Record of Decision
RCA - Rocky Point Site
Town of Brookhaven, Suffolk County, New York
Site Number 1-52-011

March 2007

New York State Department of Environmental Conservation
ELIOT SPITZER, Governor
DECLARATION STATEMENT - RECORD OF DECISION

RCA-Rocky Point Inactive Hazardous Waste Disposal Site
Town of Brookhaven, Suffolk County, New York
Site No. 1-52-011

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the RCA - Rocky Point 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 RCA - Rocky Point 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 release of hazardous waste constituents from this site have been addressed by implementing the remedial measures identified in this ROD. The removal of contaminated soil from the site has significantly reduced the threat to public health and the environment. Therefore, a groundwater monitoring program will be implemented to monitor the effectiveness of previous remedial actions in preventing further contamination of the groundwater. This site does not present a current or potential threat to public health or the environment.

Description of Selected Remedy

Based on the results of the Remedial Investigation for the RCA - Rocky Point site and the criteria identified for evaluation of alternatives, the Department has selected No Further Action with institutional controls/engineering controls (ICs/ECs) for this site. The components of the remedy are as follows:

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 will 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 will 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 NYSDOH; and (d) the property owner to submit a periodic certification of institutional and engineering controls.

6. Development of a site management plan which will 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 will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) periodic monitoring of groundwater, and (c) fencing to control site access.

The property owner will 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 will: (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. Since the remedy results in untreated hazardous wastes remaining in the subsurface soils at the site (with PCB levels $<50$ ppm at the capped area and at the landfill area), a long-term monitoring program will be instituted. Groundwater monitoring wells downgradient of the PCB capped area and the landfill area will be periodically sampled.
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.

[Signature]

Date: March 3, 2007

Dale A. DeSnoyers, Director
Division of Environmental Remediation
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SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the 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 a century by the former operator General Electric Company - RCA Global Communications, Inc. (GE/RCA). A PCB spill occurred in the early 1980s 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) was selected as the remedy for this site:

The selected 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.

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 Building #9, 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. Former Building #9 consists of a capped area which was the site of a PCB spill and the area beneath the building which was the subject of excavation activities.

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 two acres of the site consisting of a landfill and Building #9 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. Excavation of soils in the vicinity of the 1982-1983 PCB spill at Building #9 and off-site disposal to a permitted disposal facility in Model City, New York. Confirmatory soil samples revealed PCB levels below 50 ppm. Contaminated soil with PCB levels below 50 ppm would be considered non-hazardous. The area was backfilled with 36 inches of compacted fill, a high density polyethylene (HDPE) cap was installed over the area and 30 inches of fill was placed over the cap.
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. 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 and 1,100 tons of PCB contaminated soil were excavated from beneath the footprint of former Building #9 and shipped to a permitted hazardous waste landfill in Utah. Residual PCB levels were below the 10 ppm cleanup objective, so no additional remedial actions were necessary. 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.

SECTION 5: SITE CONTAMINATION

On March 20, 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 the 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 disposed of 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:

Former Building #9:

Two areas of concern exists relating to former Building #9. The first area was where PCBs were spilled in 1982-1983 (Figure 3). In 1985 and 1988, PCB contamination in this area was addressed through excavation and off-site disposal at a permitted facility. Residual soil contamination existed (PCB levels <50 ppm), so the area was covered with an impervious HDPE cap. The second area was beneath the footprint of former Building #9. In February 1990 contaminated soil was excavated from this area and disposed of at a permitted off-site facility. Residual PCB levels in this area did not exceed 10 ppm (sampled on November 8, 1990). During the RI, two damaged monitoring wells were 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.
RI results were compared to the SCGs and potential public health and environmental exposure routes. 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.

Soil

Former Building #9:

Post excavation confirmatory soil sampling conducted in 1988 at the PCB spill area, near former Building #9, revealed PCB concentrations lower than the 50 ppm. The PCB spill area was covered with 36 inches of compacted fill and a 40 millimeter HDPE cap was placed over the area. Then, 12 inches of drainage sand and 18 inches of top soil were placed over the HDPE cap. Post excavation confirmatory soil sampling conducted on November 8, 1990, beneath the footprint of former Building #9, revealed PCB levels below 10 ppm.

Landfill Area:

The landfill area was covered with 18 inches of clean sand. 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, rusted steel and other assorted debris. The analytical results of soil samples collected in the landfill area 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 soil cleanup objective 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 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 1,000 ppb. This detection exceeds the 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.


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 HDPE 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 <50 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 REMEDIAL GOALS AND SELECTED REMEDY

Based on the Administrative Record (Appendix B) and the discussion presented below, the
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 will 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 will 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 NYSDOH; and (d) the property owner to submit a periodic certification of institutional and engineering controls.

6. Development of a site management plan which will 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 will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) periodic monitoring of groundwater, and (c) fencing to control site access.

7. The property owner will 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 will: (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. Since the remedy results in untreated hazardous wastes remaining in the subsurface soils at the site (with PCB levels <50 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 will be sampled annually for the first five years and periodically thereafter.

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 groundwater sampling of the monitoring wells at both the capped area and the landfill area and maintenance of the capped area.

The site will 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.
APPENDIX A

Responsiveness Summary
The Proposed Remedial Action Plan (PRAP) for the RCA Rocky Point 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 20, 2007. The PRAP outlined the remedial measure proposed for the contaminated soil at the RCA Rocky Point 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. The PRAP incorrectly stated the soil cleanup objective as 10 ppm for the capped area in the vicinity of Building #9. As discussed at the March 7, 2007 public meeting for the site, and the March 2007 Record of Decision (ROD), the soil cleanup objective of 50 ppm was used during year 1988 for the capped area in the vicinity of Building 9. The soil cleanup objective for the excavated soils beneath Building #9 was 10 ppm, as stated in the ROD.

The public meeting 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 22, 2007. This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

**Comment 1:** How often will the monitoring wells be monitored? How fast will a plume move in a year?

**Response 1:** The wells will be sampled and the data will be reviewed annually for the first five years and periodically thereafter. Regional groundwater in the Upper Glacial aquifer in the area moves approximately one foot per day (300 - 400 feet per year). However, there are no site related contaminants detected in groundwater at either the capped area or at the landfill.

**Comment 2:** Will the RCA contaminants move to the Suffolk County Water Authority (SCWA) wells?

**Response 2:** There are no impacts to groundwater from the RCA Rocky point site. Therefore, no impacts to the SCWA wells are anticipated.
**Comment 3:** Were any samples collected from 1980 through 2006? Are there any PCBs in the soil? If so, why?

**Response 3:** In 1988, the Department sampled two monitoring wells at the capped area and four monitoring wells at the landfill area. No PCB compounds were detected in the groundwater samples. As part of the Phase II investigation, soil samples were collected on November 3, 1988 at the landfill area. No PCBs were detected in these soil samples. The analytical results of soil samples collected in the landfill area in March 2006 indicate a limited amount of PCB contamination (23 ppm) in the landfill area. The source of the PCBs was the fluid which leaked from the condenser.

**Comment 4:** If there are PCBs left in the areas, won’t they be a problem in the future? Why won’t they all be removed in the spill area?

**Response 4:** The PCB spill area was properly remediated and soils removed to levels less than 50 ppm. The area has been capped to restrict infiltration through residual soil contamination. The site management plan will ensure that the remedy remains effective, by monitoring the groundwater at both areas and maintaining the capped area and the cover at the landfill area.

**Comment 5:** How did you investigate buried drum allegation? Is there a method to look deeper?

**Response 5:** The allegation was evaluated on several occasions. Two potential site areas were visually inspected in 2003. The expanded evaluation in the Fall of 2005 first involved the collection of more historical aerial photographs from different years to look for changes in the photographs that would suggest that a particular area might have been used for landfilling. On November 28, 2005, nine disturbed areas and the old landfill area were selected for further evaluation by a geophysical survey with a magnetometer. No evidence of an appreciable amount of buried metals were found in any of the selected areas other than the old landfill. Test pits were excavated at the landfill area and two severely rusted empty drums were discovered. The soil samples collected in close proximity of the drums did not detect any PCBs. While it is possible to investigate deeper soils, the results of previous investigations make this unnecessary.

**Comment 6:** What is the future permitted use for the areas? How are you going to protect the uses of the property?

**Response 6:** This is a State natural resource management area. The current and future use of the property will continue to be recreational including hiking, bicycling, horse back riding and hunting. A chain-link fence has been installed around the capped area to restrict entrance into this area. Residual subsurface soil contamination does not affect the use of the property.

**Comment 7:** If you find a new area of concern, what would you propose for the horse trails?

**Response 7:** If the Department were to find a new area of concern, proper remedial actions would be undertaken to address the area.
Comment 8: During the 1980 landfill investigation, didn’t they know about removing the electrical equipment?

Response 8: The electrical equipment removal operations were performed between August 1982 and January 1983. The Suffolk County Department of Health Services conducted the investigation in 1980, two years prior to the removal operations.

Comment 9: Was the condenser removed when you found it during your 2006 investigation?

Response 9: No, the condenser was not removed. However, the visibly stained soil next to the condenser was removed in the sample in which PCBs were found at 23 ppm.

Comment 10: Are there any contaminants from the wires in the land?

Response 10: The wires on the site are not hazardous wastes. There are no impacts to human health or the environment due to the presence of the wires.

Comment 11: Has there been any other testing besides soil and groundwater on a regular basis? Was there any soil testing done in the areas around the antenna?

Response 11: No other testing besides soil and groundwater was performed at the site on a regular basis. During cap construction in 1988 at the PCB spilled area, all potential areas of the site were visually inspected for evidence of contamination. No locations were found around the antenna that presented evidence of possible contamination. Soil testing was not necessary around the antennas.

Comment 12: Did we disturb the area sometime? Could there be a broken bottle containing 2-butanone?

Response 12: The monitoring well that detected elevated levels of 2-butanone was locked. It was unlikely that liquid from a broken bottle containing 2-butanone could enter into the well.

Comment 13: Capping vs removal of the contaminants - how was it decided to do one over the other?

Response 13: Residual PCB soil contamination that remains at the site is below the regulatory hazardous waste level of 50 ppm and does not require removal from the site.

Comment 14: Who is paying for the cleanup? Did they (GE/RCA) know it was contaminated?

Response 14: RCA signed a NYSDEC consent order to develop and implement a site remediation program. Removal of electrical equipment and storage tanks, remediation and cap construction at the PCB spilled area near Building #9, monitoring well installation during cap construction etc were funded by RCA. The Department funded the demolition of structures and
disposal of C&D debris. There was also a Phase II investigation performed in and around the landfill area. This investigation was funded by NYSDEC.

**Comment 15:** Why are we so concerned about the capped area?

**Response 15:** Residual PCBs in on-site soil is the contaminant of concern at the capped area. Concentrations of residual PCBs are below the regulatory hazardous levels of 50 ppm. Capped area is protective of public health and the environment. The capped area reduces the infiltration of surface water into the residual waste materials. Fencing is provided to ensure the residual waste material beneath the cap is not disturbed. Two downgradient monitoring wells will be sampled to determine if there are any future impacts to groundwater.

**Comment 16:** Why haven’t we capped the landfill?

**Response 16:** 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 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. Groundwater samples from four monitoring wells indicate that residual contamination at the site is not impacting the aquifer.

**Comment 17:** What’s the difference between the two areas and how they were handled?

**Response 17:** The PCB spill area around Building #9 has been remediated. Soil was excavated until PCB levels were below 50 ppm. The residual PCB-contaminated soil (PCB levels <50 ppm) was capped with high density polyethylene and 30 inches of clean soil. The analytical results of soil samples collected in the landfill area indicate that there is a limited amount of PCB contamination (less than 50 ppm) in the landfill area. The landfill area was covered with 18 inches of clean sand. Building #9 was the location of a spill that contained hazardous wastes. The area was investigated and properly remediated. The landfill area was investigated in 1980, 1988 and 2006 and no hazardous wastes were found to be present.

**Comment 18:** What was the area of the landfill?

**Response 18:** The site consists of a 1-acre landfill situated within a 2-acre natural kettle hole.

**Comment 19:** Was the wildlife sampled on site?

**Response 19:** Although no wildlife have been sampled or chemical analyses performed on-site, deer in the area have been annually sampled for diseases, including chronic wasting disease and rabies. No positive cases have been found.
Comment 20: What is the benefit of reclassifying the site from a Class 2 to Class 4? Why is it not a Class 3?

Response 20: A class 4 site is a site that has been remediated and/or closed but that requires continued monitoring. The RCA Rocky Point site has been remediated. Due to the presence of residual PCB contamination, it requires continued monitoring. A Class-3 site is a site at which disposal of hazardous waste has been confirmed and this hazardous waste or its components or breakdown products do not constitute a significant threat to public health or the environment. According to the definition, RCA Rocky Point site does not qualify as a Class-3 site since it has been remediated.

Comment 21: GE/RCA should be paying for the long-term monitoring, not the taxpayers.

Response 21: The long-term monitoring was not included in the consent order. Therefore, the Department will incur the costs for long-term monitoring.

Comment 22: Is the cap, fence and sign overkill for the PCB area?

Response 22: The cap, fence and sign are appropriate for the area with residual PCB contamination.

Comment 23: Why is the cap fenced?

Response 23: The cap is fenced to protect the capping system.

Comment 24: Why were the two areas handled differently?

Response 24: The former Building #9 area contained hazardous wastes. The former landfill area did not contain hazardous wastes.

Comment 25: If you knew PCBs were present should they have been removed at that time rather than leaving them there?

Response 25: The soils containing PCBs above the regulatory hazardous levels of 50 ppm were removed from the PCB spilled area. The residual PCB contaminated soil was properly covered with a high density polyethylene cap.

Comment 26: Were there any contaminants found in the wire found in the test pits?

Response 26: The wires were visually inspected. No oils or stains were found. The soils around the wires were screened using a photoionization detector (PID). The soils did not exhibit any PID readings. The soils from the vicinity of the wires were also analyzed and did not detect any contaminants.
Comment 27: Are we making this someone else’s problem 10 years from now? Why don’t we clean this up now?

Response 27: The hazardous wastes by former Building #9 have been remediated properly. There are solid wastes (construction and demolition debris) buried in the landfill. These materials are not hazardous wastes. The landfill has an 18 inch soil cover and has been revegetated with natural grasses, brush and trees that act as phyto remediation. Upon reclassification, the site will be referred to the Division of Solid and Hazardous Materials to address any solid waste issues, that they may deem necessary.

Comment 28: Is the landfill area also fenced?

Response 28: A fence is not required around the landfill area.

Comment 29: After the cleanup of the spill site were there any levels of PCBs that were consequential at this site and at the capped area?

Response 29: No, the soils containing PCB levels above 50 ppm were removed before the cap construction.

Comment 30: How many test pits were there in the landfill area?

Response 30: In 2006, three test pits were excavated in the landfill area by the Department. In 1980, seventeen shallow borings were drilled by the SCDHS.

Comment 31: What happens after the fifth year of ground water monitoring results? What do you do then?

Response 31: Based on the 5-year groundwater monitoring review report, the Department may continue the monitoring as necessary.

The following comments were raised by Honorable New York State Senator Kenneth P. Lavalle, First Senate District, The State of New York in a letter dated March 7, 2007.

Comment 32: Reclassification of the RCA property would bar future cleanup.

Response 32: Reclassification to Class 4 puts the site into a monitoring phase and does not preclude additional remediation if warranted.

Comment 33: Has the Department investigated any and all allegations of contaminations at the site?

Response 33: Yes. The Department has conducted three remedial investigations at the landfill area and no contaminations were detected above regulatory levels. The Department evaluated
the buried drum allegation on several occasions and never found evidence to support the allegation.

The following comments were raised by Honorable Brookhaven Town Councilman Kevin T. McCarrick in a letter dated March 7, 2007.

Comment 34: Is the DEC prepared or equipped to properly maintain security at the site (former Building 1 and 9)?

Response 34: Yes - the Department will maintain security at the former Building 1 and 9 areas by limiting access to the site by permit only. The Department’s Law Enforcement staff will oversee safety at the site.

Comment 35: There are capacitors containing PCBs at the site in the landfill area. No one knows how many or what exactly is buried in the landfill. A more in-depth investigation is needed to ascertain what materials are present, and what state of decomposition, stability or instability exists, and then schedule a complete cleanup and removal of all materials.

Response 35: Three investigations were conducted at the site and no capacitors were found in the landfill. Only one small condenser was found, and no PCBs were detected above the regulatory limits of 50 ppm.

Comment 36: The report notes that there are rusted drums, but there does not appear to be any idea of what these drums are or what they contained, and other assorted debris.

Response 36: The soils around the drums were inspected visually and no stains or oils were identified. The soils from the vicinity of the drums were analyzed and no PCB compounds were detected above hazardous waste regulatory level. The assorted debris found in the landfill are not hazardous wastes.

The following comments were raised by Honorable New York State Assembly Member Marc S. Alessi in a letter dated March 19, 2007.

Comment 37: The site is known to have soil contamination as a result of the disposal of hazardous wastes from its previous owner GE/RCA.

Response 37: The soils containing PCBs above the regulatory hazardous levels of 50 ppm were removed from the PCB spill area. Due to presence of residual PCB contamination, the area has been capped.

Comment 38: The site poses significant threat to public health or the environment.

Response 38: The residual PCB contamination area was covered with a high density polyethylene cap, therefore, direct contact is not expected. In addition, this capped area is surrounded by a chain-link fence further reducing the potential for direct exposure. The landfill
area was covered by 18 inches of clean sand, reducing the potential for direct contact exposure. The 2006 investigation did not detect any PCB contamination in on-site groundwater.

**Comment 39:** The DEC should further investigate the site before reclassification from a Class 2 site to a Class 3 site.

**Response 39:** The site would be reclassified from Class 2 to Class 4. This reclassification requires long-term monitoring of the site. The Department will take further action if warranted.

The following comments were raised by Sarah Anker, Community Health and Environmental Coalition of Long Island, Mt. Sinai, New York in a letter dated March 13, 2007.

**Comment 40:** The RCA property, was purchased by the State of New York for $1 in 1978 as a public park, not as a hazardous waste disposal site (landfill). More remediation must be done to ensure the proper classification as a public park.

**Response 40:** Three investigations were conducted at the site. No hazardous wastes were detected above regulatory levels. No further action is required at the landfill area at this time.

**Comment 41:** DEC investigated the site by using a metal detector which has a 5-foot capacity in detection. Supplemental investigation is suggested using better technology that can detect further than 5 feet down into the soil. More must be done to protect the risk of groundwater contamination.

**Response 41:** Three ten feet deep test pits were excavated in the landfill area as part of the buried drum investigation. The Department evaluated the allegation on several occasions. No evidence of buried drums were identified and the allegation was not proved. There are no impacts to groundwater from the RCA Rocky Point site.
Administrative Record

RCA - Rocky Point
Site No. 1-52-011


3. “Remedial Investigation Report” for the RCA - Rocky Point site dated August 2, 2006, prepared by the NYSDEC.

4. “Remedial Investigation Work Plan” for the RCA - Rocky Point site dated January 26, 2006 prepared by the NYSDEC.


