

# RECORD OF DECISION

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Captain's Cove Condominiums  
Operable Unit Number 03: Ferry Terminal Area  
State Superfund Project  
Glen Cove, Nassau County  
Site No. 130032  
May 2016



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

# **DECLARATION STATEMENT - RECORD OF DECISION**

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Captain's Cove Condominiums  
Operable Unit Number: 03  
State Superfund Project  
Glen Cove, Nassau County  
Site No. 130032  
May 2016

## **Statement of Purpose and Basis**

This document presents the remedy for Operable Unit Number: 03: Ferry Terminal Area of the Captain's Cove Condominiums site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 03 of the Captain's Cove Condominiums site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

## **Description of Selected Remedy**

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

**New York State Department of Health Acceptance**

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

**Declaration**

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

May 19, 2016

Date



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

# **RECORD OF DECISION**

Captain's Cove Condominiums  
Glen Cove, Nassau County  
Site No. 130032  
May 2016

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## **SECTION 1: SUMMARY AND PURPOSE**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that have been addressed by the Li Tungsten Operable Unit 2 (LiT OU2) Remedial Action at the site. The remedy undertaken at this site is discussed in Section 6.2.

Based on the implementation of the original remedy, the findings of the construction completion report indicate that the site no longer poses a threat to human health or the environment. The remedy conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

## **SECTION 2: CITIZEN PARTICIPATION**

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Glen Cove Library  
4 Glen Cove  
Glen Cove, NY 11542  
Phone: 516-676-2130

NYS Department of Environmental Conservation  
Attn: Division of Environmental Remediation  
Attn: Heide-Marie Dudek  
625 Broadway - 12th floor  
Albany, NY 12233-7017  
Phone:

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

### **Receive Site Citizen Participation Information By Email**

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

### **SECTION 3: SITE DESCRIPTION AND HISTORY**

**Location:** The Captain's Cove Condominium site (Site) is located on Garvies Point Road in the City of Glen Cove. A site boundary modification was approved by the Department in March 2016 to incorporate areas of the Li Tungsten USEPA Superfund Site identified as Areas A, A', G and G' into the definition of the Captain's Cove State Superfund (Title 3) Site. The site is located along Glen Cove Creek. Operable Unit 3 (OU3) - Ferry Terminal Area, which is the subject of this document, includes a small portion of the original Title 3 Area and Li Tungsten OU2 Areas G and G'. (see Figures 1, 2 and 3)

**Site Features and Current Zoning and Land Use:** The site has been cleared of all buildings and foundations and now the City of Glen Cove is currently constructing a Ferry Terminal on the eastern portion of the site which includes the Li Tungsten Areas G and G'. The Ferry Terminal portion of the site is zoned commercial, while the remaining area has been zoned mixed use for restricted residential development.

Past Use of the Site: Historically, the site was used recreationally for boating, fishing, and swimming. Starting in the 1950's a portion of the site turned into a community dump. Municipal wastes, such as garbage, street debris, and yard waste, along with incinerator residues, wastewater treatment plant sludges, construction and demolition (C&D) debris, hazardous wastes including spent solvents, printing wastes, drums, and Li Tungsten mill tailings were dumped on the site. Disposal continued into the early 1980's. From the 1930's through 1965 the redefined site, the exception of the western end, was also used for the disposal of materials dredged from Glen Cove Creek.

Due to interest in the 1980's in redeveloping the Glen Cove Creek area, the site was the focus of several environmental investigations. These investigations identified metals in the soil exceeding background concentrations. On January 7, 1986, the NYSDEC placed the Captain's Cove Site on the New York State Registry of Inactive Hazardous Waste Disposal Sites (Registry) as a Class 2A site. The site classification was subsequently changed to Class 2 indicating substantial threat to human health or the environment.

The City of Glen Cove, the site owner at the time (Village Green Realty) wastes were placed, signed a Consent Order to perform a Title 3 remedial program to address the hazardous waste disposal. Subsequent to signing the Consent Order, Village Green Realty declared bankruptcy. The City of Glen Cove completed the work under the Consent Order. A Remedial Investigation and Feasibility Study were completed in 1999 with the Record of Decision requiring the excavation of waste to industrial/commercial standards signed in March 1999. The City of Glen Cove completed the Remedial Action in 2001.

During the Title 3 Remedial Investigation of the Captains Cove site, the City of Glen Cove identified radiological and metal contamination associated with the Li Tungsten site. The USEPA issued a Record of Decision for the Li Tungsten Operable Unit 2 in 1999 requiring the excavation of the contamination. The USEPA completed the work at Captain's Cove Condominium site in 2006.

In 2009, the City of Glen Cove received Federal Stimulus money to begin the construction of a high speed ferry terminal on the eastern portion of the site. Construction of the new ferry terminal began in 2010 and is scheduled for completion in 2016.

Subsequent to the construction of the Ferry Terminal foundation, a site boundary modification was prepared to better define the overall Captain's Cove Site and to clarify that the Li Tungsten's Areas A, A', G and G' which overlap part of the original Title 3 remediation area are included.

Site Geology and Hydrogeology: The Site is located along the northern shore of Glen Cove Creek. Soils observed at the site are similar to those observed throughout the Garvies Point Road area, the vadose zone consists of silt or silt and fine grained sand, while the saturated zone consists of sand underlain by an extensive and thick peat layer with a clay layer beneath it (observed off-site at 12- to 16-feet below ground surface).

Groundwater, which varies with tidal cycles, was encountered at the site between 7 and 10-feet below ground surface. Regional groundwater flow is in a southerly direction towards Glen Cove Creek.

Operable Units (OU): OU1: is the original NYSDEC Title 3 Area and Li Tungsten OU2 Areas A and A'. OU2 is defined as all areas of the Captain's Cove Site outside of the original Li Tungsten and Captain's Cove remedial areas. OU3 is the Ferry Terminal Area, which includes a small portion of the original Title 3 Area and Li Tungsten OU2 Areas G and G'.

OU3 is the subject of this document.

A Record of Decision was issued previously for OU1. The Department is issuing a separate Amended Record of Decision for OU1 and a Record of Decision for OU2.

#### **SECTION 4: LAND USE AND PHYSICAL SETTING**

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants was completed as part of the US EPA Remedial Investigation and the 1999 USEPA Record of Decision.

#### **SECTION 5: ENFORCEMENT STATUS**

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

The PRPs for the site, documented to date, include:

- City of Glen Cove
- Village Green Realty at Garvies Point, Inc.
- Old Court Savings & Loan (In Receivership)
- AGI-VR/Wesson Company;
- Adams Carbide Corporation;
- Alloy Carbide Company;
- Chi Mei Corporation;
- Climax Molybdenum Company;
- Climax Molybdenum Marketing Corporation;
- County Of Nassau, New York;
- Cyprus Amax Minerals Company;
- General Electric Company;

GTE Corporation;  
H.C. Starck, Inc.;  
Kennametal Inc.;  
Kulite Tungsten Corporation;  
M & R Industries, Inc.;  
Minmetals Inc. /China National Metals and Minerals Import And Export Corporation;  
OSRAM Sylvania Incorporated;  
Philips Electronics North America Corporation;  
Sandvik AB;  
TDY Holdings, LLC;  
TDY Industries, Inc.;  
United States Department of Defense;  
United States Department of the Treasury;  
United States General Services Administration

On March 18, 1997, the City of Glen Cove (the site owner at the time wastes were placed), Village Green Realty at Garvies Point, Inc. (the then owner) and Old Court Savings & Loan (In Receivership) signed a Consent Order to perform a Title 3 RI/FS to address the hazardous waste disposal. Subsequent to signing the Consent Order, Village Green Realty at Garvies Point, Inc. declared bankruptcy. The City of Glen Cove completed the work under the Consent Order.

## **SECTION 6: SITE CONTAMINATION**

### **6.1: Summary of the Remedial Investigation**

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil

### **6.1.1: Standards, Criteria, and Guidance (SCGs)**

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

### **6.1.2: RI Results**

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media that required action are discussed in the RI Report. The contaminant(s) of concern identified at this site is/are:

Arsenic, lead, Radium-226 and Thorium-232.

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the remedial action summarized in Section 6.2. More complete information can be found in the Li Tungsten Remediation Summary Report.

### **6.2: Interim Remedial Measures**

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The IRM mandated by the USEPA September 1999 Li Tungsten Record of Decision (ROD) for the remediation of mill tailings and associated contamination at Captain's Cove was completed in 2005. The IRM required the excavation of soil contaminated above the cleanup levels as established under the EPA ROD; segregation of radionuclide-contaminated soil and non-radionuclide soil contaminated with arsenic and lead, offsite disposal of all contaminated soil at appropriately licensed or permitted facilities and a site cover of site structures such as buildings, pavement, sidewalks or two-feet of clean fill. Between 2001 and 2003, the USEPA excavated approximately 1.5 acres within Areas G and G' to depths ranging from 3 to 14 feet below grade. Confirmation sampling confirmed the remedial objectives were achieved.

In 2010, as part of the Ferry Terminal Construction, the original bulkhead and associated tie-backs was removed in accordance the approved Site Management Plan and replaced with a new bulkhead to allow the new marina.

### **6.3: Summary of Environmental Assessment**

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

The Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 03, which is included in the 1999 Captain's Cove RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Soil: Remediation to commercial standards is complete. Prior to remediation, hazardous waste disposal had contaminated the site with metals and radionuclides. Contaminants of concern in the soil included arsenic, lead, radium-226, and thorium-232.

Groundwater: In accordance with the original Captain's Cove and Li Tungsten RODs, groundwater monitoring has continued to evaluate groundwater attenuation for semi volatile organic compounds (SVOCs) and metals. Although, the SVOCs 2-methylnatphalene, acenapthalene, fluorine, naphthalene, and phenanthrene and volatile organic compound (VOC) chlorobenzene continue to be detected above the site SCGs, overall concentrations continue to decrease. The additional VOCs detected are indicative of a petroleum spill located near the north-western section of OU2. Metals however have not shown expected reductions leading to the development of the site-specific excavation criteria.

### **6.4: Summary of Human Exposure Pathways**

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People may come into contact with contaminants in soils in OU-1 and OU-2 by walking on the site, digging or otherwise disturbing the soils. Measures are in place to prevent contact with residual soil contamination in OU-3. People are not drinking the contaminated groundwater because the area is served by a public water supply not affected by this site. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for people to inhale site contaminants for any future on-site redevelopment or occupancy.

## **6.5: Summary of the Remediation Objectives**

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

Based on the RI and Remedial Construction Summary data the Remedial Action Objectives (RAOs) for the site are:

### **Groundwater**

#### **RAOs for Public Health Protection**

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

#### **RAOs for Environmental Protection**

- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable
- Remove the source of groundwater or surface water contamination

### **Soil**

#### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.

#### **RAOs for Environmental Protection**

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

### **Soil Vapor**

#### **RAOs for Public Health Protection**

- Mitigate impact to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

## **SECTION 7: SUMMARY OF SELECTED REMEDY**

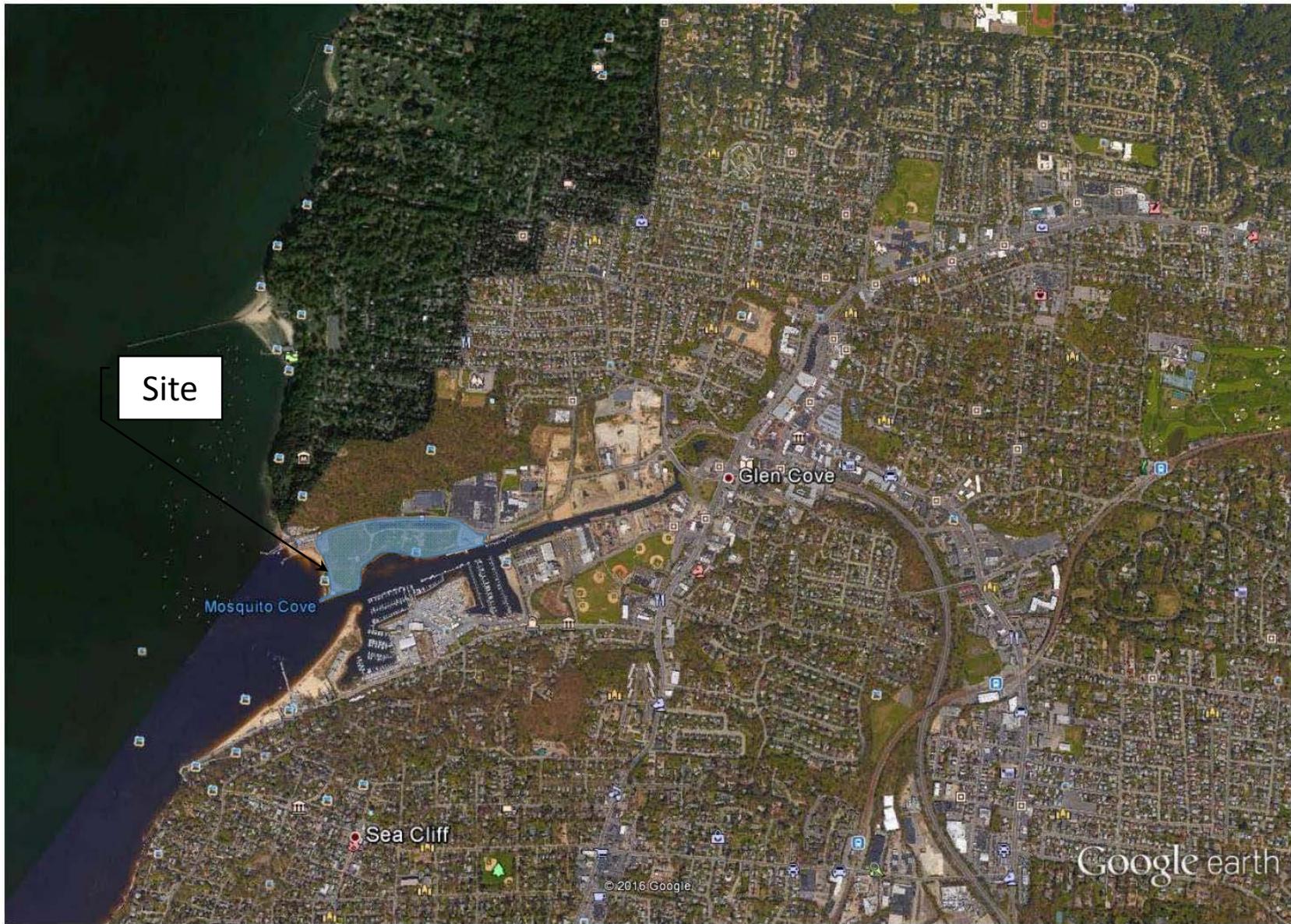
Subsequent to the construction of the Ferry Terminal foundation, a site boundary modification was prepared to better define the overall Captain's Cove Site and clarify that the Li Tungsten's Areas A, A', G and G', which overlap part of the original Title 3 remediation area, are included. With the boundary modification Operable Unit 3 was defined as the Li Tungsten G and G' Area. In 1999, the USEPA issued a Record of Decision for Areas G and G' requiring the remediation of Li

Tungsten radiological and metals contaminated waste. The State concurred with the ROD. With the remedial elements completed and based on the soil remediation completed as part of the bulkhead construction the Department has chosen No Further Action as the remedy for the site. This No Further Action remedy includes the implementation of ICs/ECs as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The remedy consists of the elements of the IRM already completed, as described in section 6.2, and the institutional control listed below:

1. **Institutional Controls:** Imposition of an institutional control in the form of an environmental easement that will require: (a) require the site owner to complete an submit to the Department a periodic certification or institutional and engineering controls in accordance with Part 375-1.8 (h)(3); (b) allow the use or the use and development of the property to commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; (c) restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) compliance with the Department approved Site Management Plan.
2. **Site Management:** Require a Site Management Plan, which includes the following:
  - an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
    - Institutional Controls: The environmental easement discussed in element 4 above.
    - Engineering Controls: The soil cover listed above in element 3.
  - Any remaining contamination and the depth of contamination that will be managed under the SMP Plan will be delineated on a Site Plan/Survey
  - This plan includes, but may not be limited to:
    1. An excavation plan which details the provisions for management for future excavations of remaining contamination. Details shall include, but are not limited to:
      - a. All soil disturbed during redevelopment or site management will need to be handled in accordance to the approved excavation plan.
      - b. all soil excavated during development that exceeds the removal criteria defined in element 1 above must be disposed of offsite at an appropriate facility.
      - c. All excavated material that will be used onsite must be sampled in accordance with DER 10 for Backfill.

2. A provision, should redevelopment occur, to ensure no soil exceeding protection of groundwater concentrations as defined in Part 375.6.8 (b) will remain below storm water retention basin or infiltration structures
3. A provision for evaluation of the potential for soil vapor intrusion in future buildings developed onsite, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
4. A provision for the management and inspection of the identified engineering controls;
5. Maintaining site access controls and Department notification;
6. The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
7. Descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions.
8. A monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - i. Monitoring of groundwater to assess the performance and effectiveness of the remedy;
  - ii. A schedule of monitoring and frequency of submittals to the Department;
  - iii. Monitoring for vapor intrusion for any occupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



Google earth



Figure 1 Site Location





Google earth

feet  
meters



Figure 2: OU3 Site Boundary

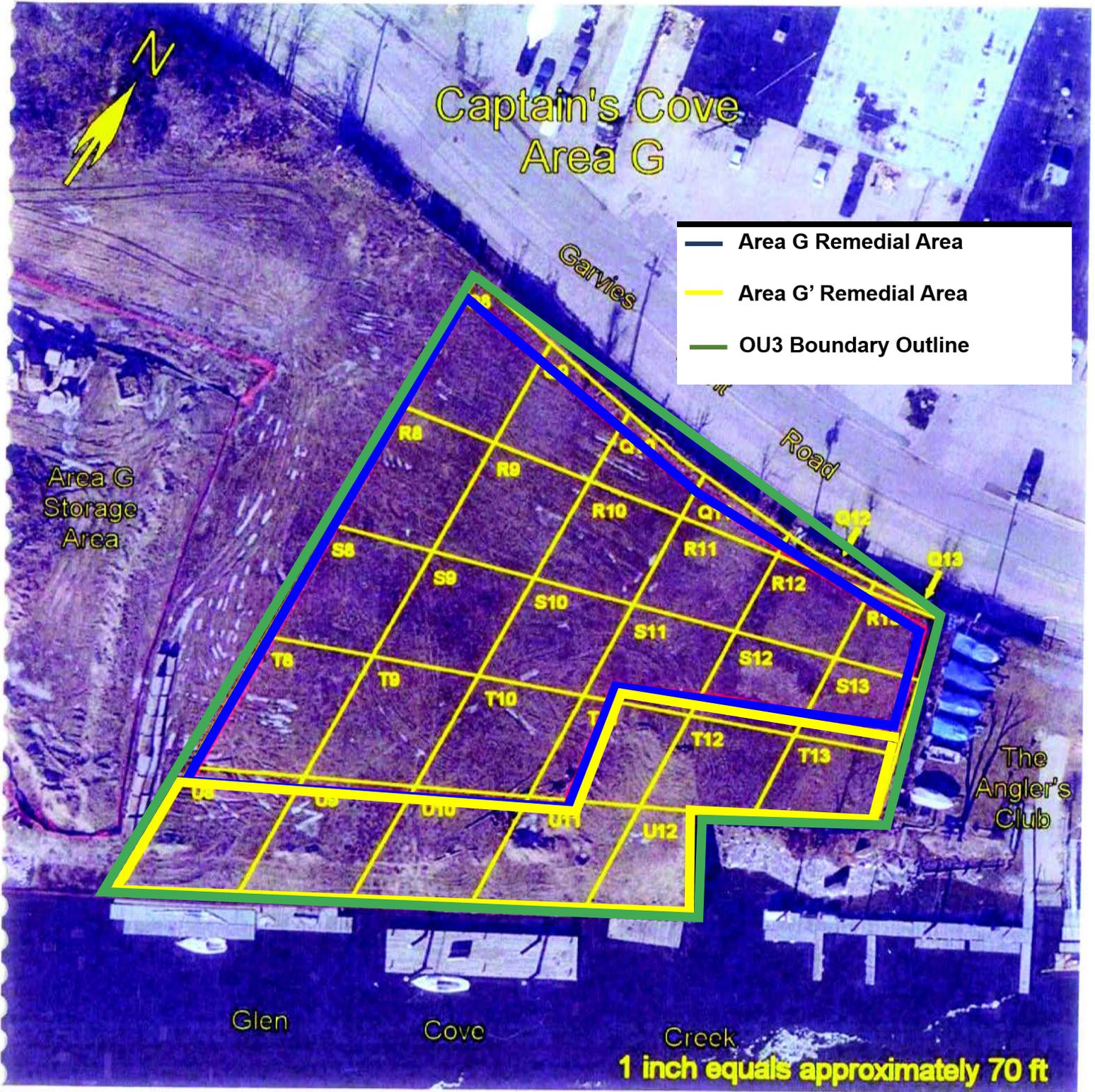


Figure 3: EPA Areas G and G'

# **APPENDIX A**

## **Responsiveness Summary**

# **RESPONSIVENESS SUMMARY**

**Captain's Cove Condominiums  
Operable Unit No. 3  
City of Glen Cove, Nassau County, New York  
Site No. 130032**

The Proposed Remedial Action Plan (PRAP) for the Captain's Cove Condominiums Operable Unit 3 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 March 8, 2016. The PRAP outlined the remedial measure proposed for the contaminated soil at the Condominium site.

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

A public meeting was held on March 23, 2016, which included a presentation of the new data pre-construction data and analysis for the Captain's Cove Site 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 April 15, 2016.

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:

1. We live right across the creek from this site. How are you going to monitor the air when work is done at this site?

Response: A community air monitoring plan will be prepared and implemented in accordance with the NYSDOH Generic Community Air Monitoring Plan and the NYSDEC Fugitive Dust and Particulate Monitoring program as outlined in the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation May 2010.

2. If an alarm goes off, with regard to air exceedances, doesn't that mean that the air is already dangerous?

Response: No, the intent of the community air monitoring plan (CAMP) is to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified in the CAMP require increased monitoring, corrective actions to abate fugitive dust emissions and/or work shutdown. They do not represent levels at which health effects are likely to occur.

3. Who is responsible for the work [future remediation] when you say "we" did this?

Response: In the context of the presentation of the Proposed Remedial Action Plans, "we" is the NYSDEC, in consultation with the NYSDOH. Both Departments will review all remedial action work plans. The work will be conducted by the property owner.

4. When building at this site takes place the structures for these building, they will likely have to go down further than 14 feet. Wouldn't you find contamination there? Then what do you do?

Response: All intrusive work at the Captain's Cove Site will have to follow the excavation and soil management plan contained within the approved Site Management Plan. This plan will include provisions for the installation of building foundations at depth.

Site investigations have not found soil contamination at a depth greater than 14 feet below ground surface.

5. Does any contamination go below 14 feet?

Response: See the response to Comment 4.

6. Did you go past 14 feet to look for contamination?

Response: Yes, the Captain's Cove Remedial Investigation sampled to depths greater than 15 feet below ground surface. Contamination was not noted at depths greater than 14 below ground surface.

7. How does the two feet of soil cover stay in place, so it is not washed away by weather events, like snow, wind?

Response: The site cover will be vegetated to ensure that it is not easily eroded under normal weather events. If erosion does occur, the site owner is responsible to notify the NYSDEC of the erosion and repair the damaged cover in a timely manner.

8. I live ½ mile from the building will I get exposure from the VOCs and who will monitor that?

Response: No, in its current state off-site inhalation exposure to VOCs as a result of this site is not a potential exposure pathway. During intrusive construction activities there will be a Community Air Monitoring Plan in place to ensure the protection of the downwind community during remedial activities at the site. Also see Responses 1 and 2.

9. Do you have exposure if you are swimming in the creek?

Response: Due to the potential presence of biological contaminants, chemical contaminants and other physical hazards, people may be exposed by direct contact or ingestion. The NYSDOH advises that people only swim at regulated bathing beaches.

10. If material (groundwater) is moving down the slope and enters the creek, what sort of exposure do you have if you swim in the creek?

Response: See the response to Comment 9.

11. The potential exist to inhale contaminated air when the building are built at this site. What part of Captain's Cove still needs remediation? What part of these remediation units need additional work in OU-1 and OU-2?

Response: Remaining contamination (above the excavation criteria) was found in isolated spots through Operable Unit 1 and 2; these areas will be excavated as part of the remedy for Operable Unit 1 and 2. All new buildings will be evaluated for soil vapor intrusion and, if needed, a sub-slab depressurization system will be incorporated into the building design to eliminate the potential for soil vapor intrusion.

12. In the Captain's Cove area how much contamination remains? How big are these contaminated areas?

Response: The approximate size of each operable unit is: OU1 is approximately 11.7 acres, OU2 is approximately 9.5 acres and OU3 is approximately 2.3 acres. Also see the response to Comment 11.

13. I am confused about how Glen Cove made approvals to build certain buildings before all the DEC remediation plans were in place?

Response: Glen Cove is responsible for the zoning and redevelopment approvals of a site.

14. When we were here in 1999, the remediation plans called for no housing at the site. Now it is restricted residential. Did someone ask us to make that change?

Response: In 2004, the north shore of Glen Cove Creek, which includes the Captain's Cove property, was rezoned mixed use - restricted residential use. With the rezoning of the area, the City of Glen Cove requested the USEPA re-evaluate the Li Tungsten Site for restricted residential use including the areas adjacent to and within the Captain's Cove site. In 2005, the USEPA issued an Explanation of Significant Difference allowing restricted residential use for all Li Tungsten Parcels and Areas with the exception of Parcel A which required further evaluation. The State concurred with

the ESD allowing restricted residential use of the Li Tungsten Site with the exception of Parcel A. With the promulgation of new Part 375 regulations in 2006 that included the definition of the restricted residential land use category, the City of Glen Cove requested that the NYSDEC re-evaluate the Captain's Cove site for Restricted Residential use and provided additional site characterization data to facilitate the review.

15. Why do you want to jeopardize people's health in order to build housing at this site?

Response: The remedy is protective of public health for the intended use.

16. Have other sites in New York State been remediated to the extent that it can be compared to what is being done in Glen Cove?

Response: Restricted residential is a restricted land use category established by the NYSDEC regulations governing the superfund program in 2006. See NYCRR Part 327-1.8(g)(2)(ii).

17. The soil vapor intrusion controls that are in place at the ferry terminal. Is that the control measure?

Response: The sub-slab depressurization system installed at the Ferry Terminal building located in Operable Unit 3 (OU3) is an engineering control installed to mitigate the potential of volatile organic compound (VOC) soil vapor intrusion into the building due to contamination in the groundwater. A site management plan providing the operation and maintenance requirements for the system is in place.

18. What controls are in place to prevent contaminated water from going into Glen Cove Creek?

Response: The Captain's Cove remedies address groundwater contamination by the removal of soil contamination exceeding the excavation criteria. As explained in the OU1 and OU2RODs, the excavation criteria were derived to mitigate the potential of contamination leaching into the groundwater and entering the creek.

19. What is the timeline for cleanup?

Response: NYSDEC anticipates that remediation will begin upon issuance of the ROD and approval of the Remedial Action Work Plan. All work is expected to be completed within the 2016 and 2017 construction seasons. It is anticipated that some redevelopment activities will be completed concurrently with the remediation.

20. How long will monitoring continue at these sites?

Response: The site management plan will require continued monitor of the sites indefinitely until such time as the remedial objectives have been achieved.

21. Do you have regular 5-year reviews at the site to determine how well the remediation is going?

Response: NYSDEC requires periodic reviews for all sites with the timing based on the type of remedy and development status of the site. The initial periodic review is 18-months after remediation has been completed, subsequent periodic reviews are then scheduled either every 1, 3, or 5-years depending on findings of the previous periodic review. The periodic review and subsequent certification will:

- Determine if the remedy remains in-place, is performing properly and effectively, and is protective of public health and the environment.
- Evaluate compliance with the decision document(s) and the Site Management Plan.
- Evaluate all treatment units, and recommend repairs or changes, if necessary.
- Evaluate the condition of the remedy.
- Evaluate the IC/EC Certification, certifying that the institutional and/or engineering controls remain in-place, and remain effective as well as protective of public health and the environment.
- Determine the frequency and type of subsequent review and evaluation.

22. With what degree of confidence can you say that nobody will get sick from this site?

Response: The remedy is protective of public health for the intended use as potential exposure pathways at the site have been addressed.

23. How many samples taken in OU-1 and OU-2 showed exceedances?

Response: Fifteen locations within OU1 and OU2 had concentrations of either arsenic or lead exceeding the excavation criteria established by the RODs.

24. For Captain's Cove, the list of contamination says an unknown release. What does that mean?

Response: On the NYSDECs website for Captain's Cove, under contaminants of concerns, the NYSDEC lists the contaminants found onsite, if known the amount of material disposed. In the case of Captain's Cove, the quantity was unknown. The website has been updated. <http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3>

25. Current remediated area states that there is still some contamination at this site. So is the site really remediated?

Response: Yes, Doxey and Captain's Cove OU3, which have proposed No Further Actions, have been remediated. Remaining contamination is allowed beneath a two-foot soil cover. The Captain's Cove OU1 and OU2 selected remedial actions require additional excavation to remove contamination above the excavation criteria. As with Doxey and Captain's Cove OU3, remaining contamination is allowed beneath the 2-foot soil cover.

26. Because the site is vacant now there are no concerns about breathing these contaminants. Doesn't that change once buildings are put up on the site?

Response: The remedy includes provisions for the evaluation of the potential for vapor intrusion and subsequent exposures for any buildings constructed at the sites in the future. As a proactive measure, the Captains Cove OU-3 Ferry Terminal Building was constructed with a vapor mitigation system as part of its design.

27. How high above sea level is Captain's Cove? What happens in a hurricane or some other storm when the area is totally under water? What does that do to the remediation efforts?

Response: The current elevation of the Captain's Cove Site ranges from 16 to 18 feet above Mean Sea Level. As long as the site is maintained in accordance to the Site Management Plan, minimal erosion is anticipated in a flooding event. Any damage that may occur will be repaired in accordance with the Site Management Plan.

28. How does the groundwater monitoring system work at this site?

Response: Eight (8) permanent groundwater monitoring wells have been installed on the Captain's Cove site and are sampled annually to determine the groundwater quality. Data is submitted to the NYSDEC for review and to determine if the groundwater quality remedial objectives are being achieved.

29. Can the sub slab depressurization system be used after a storm (flooding)? How can it be restored? Do you know of other areas that are in storm surge areas that have these types of systems?

Response: In the event that the Captain's Cove Site floods to the extent that the sub-slab depressurization system (SSDS) is inundated with floodwaters, the system would be pumped out and any damage to the electrical or mechanical systems would be repaired. SSDS systems have been installed across the State including the south shore of Long Island that received floodwaters from Super Storm Sandy. If these systems were damaged due to floodwaters, they were repaired and put back into operation.

30. When you cap this site, how long will you continue monitoring of this site?

Response: The property owner, under the site management requirements, will continue to monitor the sites indefinitely until the remedial objectives have been achieved.

31. Can a cap survive a hurricane without releasing toxins? How will normal erosion impact this cap?

Response: The soil cover will be designed to withstand normal storm erosion, including storm surge. Any erosion that does occur will be repaired per the Site Management Plan.

32. During construction if you find something else, additional contamination, what happens then? Who cleans it up?

Response: In accordance with the Site Management Plan, if additional contamination is found during construction or other site maintenance activities, it must be removed and disposed of properly. The work and cost will be the responsibility of the property owner.

33. Can there be a single DEC point of contact for all sites within the City of Glen Cove. Sites should be under one DEC project manager.

Response: There are numerous sites within the City of Glen Cove, not just in the Garvies Point area, under various NYSDEC remedial programs. Therefore, it is unlikely that one project manager would be the point of contact for all sites within the City of Glen Cove.

34. What safeguards are being put in place for future purchases of these proposed housing units? Is disclosure of the past uses and contamination at this mandated?

Response: In accordance to 6 NYCRR 375-1.11(d) and DER-10 Section 6.2 the requirements of the Site Management Plan will transferred to the new

owner and the NYSDEC will be notified 60-days in advance of any property transfer.

35. How will construction workers at the site be protected?

Response: All work will be conducted under the approved Site Management Plan and will require appropriate health and safety plans.

36. I use the site as a recreation area, and I look forward to using it for more recreational purposes in the future. From 1999 until now how much safer is this site today than it was then?

Response: Both remedies were protective of public health for their intended use. While the previous remedy included a use (commercial) with limited potential for soil contact, the current remedy includes a use (restricted-residential) with more likely potential for contact with soil and therefore, has an additional foot of clean soil cover than the commercial use remedy. In addition, measures will be put into place to prohibit digging into this protective soil cover.

37. Some of the people here are anti-housing and they oppose this. You have to look at this site in terms of long-term risk management. And what you have done here has reduced the risk and I think you are doing an excellent job.

Response: Comment noted.

38. Do other programs at DEC have a role in determining what is built at this site?

Response: While NYSDEC can place general use restrictions (e.g., restricted residential) based on a remedy or can determine that an activity does or does not comply with applicable Regulations, NYSDEC does not have jurisdiction to determine local zoning of specific development plans.

39. In all the Records of Decision that are issued there is a lot of details on how contamination got to a site. How did the nuclear material get into Glen Cove Creek?

Response: The radiological contamination found in Glen Cove creek has been attributed to housekeeping practices at the Li Tungsten site.

40. When they do construction work, how will they know where the groundwater monitoring wells are when the construction is taking place?

Response: All groundwater monitoring wells will be located and protected during construction. Should a well be inadvertently damaged or need to be moved during construction, it will be repaired and/or replaced at the property owners expense.

41. How will wells be protected so that nobody uses the groundwater from these wells?

Response: The groundwater monitoring wells are locked and do not contain pumps.

42. How long will DEC representatives be at the site during the construction process?

Response: The NYSDEC anticipates providing oversight during the remediation and redevelopment of the Captain's Cove Site.

43. How are the groundwater monitoring wells only one-way wells?

Response: Please see response to Comment 41.

44. Who addresses the safety of public bathing areas close to Glen Cove Creek?

Response: In New York State, a bathing beach must have a state, city or county health department permit to operate in compliance with 10 NYCRR Part 6 Section 6-2. The Nassau County Department of Health has the responsibility to inspect and regulate all public bathing beaches located within Nassau County including areas near Glen Cove Creek.

Kaie Ojamma submitted written comments dated March 25, 2016 which included the following comments:

45. How will the specific mandates, regulations outlined in the site management plans be enforced?

Response: The site will be subject to an environmental easement held by the NYSDEC pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

46. How many years will the DEC enforce the management plans? What happens to oversight in the event that the owner/management company of the property changes over time?

Response: Upon completion of the remedy, the NYSDEC will continue to monitor the site until the remedial objectives as stated in the Record of Decision are achieved. If the property is transferred, the environmental easement and its corresponding Site Management Plan are transferred with the property and become the responsibility of the new property owner.

47. Since remediation is not currently complete, what is the estimated timeframe that this will be completed? Will work or development on the site occur before remediation is completed?

Response: Please see the response to Comment 19.

48. What happens to any development of the property if during the building process, contamination is found in the sites at which water and soil are monitored?

Response: Please see response to Comment 32.

49. Is there any possibility that after the property is developed for residential use that the contamination remains such that occupation of the site will not be possible and the building abandoned? (as occurred during the first Captain's Cove condominium development).

Response: The NYSDEC has reviewed all data collected to date and does not believe that additional contamination that would prohibit redevelopment exists at the sites. Also see the response to Comment 32.

Carol DiPaolo for the Coalition to Save Hempstead Harbor submitted written comments dated April 15, 2016, which included the following comments:

50. **All Documents Should Be Made Available Online.** As I had mentioned to you in our phone conversation, the links that were provided in the fact sheets regarding the proposed remedies for the sites did not reference all of the documents that were available. Although the fact sheets mentioned that project documents are available at the Glen Cove Library and at NYS DEC offices, **all documents and remedy details should be made available online prior to the public meeting.**

Response: Comment noted. The NYSDEC makes every effort to post significant documents to the public website. The actual size of some documents prohibits posting but these documents can be made available upon request.

51. **Doxey Site – No Further Action.** Your presentation at the public meeting and the Proposed Decision Document for the Doxey Site (March 2016) detailed the site investigation, predesign investigation results, interim remedial measures, and environmental assessment of existing and potential future impacts of the Doxey site. The NYS DEC's conclusion is that the remediation at the site is complete, and the department therefore proposed No Further Action as the remedy for the site.

- a. The No Further Action remedy for the Doxey site should be qualified. It was stated at the public meeting and in the Proposed Decision Document that residual contamination remains near the bulkhead (below a 2-ft soil cover) at the eastern corner because the "uncertain structural integrity of the bulkhead" prevented excavation. The final decision document should make it clear that once plans are in place for construction of a new bulkhead in that area that a remediation plan will be in place to remove the contaminated soil, as was expressly stated at the public meeting.

Response: Please see the response to Comments 1. The source of contamination has been removed. During future development any contamination, such as

that described in Comment 1, if encountered will be addressed as required by the Environmental Easement and Site Management Plan.

- b. In the Proposed Decision Document at "Section 7: Elements of the Proposed Remedy, Paragraph 4-Site Management Plan (a)":
  - i. References to paragraphs 5 and 3, should be corrected to paragraphs 3 and 2 (respectively).

Response: This has been corrected in the ROD.

- ii. Paragraph 4 states that a Site Management Plan is required and includes an Institutional and Engineering Control Plan, which includes an Excavation Plan that "details the provisions for management for future excavations of remaining contamination." The Excavation Plan should specify the plan for the known contamination at the bulkhead.

Response: Please see the response to Comment 51a.

- iii. Paragraph 4 further states that the Institutional and Engineering Control Plan includes "The steps necessary for periodic reviews and certification of the institutional and/or engineering controls." The frequency and schedule for review of institutional and engineering controls should be stipulated.

Response: Please see the response to Comment 21.

- c. The site location map that is included in the Doxey Fact Sheet is not included in the Proposed Decision Document. An aerial map with site boundaries delineated, like the one included for Captain's Cove, should be included.

Response: Comment noted. A figure has been added to the RODs.

52. Captain's Cove Condominiums Site. The details for the proposed remedies for the Captain's Cove Condominium site include the site-boundary modification that was approved by NYS DEC in March 2016 to incorporate areas of the federally regulated EPA Li Tungsten Superfund site into the state regulated Captain's Cove superfund site. Although the boundary modification makes sense in terms of having the proposed cleanup remedies, monitoring, and management for this large section of the western waterfront along Glen Cove Creek fall under one jurisdictional authority, the proposed remedies for the three operable units within the site are difficult to follow. To address this , the figure with operable boundaries overlaid on the aerial photo should also include brief descriptors for each operable unit that indicate whether further remediation is required, the proposed remedy, and cleanup standard {commercial or restricted residential); e.g., in the figure legend for "OU3 Area Outlined in Blue," also include "Current Ferry Terminal Site," "Remediation Completed to Commercial Standards ," "No Further Action Remedy Proposed."

Response: Comment noted, the figures accompanying the RODs have been modified.

- a. Proposed Record of Decision Amendment, Operable Unit 1-Section 8: Proposed Remedy. The proposed upgraded excavation and backfill remedy to clean up remaining soil and groundwater contamination and achieve standards to allow restricted residential use includes an institutional control in the form of an environmental easement. It is stated that the environmental easement would require, among other things, the remedial party/site owner to submit to DEC "periodic" certification of institutional and engineering controls. Submission of certification of the controls should be on a stipulated schedule and should delineate the extent to which the excavation has achieved the cleanup objectives.

Response: Please see the response to Comment 21.

- b. Proposed Remedial Action Plan, Operable Unit 2-Section 7: Summary of the Proposed Remedy. The proposed excavation and backfill remedy, which is designed to achieve remedial objectives to allow for restricted residential use, includes the same institutional control as for Operable Unit 1-an environmental easement that would require, among other things, the remedial party/site owner to submit to DEC "periodic" certification of institutional and engineering controls. The comment here is the same as above: Submission of certification of the controls should be on a stipulated schedule and should

delineate the extent to which the excavation has achieved the cleanup objectives.

Response: Please see the response to Comment 21.

- c. During the public meeting, concerns were expressed about the eventual development of the two areas of the Captain's Cove site that are slated for restricted residential use. The concerns focused on construction activities that could uncover further contamination that would go unnoticed by construction workers and others. NYS DEC representatives offered assurances that a NYS DEC staff person would be onsite every day of construction to monitor activities and determine whether additional soil or other testing would be necessary. If this is accurate but not appropriate to include within the proposed remedies for these sites, this assurance should be included in the responsiveness summary that will be made available to the public.

Response: The NYSDEC anticipates providing oversight during the remediation and redevelopment of the Captain's Cove Site.

- d. Proposed Remedial Action Plan, Operable Unit 3, Ferry Terminal Area-Section 7: Summary of the Proposed Remedy. The No Further Action remedy proposed for this site, which has been remediated to allow for commercial use, includes implementation of institutional and engineering controls as well as a site- management plan. The institutional control is the same as for Operable Units 1 and 2-an environmental easement that would require, among other things, the site owner to submit to DEC "periodic" certification of institutional and engineering controls. Submission of certification of the controls should be on a stipulated schedule.

Response: Please see the response to Comment 21.

53. We recognize the complexities and scope of work necessary to address contamination at sites along Glen Cove Creek. To ensure that all aspects of the proposed remedies are followed, DEC should develop a regular review period-e.g., three-year or five-year review-by which the department provides a summary report on progress in achieving cleanup objectives.

Response: Please see the response to Comment 21.

Pat Tracy submitted written comments dated April 5, 2016 which included the following comments:

54. Regarding the groundwater and intended use. I don't know whether you have been made aware, but the developer has planned to create an area at the tip of Captain's Cove, just at the point where Captain's Cove joins Hempstead Harbor which is to be called "Sunset Park". There was a large discussion on the issue of water quality, and a gentleman in the audience, who I think was introduced as some sort of public official stated, "Well it is not a swimming beach". I was unable to hear what organization he represented. In fact, a swimming beach IS planned for the point of Captain's Cove, and the Sea Cliff public beach is less than half a mile away from the very tip of Captain's Cove. I was unable to copy the map into this document, but if you look using Google.com/maps, you can see how close Captain's Cove is to the public Sea Cliff Beach. Our nearest Glen Cove public beach is also very near to Captain's Cove. You can see it on Google maps marked Morgan Memorial Park. I would estimate it is less than three-quarter's of a miles away from the point of Captain's Cove. (I also mailed you a map from the local newspaper which shows "Sunset Park" and an area marked as "Beach and Boardwalk".) Is it a correct impression that the NYSDEC does not see the water of the Creek as part of its jurisdiction?

Response: Please see the response to Comment 44.

55. It seems to me that if there continue to be known poisonous chemicals in the groundwater of the land of Captain's Cove, that this water flows from Mattiace, which is up gradient, across Captain's Cove and into the Creek. And with the flow of tides, this water coming from the Creek will flow out across Sea Cliff Beach to Morgan Memorial Park, as well as the new, proposed swimming beach at the tip of Captain's Cove called "Sunset Park". When you have a swimming beach you would have ALL THREE of the exposure pathways, Direct Contact, Ingestion and Inhalation. Little children just learning how to swim do not know how to keep the water out of their mouths. All people swimming without goggles will have Direct Contact with their eyes and skin. They will also have Inhalation. And as the tides move up and back, everyone using the beach, even if not swimming, will have an Inhalation exposure. I can't imagine that they will create a sandy area by the side of Hempstead Harbor called "Sunset Park" and say that "swimming is prohibited here." I do not see how the remedy of NO FURTHER ACTION can be correct since the groundwater flows into the Creek and across to two public

swimming beaches. If this is not within the jurisdiction of the NYSDEC, could you please let us know who is responsible for this?

Response: Please see the response to Comment 44.

56. Regarding the high levels of arsenic and lead in the soil of Captain's Cove: I understand that the proposed remedy is to dig up the soil and replace it. Could you please comment regarding the groundwater, as described above: does the arsenic and lead leach into the groundwater? And what is the impact of swimming in that? We certainly and very unfortunately have learned the impact of lead on children from Flint, Michigan and Newark, New Jersey and as I mentioned already, little children learning to swim are unable to keep the water out of their mouths. It was stated by Ms. Boyd that swimming beaches are usually tested for biological contamination. But, beaches are not often located directly adjacent to a large sources of arsenic and lead and other chemicals of very high concern. This proposed beach is also located less than one half a mile from the Nassau County-owned Sewage Treatment Plant. There are reports of raw sewage floating in the Creek. For all these reasons, number one being: "The remedy is do not use the water", could the NYSDEC please test the water for Arsenic, Lead, PCB's AND biological contamination and publish those results of the water quality testing?

Response: The Nassau County Department of Health is responsible for regulating the proposed beach and conducting any necessary water quality sampling. Information regarding water quality at all of the sites is available at the document repository for your reference.

57. As I mentioned in the meeting, according to the Li Tungsten Record of Decision for the Glen Cove Creek, we were informed that the Army Corps of Engineers performed dredging of the creek to remove radioactive material, working with the US EPA to dispose of the radioactive material. According to Mr. Sal [Badalamenti], of US EPA, there still remains radioactive material in the Creek. In order to keep the navigational channel open to operate the proposed Ferry, continued dredging of the Creek will be needed periodically. When the Army Corps of Engineers performed the dredging in cooperation with the US EPA, the dredge spoils were left on Li Tungsten Parcel A to be "de-watered" and disposed of. Now, that area is proposed to be a public amenity/park, called "Renaissance Park". The next time the Army Corps of Engineers needs to dredge the Creek, where will they place the dredge spoils? And will all of us again be subject to the Inhalation pathway? How can we determine how much more radioactive material is remaining in the Creek?

Response: As noted by the USEPA representative, during the remediation of the Li Tungsten Operable Unit 4 (Glen Cove Creek) radiological contamination was left next to the bulkhead of Parcel A and will need to be addressed during improvements and/or replacement of the bulkhead. The USEPA is the lead agency for the Li Tungsten Site including Glen Cove Creek.

58. There are some experts who have recommended that planting of Sunflowers in areas where radiation is present, such as at Chernobyl and Fukushima, have mitigated the effects of radiation. Would it be possible to add to your proposed Remedy the planting and disposal of Sunflowers on Li Tungsten Parcel A and on the Ferry Terminal area in order to reduce the effect of this radioactive material? The Sunflower seed is relatively inexpensive, I believe that land could be planted in a single day and the Sunflowers are drought tolerant, so they would require rather little maintenance, perhaps watering once a week. However, time is of the essence for this proposed Remedy, because the best time to plant seed is May 1 to May 15. Since I assume the NYSDEC will be working on other portions of the Remedy this spring and the City will be finishing the Ferry Terminal building, perhaps there could be some coordinated effort between the City and the NYSDEC to water the plants. This would represent a minimal amount of on-going personnel time. Plus, I would guess that the Ferry Terminal property will have some landscaping. An important part of this remedy would require the expertise of the NYSDEC to harvest the plants and dispose of them properly. Because Sunflowers are an annual plant, this Remedy would need to be repeated every year. This can also be used as a test, to be sure that all personnel know the correct water faucet to use to make sure that City water is being used to water the plants and not groundwater from the site.

Response: The Captain's Cove OU3 (Ferry Terminal) remedy is complete. This comment pertains to the USEPA Li Tungsten site which is not the subject of this responsiveness summary.

59. I was disappointed to learn that no trees have been planted yet at Mattiace. One can find many articles on the US EPA site concerning Phytoremediation. It is a known and tested method used by US EPA to remove trichloroethylene from groundwater. The recommended trees are Poplars; those are recommended because they are fast growing, and US EPA was able to test the method to show its efficacy. I spoke with several US EPA employees who stated that the method would work with Oak, Hickory or just about any native tree. I believe it would also work with Beach Roses, which are native to our coastline area. I was dismayed to learn in last night's meeting that the landscape plan proposed by the developer was proposed by an individual who was not a qualified landscape expert, and who proposed non-native species of plants to be planted at Captain's Cove. I would recommend that NYSDEC include in its Remedy the planting

of Tulip Poplars, *Liriodendron tulipifera*, which are a signature tree of the Welwyn preserve in Glen Cove, certainly native to Glen Cove, and to plant along with them Beach Roses. Part of this Remedy would need the expertise of the NYSDEC to harvest and dispose of the trees, because they incorporate the trichloroethylene into their wood. This Remedy would combine the benefits of removing toxic material and being aesthetically pleasing, and with the Sunflowers, providing low-maintenance, native, succession of bloom. Tulip Poplars flower in Spring, and provide fall color, Sunflowers and Beach Roses flower Spring through Fall. Poplars and Beach Roses are readily available from the NYSDEC tree nursery, and available at the rate of about \$0.56 each. According to US EPA, trees need to be planted at the rate of 400 - 800 trees per acre.

Response: This comment pertains to the USEPA Mattiace site which is not the subject of this responsiveness summary.

60. Would it be possible for the NYSDEC to add phytoremediation to its Remedy for Captain's Cove? It would seem like a good idea to provide a natural remedy, instead of relying solely on the Sub Surface Depressurization Systems to remove TCE.

Response: Phytoremediation is not appropriate based on the location of the TCE which may remain at depth after the remediation and will not provide mitigation for the potential for indoor vapor intrusion.

61. According to the Records of Decisions for Mattiace, Li Tungsten, Captain's Cove and Doxey, the following materials were disposed of at Mattiace: and according to the press release of 9/30/14, the levels of materials found at Mattiace are not diminishing. According to Mr. Sal Bottleman of US EPA on 3/23/16, none of the new proposed remedy has been implemented yet, as it is still in the design phase, since 9/30/14. Therefore we can only conclude that the chemicals described in the ROD's of 1999 are still present in the soil and the groundwater. And as was shown in a slide in the meeting of 3/23/16, the groundwater flows in a downgradient direction across Captain's Cove and toward the Glen Cove Creek. Mattiace is directly adjacent to the Li Tungsten property.

Here is a partial list of the substances of very high concern which were described in all the various ROD's: (From Wikipedia)

“PCB’s polychlorinated biphenyl Because of PCBs' environmental toxicity and classification as a persistent organic pollutant, PCB production was banned by the United States Congress in 1979 and by the Stockholm Convention on Persistent Organic Pollutants in 2001. The International Research Agency on Cancer (IRAC), rendered PCBs as definite carcinogens in humans. Other toxic effects such as endocrine disruption (notably blocking of thyroid system functioning) and neurotoxicity are known.”

Trichloroethylene: “Groundwater contamination by TCE has become an important environmental concern for human exposure. In 2005 it was announced by the United States Environmental Protection Agency that the agency had completed its Final Health Assessment for Trichloroethylene and released a list of new TCE toxicity values. The results of the study have formally characterized the chemical as a human carcinogen and a non-carcinogenic health hazard. A 2011 toxicological review performed by the EPA continues to list trichloroethylene as a known carcinogen. (A carcinogen is any substance, radionuclide, or radiation that is an agent directly involved in causing cancer.)”

Arsenic: “Arsenic and its compounds are used in the production of pesticides, treated wood products, herbicides, and insecticides. ... Increased levels of skin cancer have been associated with arsenic exposure in Wisconsin, even at levels below the 10 part per billion drinking water standard.” Arsenic is water soluble. It cannot be a coincidence that high levels of arsenic have been found on Captain’s Cove, since it is known that pesticides were one of the many chemicals found in the 100,000 drums of material removed from Mattiace.

Lead: I don’t need to discuss the dangers of lead in water. We all have seen the tragedy towards an entire generation of 8,000 children in Flint, Michigan and untold numbers of children in Newark, NJ. Removing the lead in the soils at Captain’s Cove is part of the proposed Remedy. We only wonder why is this only being done now, when presumably this was there at Captain’s Cove for a rather long time. As we know from the Mattiace press release of 9/30/14, US EPA has been working on these issues for 15 years and still the levels are not diminishing.

I know that the Crown Dykman Site may not be considered to be part of this discussion, but it does impact on Captain’s Cove, because it is directly adjacent to Captain’s Cove and Li Tungsten, and is directly across the street from the proposed development of Garvies Point. The chemical of very high concern is Perchloroethylene: perchloroethylene ("perc" or "PERC"), and many other names, is a chlorocarbon. It is a colorless liquid widely used for dry cleaning of fabrics, hence it is sometimes called "dry-

cleaning fluid." "The International Agency for Research on Cancer has classified perchloroethylene as a Group 2A carcinogen, which means that it is probably carcinogenic to humans. Like many chlorinated hydrocarbons, perchloroethylene is a central nervous system depressant and can enter the body through respiratory or dermal exposure. Perchloroethylene dissolves fats from the skin, potentially resulting in skin irritation." The ROD for LI Tungsten states that PERC from Crown Dykman flows across Li Tungsten Parcel A, the area that the developer has generously given to the people of Glen Cove as a public park where people should bring their children and dogs.

Persistence means that these chemicals do not dissipate over time. It has been stated that the remedy for Mattiace which has been in process for over 15 years is not working to reduce the amount of material in the soil and the water. We can only conclude that the materials, described in the Records of Decisions for Mattiace, are still there. It is my view that these chemicals can inter-react with each other in the groundwater to produce compounds that science has never studied. (There would have never been a reason to study a mixture of such substances.) So no one knows what properties these compounds could have in the groundwater. And most importantly, NO ONE KNOWS WHAT CAN HAPPEN WHEN THESE SUBSTANCES ARE DISTURBED WITH A BACKHOE. Could you please let us know how this situation is "protective of human health?"

Response: Exposure is the physical contact with a chemical of substance by direct contact, ingestion and inhalation. One or more of these physical contacts must occur before a chemical has the potential to cause a health problem. A Community Air Monitoring Plan will be implemented during all intrusive activities (i.e., backhoe digging) at the sites to ensure a measure of protection for the downwind community. All potential exposures have been addressed by the previous remedies or will be addressed by the implementation of the proposed remedies. Therefore, the proposed actions are protective of public health.

62. As you described for the Ferry Terminal area: this area has a remediation status of "Commercial". If the proposed use for the Ferry Terminal were to change, for example, to use as a homeless shelter, would the NYSDEC need to come back and perform more remediation?

Response: The remedial action completed at the Ferry Terminal would allow for restricted residential use, however the site is not zoned for restricted residential use. Should the zoning for the Ferry Terminal be changed to restricted residential and the use of the building change to such a use, a

modification to the Record of Decision would need to be prepared. Subsequent to a change in use, the Easement and the Site Management Plan would need to be revised to account for restricted residential use.

63. One of the questions which was raised in the meeting was whether there has ever been in New York or anywhere else in the United States a residential development on a former superfund site. The person answering the question said he did not know. We would be very interested in finding out the answer to this question, because we have been trying to find one using numerous Google searches and we have not found a single one.

Response: Please see the response to Comment 16.

64. I live about one half a mile away from Captain's Cove, approximately 30 feet upgradient from the level of the Creek. Regarding the Subslab Depressurization Systems (SSDS) discussed as a remedy, to prevent trichloroethylene in the soil and groundwater from causing soil vapor intrusion, a known cancer causing phenomenon in built structures: could you please let us know what material is dissipated? We understand that said material will be dissipated at the roof level of the building. It is our understanding that the new buildings are planned to be over 140 feet tall. Will there be several SSDS? My house is only about 30 feet up from the Creek, so will this material be dissipated by the SSDS be carried on the wind to my home? Is there going to be one or several SSDS's in use for each building? Is there any information available on the affect of multiple SSDS's operating 24/7 in a small area? I have heard of these systems in use, but they are mainly used in 2 story private homes. Is there any information available showing this product's use in 12 story buildings? If there is a power failure and these devices are not working, will the people need to be evacuated?

Response: The selected remedy includes an evaluation of the potential for vapor intrusion and mitigation, if necessary, for any buildings constructed at these sites. Until the potential for vapor intrusion is evaluated, we cannot predict if a sub-slab depressurization system will be recommended, how many would be recommended or other design details.

A study of a site in NYS found that the use of approximately 500 ventilation systems at 453 properties to remediate soil vapor in a small town did not result in ambient air VOC levels of public health concern.

Sub-slab depressurization systems are routinely used in the construction of large high-rises throughout NYS and the country.

People will not need to evacuate the building due to a loss of power to sub-slab depressurization system. The system will continue to operate passively during power loss.

65. It was mentioned in the meeting that some people working at the site will be required to wear Personal Protective Equipment (familiarily known as Hazmat Suits). Could you please state whether this will be specified in the Site Management Plan? Who will be responsible for purchasing this equipment? Will it be paid for by the developer, or will the individual worker be required to purchase it? Will the employees be instructed that they must remove the equipment before going into the village for lunch or coffee? And will it be explained to the employees why this is necessary?

Response: The Site Management Plan will require the development of a Site Health and Safety Plan (HASP) in accordance with the Federal Occupational Safety and Health Administration (OSHA). The Plan will be prepared by a qualified person in accordance with the most recently adopted and applicable general industry (29 CFR 1910 and construction (29 CFR 1926) standards of OSHA, the US Department of Labor, as well as any other federal, state or local applicable statutes or regulations. A copy of the HASP will be available at the site during the conduct of any intrusive activities or as outlined in the Site Management Plan.

The Site Owner will be responsible for the implementation of the Site Management Plan and as such, the implementation of the HASP. All personal protective equipment will not be allowed to be worn offsite. All personnel onsite will have received the proper health and safety training prior to commencing work on the site, this will include the why following the HASP is required.

Amy Peters for the Committee For a Sustainable Waterfront submitted written comments dated April 15, 2016, which included the following comments:

66. Based on the results of the remedial action at the site, the USEPA proposed No Further Action with the implementation of Institutional Controls and Environmental controls.

As Lenny Siegel of the Center for Public Environmental Oversight (CPEO) states in A Stakeholder's Guide to Long-Term Management at Vapor Intrusion Sites (April 2016):

“Particularly at high-profile sites with robust regulatory oversight, best practices have emerged. They are described in U.S. EPA’s June, 2015 vapor intrusion Technical Guide, as well as numerous guidance documents produced by the states.

But at many sites, **especially new developments with little or no regulatory oversight, site management activities end after early rounds of sampling or soon after the installation of mitigation systems.** To this day, there is no national accounting of the number of buildings that have been evaluated for vapor intrusion, let alone the number of sites subject to future investigation or mitigation.”

VOCs tend to persist in the subsurface and often result in vapor intrusion into buildings above. In many cases where there are significant releases, neither natural biological degradation nor conventional treatment reduces contaminant concentrations to acceptable levels in a reasonable amount of time. Therefore, long-term management is necessary to protect the people who might be exposed. This is true, whether a decision is made to mitigate or not, and whether an effort is made to accelerate the removal or degradation of the subsurface contamination.

Long-term management MUST include:

- monitoring of subsurface contamination, in the form of groundwater or soil gas;
- inspecting possible pathways from the subsurface to indoors;
- operation, maintenance, monitoring, and inspection of mitigation systems;
- training building maintenance personnel;
- controlling and monitoring of mitigation system emissions;
- monitoring indoor and outdoor air;
- being prepared to implement contingency plans should indoor air concentrations exceed or even approach target levels;
- establishing institutional controls to limit activities and uses at the site and to ensure continuation of the steps above;
- periodic review of the protectiveness and/or efficiency of the response;
- inspecting possible pathways from the subsurface to indoors;
- operation, maintenance, monitoring, and inspection of mitigation systems;
- training building maintenance personnel;
- controlling and monitoring of mitigation system emissions;
- monitoring indoor and outdoor air;

- being prepared to implement contingency plans should indoor air concentrations exceed or even approach target levels;
- establishing institutional controls to limit activities and uses at the site and to ensure continuation of the steps above;
- periodic review of the protectiveness and/or efficiency of the response;
- notifying building occupants and public at large, including prospective purchasers, of site conditions and the current status of the environmental response;
- developing a decision-making process for turning off active mitigation when the vapor intrusion threat has receded;
- preparing reports documenting all of the above.

What assurances can be given by the EPA, the DEC and the re-developer that the institutional controls decided upon are actually inspected and maintained on a regular basis – forever? What entity will commit to that? What will happen if this site is subjected to another Superstorm like Hurricane Sandy? How will these institutional controls be protected and what happens if they fail to function properly as a result?

Unless and until these questions can be answered, I oppose the DEC's decision for “A No Further Action Remedy” proposed for Operable Unit 3 (OU3) at Captains Cove Condominiums.

Response: The Site Management Plan will provide the operation and maintenance plan, along with any sampling and reporting requirements. The institutional control that will be placed on this property is an Environmental Easement restricting the site use to restricted residential use, restricting the use of groundwater and requiring the adherence to the Site Management Plan. The Environmental Easement runs with the land in favor of the State, subject to the provisions of ECL Article 71, Title 36. The placement of an Environmental Easement provides an effective and enforceable means of encouraging the reuse and redevelopment of a controlled property, determined to have been remediated to allow for a general category of use, while ensuring the performance of any necessary operation, maintenance, and/or monitoring requirements. Also, see the response to Comment 21.

Amy Marion, Esq. submitted written comments dated April 15, 2016 which included the following comments:

67. The language in the RODs is speculative: "...should redevelopment occur ...", when the DEC has been working with and communicating with the City of Glen Cove, the Redeveloper and the Redeveloper's consultants for years. Saying, "should redevelopment occur" is utterly disingenuous when DEC has been fully aware that this has been the intent as evidenced by the City of Glen Cove's direct request to the DEC in 2009 to change its focus from commercial to restricted residential use.

In considering the groundwater situation, the project cannot meet the following condition as stated in the ROD's:

"... to ensure no soil exceeding protection of groundwater concentrations as defined in Part 375.6.8 (b) will remain below storm water retention basin or infiltration structures ..."

The depth to groundwater is so shallow in many places that the basins and infiltration structures cannot hold more than a 2 inch rainfall, so in large storms or under storm surge, all of the waters and soils will be mixed with anything left in the soils. The Doxey PRAP states that remediation at the site is complete when the primary contaminants of concern were petroleum related gross contamination, TPH, PAHs, and arsenic; and, the TPH, PAHs and gross contamination above the Site SCOs has been left in place post remediation near the bulkhead beneath the 2 foot soil cover due to uncertain structural integrity of the bulkhead. Soils that are left with higher concentrations (due to logistical limits to their removal) will certainly mix with storm flows and, since the status of leaching remains unresolved in the ROD, the public cannot know how much mixing of higher levels is occurring now or in the future.

In the neighboring Gladsky site's ROD, it is clearly stated that groundwater flows from the north towards the Creek, carrying pollution from, for example, the neighboring Mattiace site to and through the Gladsky site. Since all of the remediation sites will be left with some levels of contamination (mostly metals and radioisotopes), these sources will continue to shift the pollution all along the Creek frontage. Capping the area with soil will not change this reality, and does not address the continuing threat of pollution leaching to Glen Cove Creek.

Response: The Doxey site, which has a proposed No Further Action remedy, has petroleum-related contamination next to the bulkhead that could not be removed due to concerns about the structural stability of the bulkhead. This contamination will be addressed during the repair and/or replacement of the bulkhead proposed during the redevelopment in accordance with measures included in the Site Management Plan.

Contamination is present approximately 3 to 4 feet below ground surface and should not be in contact with groundwater, which is found at greater depth. Groundwater monitoring wells have been installed onsite and are monitoring groundwater conditions.

The Captain's Cove Decision Documents require the removal of soil which exceed the excavation criteria, followed by capping of any remaining contamination. The excavation criteria were developed to protect groundwater from the potential of metals leaching.

68. Segmenting the review, when all of these sites border each other and are connected is improper and violates SEQRA and this agency's obligations as lead agency.

Response: Per 6 NYCRR Part 375 2.11(b): *State environmental quality review act applicability. Remedy selection and implementation of remedial actions under Department approved work plans pursuant to ECL article 27, title 13 are not subject to review pursuant to ECL article 8 and its implementing regulation (6 NYCRR Part 617), as an exempt action pursuant to the enforcement exemption provision.*

69. The capping remedy described in all of the ROD's related to this area is the placement of a 2 foot soil layer to prevent direct contact with the contamination remaining in the ground. Even this objective is vague and not likely to truly protect people living on these sites from contact with polluted materials. This layer is intended to include 6 inches of 'clean soil' in which plantings can occur. The six inch requirement is far too little to support the plantings proposed, including the native plantings and landscape treatments. Most shrubs and trees require holes of 12-24 inches (a quick look at the Planting Detail, Sheet L-703 (dated 9/27/2012) actually shows tree ball to 30 inches deep with support stakes penetrating to deeper than 3 feet), so in some areas, particularly

parks and playground, the plants themselves, and certainly their support stakes, roots and watering depths, will be in direct contact with pollutants.

It would appear that the combination of speculation on redevelopment stated and presumed in the ROD's and deferring consideration of toxic pathways of exposure reflected in both the City's and the Redeveloper's documentation to the US EPA and NYS DEC has created a gap in information about how dangerous it is to leave the contamination in the ground and place residential and recreation uses on top of this pollution. If the development plans had been fully reviewed as part of the ROD process, then perhaps the EPA and DEC would not have decided to leave so much pollution behind. However, once the City, the Developer and the agencies move forward on these decisions, further testing will not be as useful as it would now, meaning that this redevelopment is not ready to proceed.

Response: The NYSDEC has not received any final redevelopment construction plans. All construction plans will need to be reviewed by the NYSDEC to ensure that they meet the requirements of the Environmental Easement and the Site Management Plan. The NYSDEC anticipates providing oversight during the redevelopment of the site.

70. In OUI 1's ROD and other RODs, people may come into contact with contaminants in soils in OU-1 and OU-2 by walking on the site, digging or otherwise disturbing the soils. Measures are in place to prevent contact with residual soil contamination in OU-3. People are not drinking the contaminated groundwater because the area is served by a public water supply not affected by this site. However, the DEC has completely ignored soil vapor intrusion from the volatile organic compounds in the groundwater which can move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality.

Response: The remedy includes provisions for the evaluation of the potential for vapor intrusion and mitigation of structures, if necessary.

71. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for people to inhale site contaminants for any future on-site redevelopment or occupancy.

Response: Please see the response to Comment 70.

72. Each of the ROD's acknowledge ongoing groundwater monitoring as part of the OUI remedy and the PDI has noted that while VOC and SVOC groundwater contamination continues to decline, metals contamination has not shown the expected reductions. Section 7.2 ROD OUI states that after the DEC and EPA RODs were implemented, additional soil and groundwater samples were collected throughout the Site, in anticipation of redevelopment. This sampling indicates: Significant areas of gross contamination were not identified within the redefined site; Isolated areas of elevated contaminants at levels which would continue to impact groundwater have been identified on the site; Implementation of groundwater monitoring required by the ROD remedies identified that the prior waste removals had not achieved the improvements to onsite groundwater anticipated by the original RODs. Groundwater monitoring will be continued to assess effectiveness of the additional soil removal. These paragraphs confirm the concern that the site is not ready for redevelopment.

Response: Please see the response to Comment 49.

73. ROD OUI, section 6.3 and similar language in each ROD states that because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for people to inhale site contaminants for any future on-site redevelopment or occupancy and the public must be informed of this. With such known risks, this site is not ready for redevelopment.

Response: Please see the response to Comment 70.

74. Garvies Point Lawn is a large expanse of grassed area overlying the prior location of lagoons and contaminated meadows lying as close as 2 feet to the groundwater when the area is fully saturated. During heavy storms, deep snow pack/melt this area will subside, a natural process that occurs in areas without woody vegetation to hold soils. Over the first few years, as the roots for the grass penetrate and loosen the top layer of soil, compaction will occur to the soils of this area. Moreover, this area was one of dynamic movement of groundwater which is in direct contact with tidal influence, so this area will not settle even as quickly as a normal lawn area might. During the first or second winter, the soils will settle deeper into the root zone, the new turf will compress and in the following spring root growth will again loosen the soils, so the cycle of compaction will recur for a few years until the 'lawn' is fully developed. As with golf course turf development, over-sanding is performed to maintain the desired elevations. However, even if such maintenance is added to the plans, the settling and root

disturbance process will bring the contaminants being 'barriered' closer to exposure for people, and the two foot protective layer will no longer be two feet, it will have been penetrated by root action and dissolved pollution will reach the surface and expose people playing on that lawn to toxic waste.

The playfield next to Ferry terminal is an area which is close to soils and groundwater which are not being controlled by EC's or IC's because the ROD leaves the Ferry Terminal parcel as cleaned only to commercial standards, so plant and play activity in this area is even more likely to be exposed to contaminants as described above for the Garvies Lawn.

Response: The remedy for the site includes maintenance and monitoring for the soil cover to ensure that it remains intact and two feet thick. It is unlikely dissolved contamination will reach the surface in the manner described above. Contrary to the statement above, the Ferry Terminal remedy includes appropriate engineering and institutional controls. The remedy also includes a site cover which will maintained and monitored, thereby limiting the potential for people to be exposed to remaining contaminated soils.

75. Renaissance Park is an area which sits downhill from the Li Tungsten buildings, the Doxey and Mattiace sites and alongside of an area in which stormwater and pollution was stored and staged for years. For decades pollution from these sites drained and seeped from inland towards the Creek and the soils and groundwater in this area is permanently affected. The proposal to plant trees and shrubs in a public park over the top of this area represents one of the most serious threats to human health. The woody species will reach deeply in this area for their root zone, break through any two foot cover layer and result in mixing and exposure of polluted groundwater at the surface, especially in storm surges or heavy snow melt periods. The ROD determined that no further action is proposed and some contamination was left in the ground because of concerns that removing it from its location against the bulkhead could be problematic due to insufficient knowledge of the condition of the bulkhead. The City and redeveloper have written so many statements assuring that the project is being thoroughly planned to protect the environment and public, yet they lack this simple set of facts, and they plan to build above this questionable bulkhead? The project's design, remediation and public interest review is woefully inadequate given that the condition of this bulkhead located in the middle of the site remains unknown.

Response: The Site Management Plan for each site will contain a figure outlining potential areas of remaining contamination and provides the framework for remediation upon replacement or repair of the bulkheads and redevelopment of the site.

76. The Li Tungsten site along Garvies Point Road: anything planted along the southern boundary of the main site has died. Over two decades, even during the past five years, anything planted died along the southern boundary of the main site. The pH has evidently been adversely effected by the heavy metals (negative ions) making plant life impossible along this stretch of the project site. Even a two foot layer of clean soil will be penetrated, as the toxicity has risen to the surface which will occur during heavy rain/snow periods or in storm surges.

Response: Please see the response to Comment 70.

77. The remedy proposed for Captains Cove and the no further action proposed for the Doxey site are woefully inadequate and misconceived, are based upon segmented reviews and reflect this agency's failure to give the environmental conditions of these sites a hard look, the related impacts from these actions, or no further action, a hard look, as well as this agency's failure to acknowledge and take a hard look at the impact upon these sites from their neighboring sites which are either Brownfield or Superfund sites in clear violation of SEQRA.

Response: Please see the response to Comment 72.

Roger Street Friedman submitted written comments dated April 14, 2016 which included the following comments:

78. I oppose the No Further Action decision on the Captain's Cove site. Please see below:

In the late 1990's and up until 2006, US EPA and others charged with studying the environmental and health risks conducted tests, remediation and regulatory processing of a strategy for the cleanup of Glen Cove Creek's waterfront to commercial use standards. In 2009, the assessment added the City's intent to include residential uses, so the clean-up strategy was 'updated' by a vague requirement for 'institutional and

environmental controls'. There was no tightening of the levels of contamination allowed: so people can live where industry can operate?

Response: The NYSDEC and NYSDOH have reviewed all the data collected to date at the Captain's Cove and Doxey Sites and have determined that the cleanups that have occurred along with the additional proposed remediation at Captain's Cove, which includes appropriate institutional and engineering controls consisting of an environmental easement, site management plan and a site cover are sufficient to allow restricted residential development of the site properties.

79. The information released by US EPA in 2015 reflects the same information in the NYS DEC website for the upcoming hearing. Despite some new data showing that the contamination still to this date includes heavy metals, volatile organics, hydrocarbon and radioactive waste, the plan remains to cover it over. Of course there is a contradiction whereby the DEC intends the groundwater to be cleaned to a 'standard', but since the EPA wants it all covered, there is a remaining risk to people from surface contact with the ground. In fact, the DEC Fact Sheet for the Captains Cove public hearing has the levels of contamination listed as 'unknown'. In their 2014 Progress Report, DEC made clear that they were still testing the groundwater and finding pollution. The compounds found in the groundwater include carcinogens, some of which are amongst the most serious of these agents. The fact that DEC still acknowledges not knowing the levels means that any health risk assessment includes even broader risks than experts can even predict. The groundwater along Glen Cove Creek is in constant flux into and out of the Creek and Harbor, so there is continual mixing of compounds, and it is likely that there are chemical species in that water that are not even tested for because even the experts do not know exactly what to test for. This situation can be just like the whole issue of soil vapors (which are also rampant along this waterfront). Until the turn of this century, little or no attention was paid to toxic vapors, and then suddenly, when scientists finally recognized the pathways of these vapors into people, the subject became serious and government (including NYS DEC) began new restrictions. It was serious throughout the last half of the last century, but no one was looking for it. This is why science MUST lead regulation, and 'compromises' are not acceptable.

There is a rule of thumb in conservation, the 'precautionary principle', adopted by most nations worldwide during the 1992 United Nations Earth Summit on the environment (<http://www.un.org/geninfo/bp/envirp2.html>). This principle states that in the absence of sound and complete science, we should opt for more research and not take actions for

which we do not know the consequences. If NYS DEC adheres to sound science then they cannot make the no-further-action decision.

Accordingly, the groundwater along Glen Cove Creek will still contain pollutants to some level (see below for how the US EPA determines acceptable levels to be left behind). The DEC website confirms that the groundwater is in direct contact with the sea water of the Creek and Hempstead Harbor, rising and falling with the tides and leaking through sandy soils from inland to open water. Moreover, with the intent to place heavy loads of apartment buildings on this land surface, and to drain stormwater through to the Creek, it is absolutely going to result in increases in pollution in the Creek, and out into Hempstead Harbor. Clearly, the decision to stop cleaning the Creek's waterfront leaves Glen Cove residents with a serious and unknown hazard. Aside from the potential for direct contact with polluted waters by people doing water recreation, there will be organisms in the wetlands and Creek bed that become loaded with these compounds. Some people eat fish from this area, and of course, the pollution will gradually saturate the shell fish of Hempstead Harbor, leading to de-certification in the future after years of effort to clean up the Harbor.

Perhaps people don't realize that the determination to stop a clean-up of toxic and hazardous waste follows a procedure called 'risk assessment', wherein a statistical analysis is made to derive a probability of a given percentage of the population being made ill by the amount of pollution left behind...i.e., when the 'no further clean-up action' is recommended. There are no local guidelines for our health in this respect, so these health assessments are based on generalized regional statistical estimates of how many people will die if a certain level of pollution is left. From a generalization, and according to the discretion of agency staff, we will be left with a certain level of pollution that will kill a 'small number' of people.

Who are the Glen Covers that will die from this? Will it be the children of new residents who buy on the waterfront, or someone who has lived here for decades, but hangs out along the new waterfront? Who gets to decide who dies?

The choice is to spend more time and money on cleaning the pollution up further, despite the 'logistical challenges', and to prevent uses of this land that expose people, and children, to ANY level of pollution. We don't have any spare people to supply to the risk assessment.

The agencies usually operate on the basis of precedent, in other words, what have we allowed to be left as pollution levels before. The problem with this strategy is that prior decision-making is evidently not good enough: this area has some of the highest cancer rates in the world...so we must tighten our 'acceptable levels' of pollution, or risk continuing these high mortality rates.

You may have noticed that the US EPA Risk Assessment approach deviates from the precautionary principle. This is highly significant: the principle comes from conservation scientists, and Risk Assessment is a government tool for compromise. Glen Cove Creek should not be protected by compromise, but by science."

Response: Comment noted.

Alan Mitzner submitted written comments dated April 15, 2016, which included the following comments:

80. I attended your discussion about the Doxey and Captain's Cove parcels the other week in Glen Cove.

I was very surprised by the lack of concern regarding the actual safety of the land. It seem that the remediation that was done does not completely solve the problem.

As you mentioned, an air filtration system will need to be installed in any building built on the property which will take the unsuitable vapor rising from that ground and vent it above the building. How can this be considered remediated? If vapor that is dangerous enough to require venting is still rising from the ground why is venting above the building a solution. The residents of the nearby areas (where this vapor will ultimately flow) will still be subject to its dangers!

In addition, the parcels have been designated as useable for multi-unit residential use but not for single residences. What possible difference could many residences make vs one in evaluating the safety of building on this land? If a poured concrete slab is needed to cover up the problem, clearly the problem still exists and nothing should be built.

It seems to me that the DEC has checked all the boxes that are required but has not actually solved the problem.

I hope you keep in mind that should this project ever get built and health problems ensue for its residents, you and the DEC will be on record as having given the thumbs up to this ill-conceived project.

I know I would not want that in the newspaper nor on my conscience.

Response: Comment noted.

# **APPENDIX B**

## **Administrative Record**

# **Administrative Record**

**Captain's Cove Condominium  
Operable Unit No. 3  
City of Glen Cove, Nassau County, New York  
Site No. 130032**

1. *Proposed Remedial Action Plan for the Captain's Cove Condominium site, Operable Unit No. 3, dated March 2016, prepared by the Department.*
2. The Department and the City of Glen Cove entered into a Consent Order, Index No. W1-0770-96-07 May 6, 1997.
3. Final Remedial Investigation Report, Volumes 1 and 2, Prepared by Remedial Engineering, P.C, Roux Associates, Inc. and Dvirka and Bartilucci Consulting Engineers, January 1999.
4. Final Feasibility Study Report, prepared by Remedial Engineering, P.C. Roux Associates, and Dvirka and Bartilucci Consulting Engineers, January 1999.
5. Pre-Construction Investigation Summary Report, prepared by P.W. Grosser Consulting, Inc. March 2016.
6. Concurrence Letter dated May 4, 2016 from Walter E. Mugdan, Director US EPA Region 2.
7. Letter dated April 15, 2016 from Amy Marion at Barket Marion Epstein & Kearon, LLP.
8. Letter dated April 14, 2016 from Carol DiPaolo at Coalition to Save Hempstead Harbor.
9. Email dated April 15, 2016 from Amy Peters Committee for a Sustainable Waterfront.
10. Email dated April 4, 2016 from Pat Tracy.
11. Email dated March 25, 2016 from Kaie Ojamma.
12. Email dated April 14, 2016 from Roger Street Friedman.
13. Email dated April 15, 2016 from Alan Mitzner.