. The Department believes that this alternative would be protective of human health and the environment and would satisfy all SCGs as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the Department concludes that No Further Action is needed other than operation, maintenance, monitoring, and institutional and engineering controls. The elements of the proposed remedy and the institutional and engineering controls are listed below:

1. Periodic maintenance of the capping system and chain-link fence at the PCB capped area near Building #9.
2. Periodic maintenance of the 18-inch surface soil cover in the landfill area.
3. Periodic inspection, maintenance and planting of trees and shrubs, as necessary.
4. The Department would display the appropriate "HAZARDOUS AREA" warning signs on the fence at the capped area.
5. Imposition of an institutional control in the form of an environmental easement that would require (a) limiting the use and development of the property. (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 by SCDHS; and (d) the property owner to complete a periodic certification of institutional and engineering controls.

6. Development of a site management plan which would include the following institutional and engineering controls: (a) management of the final cover system to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. 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) periodic monitoring of groundwater, (c) fencing to control site access; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.
7. 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 determines 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.
8. The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.
9. Since the remedy results in untreated hazardous wastes remaining in the subsurface soils at the site (with PCB levels <10 ppm at the capped area and 23 ppm at the landfill area), a long-term monitoring program would be instituted. Groundwater monitoring wells downgradient of the PCB capped area and the landfill area would be periodically sampled. The sampling by the PCB capped area would allow the effectiveness of this cap to protect the underlying groundwater to be monitored. The groundwater samples by the landfill area would determine whether the wastes buried there would cause future impacts to the groundwater. The periodic monitoring of both areas would be a component of the long-term management for the site.

The cost of the "No Further Action" remedy with continued monitoring and maintenance are estimated costs on a present worth basis for a period of 30 years. These total costs are \$94,650.00 and include annual groundwater monitoring of the monitoring wells at both the capped area and the landfill area and annual maintenance of the capped area.

The site would be reclassified from Class 2 to Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site is a site that has been properly closed but requires continued operation, maintenance, and/or monitoring. Upon reclassification, oversight of the landfill area would be transferred from the Division of Environmental Remediation to the Division of Solid and Hazardous Materials.