

## **RESOLUTION CONSULTANTS**

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**To:** Lora Fly, DON, NAVFAC MIDLANT

**From:** Brian Caldwell, P.G., Resolution Consultants

**Subject:** **Annual LUC Inspection Report, Sites 1, 2, and 3 — NWIRP Bethpage**

**Date:** 3 June 2014

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### **INTRODUCTION**

This memorandum documents the 2013 Annual Land Use Control (LUC) Inspections performed for Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Sites 1, 2, and 3 on 16 May 2013. These 2013 annual LUC inspections were performed in conjunction with the Five Year Review inspections, and fulfill the requirements of both. The Navy performs annual inspections of Sites 1, 2, and 3 to ensure that LUCs designed to minimize risk exposure pathways are being maintained as intended as part of the site remedies. The following report presents a general site background for each site; details of land use control implementations as required by the 1995 Operable Unit (OU) — 1 Record of Decision (ROD) for Sites 1, 2, and 3; and summaries of the annual site inspections. In addition, Appendix A contains the site inspection checklists and interview summaries and Appendix B contains the Site Inspection Photo log. The inspections, documenting current conditions and ensuring that LUCs have been implemented and are functioning properly, have also been included in the 2013 Five Year Review prepared for NWIRP Bethpage (Resolution Consultants 2014).

### **Facility Background**

The former Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage located in the Hamlet of Bethpage, Town of Oyster Bay, Nassau County New York, was a 109 acre government-owned, contractor-operated facility under the cognizance of the Naval Air Systems Command (NAVAIR) and predecessor commands and operated by Northrop Grumman (NG) and its predecessors, including Grumman Aircraft Engineering Corporation ([Grumman] and its successor

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Northrop Grumman Corporation [NGC]) (Figure 1). The NWIRP's primary mission was the research prototyping, testing, design engineering, fabrication, and primary assembly of military aircraft.

The facilities at NWIRP Bethpage included one plant used for assembly and prototype testing (Plant 3); a quality control laboratory (Plant 10), two warehouse complexes (Plant 17 north and south), a salvage storage area (Site 3), storm and non-contact cooling water recharge basins (Site 2), the Industrial Wastewater Treatment Plant and several smaller support buildings. The NWIRP also included two additional plants. Plant 5 which consisted of a Navy-owned building located on land owned leased by NG served as a research and engineering building for NG. Plant 20 was an outparcel located approximately 500 feet north of the main 105-acre parcel and served as NG's vehicle maintenance complex since 1943. In addition to operating the NWIRP facilities, NGC owned several plants on approximately 600 acres neighboring the NWIRP facilities. Contamination has been released from these facilities as well. The 105 acre NWIRP parcel was surrounded on three sides by the NG property and abutted a residential neighborhood on the east. At that time, Navy and NG properties totaled approximately 605 acres (Figure 2).

Operations at the 105 acre parcel ceased in 1998. Operations at the garage and engineering and research parcels ceased in 2002. As a result the U.S. Congress passed special legislation (PL 105-85 Sec 2852 FY-1998) that was issued as a part of the National Defense Authorization Act of 1998 authorizing conveyance of the Navy's real property at NWIRP Bethpage to Nassau County, New York, for economic redevelopment.

On 11 Dec 2002 and in accordance with the special Legislation the Plant 5 and Plant 20 were transferred to Nassau County. On 3 April 2008, the Navy transferred 96 of the 105-acre main parcel to Nassau County and leased the remaining 9 acres to Nassau County. The 9-acre parcel is leased to Nassau County but ownership is being retained by the Navy for environmental investigations and remediation. Upon successful remediation of the 9-acre parcel, ownership of the parcel will also be transferred to Nassau County. The transfer and lease documents provide land use controls and notifications of areas in which residual contamination is present.

From 1998 to 2011, activities occurring at the former NWIRP Bethpage have included facility maintenance (security and mowing), storage of Nassau County impounded vehicles, and environmental investigations and/or remediation of soil, groundwater, and soil vapor (described below).

Steel Equities should maintain restrictions Site 3  
4 year tax relief on 86 Acres

In 2011, Steel-Los III, LP bought 84-acres of the 96-acre property from Nassau County and has been renovating the property to attract new tenants. Nassau County has retained the remaining 12 acres for economic development. The Navy-owned 9-acre parcel was also subleased by Nassau County to Steel-Los III, LP in 2011. Steel-Los III, LP currently utilizes the owned and leased properties for miscellaneous outdoor storage and as a movie production set. The indoor properties are being used for light industrial and commercial activities. Steel-Los III, LP maintains security for the facility.

### **SITE 1 — DRUM MARSHALLING AREA**

Site 1 is relatively flat with a 4-foot vegetated windrow located along the eastern end of the site, and is mounded on the north at the location of the former sanitary sewer treatment plant (Figure 3). In the early 1990's, a partial interim soil cover was added to a localized area in response to finding elevated PCB concentrations in some of the site soils. Site access to the current and former NWIRP Bethpage is restricted via fencing and security. In 1998, additional fencing was added to isolate Site 1 from the remainder of the NWIRP facility. In June/July 2009, buildings, tanks, and concrete aprons within the fenced portion of Site 1 were demolished and disposed/recycled offsite. In 2012, at the request of the property leases to allow additional parking for facility tenants, the southern Site 1 fence was move to the north approximately 100 feet and the western fence was moved to the east approximately 30 feet. The new access area was covered with gravel and asphalt in accordance with the OU1 ROD. In April 2012, the current property owner, Steel-Los III, LP, uncovered two USTs that were found to contain residual solvent contamination. These USTs and contents were removed in September 2012. As of 2013, the area bounded by this fence is lightly vegetated soil and includes AOCs 23, 30, and 35. The remainder of Site 1 is covered with concrete, gravel, or asphalt. Dry Wells 20-08 and 34-07 are located outside of the interior fenced area, but are covered with asphalt.

Site 1 remains part of the 9-acre parcel retained by the Navy. Current use of Site 1 is limited and consists of periodic mowing of vegetation within the fenced in portion of the site (two to three time per year) and perimeter fence maintenance. Unfenced portions of Site 1 are used for storage, parking, vehicular traffic around Plant 3, and a security patrol of the facility.

### **Land Use Controls — Requirements and Implementation**

Land use controls at Site 1 as identified in the ROD consist of engineering controls and administrative controls. Engineering controls consist of perimeter fencing to limit general access, an interior fencing around the northern portion of the site to limit worker exposure while the additional investigation is being performed, and a soil cover to limit worker exposure outside of the

interior fencing. Administratively, a Quitclaim Deed dated 3 April 2008 is included in the property transfer to Nassau County that prohibits the extraction of groundwater from within the boundaries of the 105-acre parcel or the Plant 20 parcel located at the former NWIRP. As part of the lease agreement with Nassau County and Steel-Los III, LP, the Navy is to be advised in writing in advance of any intrusive activities. The Navy then evaluates the planned activities relative to the known location of residual soil contamination, and advises the appropriate protection to be taken.

### **2013 Inspection Activities and Results**

2013 LUC inspection activities consisted of administrative activities to complete the documentation questionnaire and field inspection to complete the inspection in the LUC compliance checklist, as discussed below.

A site inspection was conducted on 16 May 2013. The weather was sunny and there was no recent rainfall. Representatives from the Navy (Ms. Lora Fly), NYSDEC (Mr. Steve Scharf) and NYSDOH (Mr. Steve Karpinski) were present. In addition, Mr. Al Taormina, Navy Facility Manager, was interviewed. During the interview, Mr. Taormina provided input with regard to current site use, current site access, and site alterations on Site 1 with respect to the movement of internal fencing and installation of ground cover. The inspection checklist for Site 1 is included in Appendix A, and the photo log is included in Appendix B.

Remedial elements in place include:

- Perimeter fencing to limit general access
- Interior fencing to limit worker access
- Gravel, concrete and asphalt soil cover outside of interior fencing to limit worker exposure
- Fence line SVE system to address soil and shallow groundwater contamination and offsite VOC migration
- Front gate security to property to limit general access
- Deed restriction with property transfer to prohibit extraction of groundwater



Several minor inspection notations were made, including:

- Several onsite wells need to have the security locks replaced
- Several cesspool lids are missing
- There is minor debris (car battery, miscellaneous garbage) along the eastern perimeter fence
- Soil cover and perimeter fencing is intact
- Front gate security (operated by Steel-Los III, LP) is operational

### **Conclusions and Recommendations**

Since the last inspection, the only physical configuration change in the site is the moving of the interior fence to the east and to the north to allow for greater vehicular access for Steel-Los III, LP. The new access areas outside of the interior fence have been covered by asphalt and gravel consistent with the 1995 ROD.

All remedial elements are operating properly, and there were no observations that Remedial Action Objectives are not being met. Recommendations include the replacement of the missing security locks on monitoring wells, and removal of the noted debris along the eastern perimeter fence.

### **SITE 2 — RECHARGE BASINS**

Site 2 is a relatively flat area located in the northeast corner of the Navy's property and north of Site 1 (Figure 2). The site is enclosed by a facility perimeter fence along the north, east, and south and an interior facility fence along the west (Figure 4). It contains three recharge basins that currently receive storm water. The storm water is received from catch basins located on current and former Navy property and former NG property to the north.

### **Land Use Controls — Requirements and Implementation**

Land use controls at Site 2 consist of engineering controls and administrative controls. Engineering controls consist of perimeter fencing to limit general access and a permeable soil cover to limit worker exposure. Administrative controls consist of a Quitclaim Deed executed as part of the Navy transfer to Nassau County. This deed restriction provides a notification describing the location where residual compounds will remain; specified that written consultation with NYSDEC and appropriate precautions must be taken prior to disturbing site soils; and restricts use of the groundwater underlying the site. LUC implementation protocol entails written notification to NYSDEC describing planned activities and appropriate precautions to manage risk to workers.

## **Inspection Results**

2013 LUC inspection activities consisted of administrative activities to complete the documentation questionnaire and field inspection to complete the inspection in the LUC compliance checklist, as discussed below.

A site inspection was conducted on 16 May 2013. The weather was sunny and there was no recent rainfall. Representatives from the Navy (Ms. Lora Fly), NYSDEC (Mr. Steve Scharf) and NYSDOH (Mr. Steve Karpinski) were present. In addition, Mr. Al Taormina, the Navy Facility Manager, was interviewed. During the interview, Mr. Taormina provided information regarding the repairs performed by Nassau County on the eastern side of the southeast basin, the restrictions on site access, and the extent of the perimeter fencing. Also discussed was the location of the former sludge drying beds. The inspection checklist for Site 2 is included in Appendix A, and the photo log is included in Appendix B.

Remedial elements in place include:

- Perimeter fencing to limit general access
- Permeable soil cover to limit worker exposure
- Front gate security to limit general access to property
- Deed restriction with property transfer to prohibit extraction of groundwater

Minor inspection notations were made, including:

- There is slight erosion on the slopes of the recharge basins, but the soil cover is intact — there is no imminent risk of collapse at the edge of the basins
- Perimeter fencing is intact
- Front gate security (operated by Steel-Los III, LP) is operational

## **Conclusions and Recommendations**

Since the last inspection, the only physical configuration change in the site is the 2011 repair by Nassau County of erosion in the southeast recharge basin around the eastern inlet structure.

All remedial elements are operating properly, and there were no observations that Remedial Action Objectives are not being met. Because of the distance from the front gate security, it is recommended to include an interim inspection every 6 months to ensure the integrity of the perimeter fencing is intact.

### **SITE 3 — SALVAGE STORAGE AREA**

The NWIRP Bethpage Salvage Storage Area is located north of the Plant 3 and west of Site 2. Site 3 currently consists of an asphalt-paved parking area and is fenced on the northern and eastern sides (Figure 5).

#### **Land Use Controls — Requirements and Implementation**

Land use controls at Site 3 consist of engineering controls and administrative controls. Engineering controls consist of perimeter fencing to limit access and an asphalt soil cover to limit worker exposure. Administrative controls consist of a Quitclaim Deed executed as part of the Navy transfer to Nassau County. This deed restriction provides a notification describing the location where residual compounds will remain; specified that written consultation with NYSDEC and appropriate precautions must be taken prior to disturbing site soils; and restricted use of the groundwater underlying the site. LUC implementation protocol entails written notification to NYSDEC describing planned activities and appropriate precautions to manage risk to workers.

#### **Inspection Results**

2013 LUC inspection activities consisted of administrative activities to complete the documentation questionnaire and field inspection to complete the inspection in the LUC compliance checklist, as discussed below.

A site inspection was performed on 16 May 2013. The weather was sunny and there was no recent rainfall. Representatives of the Navy (Ms. Lora Fly), NYSDEC (Mr. Steve Scharf) and NYSDOH (Mr. Steve Karpinski) were present. In addition, Mr. Al Taormina, the Facility Manager, was interviewed. During the interview, Mr. Taormina provided information regarding the activities performed on the Steel-Los III, LP property bordering the site. The inspection checklist for Site 3 is included in Appendix A, and the photo log is included in Appendix B.

Remedial elements in place include:

- Perimeter fencing to limit general access
- Asphalt soil cover to limit worker exposure
- Front gate security to limit general access to property
- Deed restriction with property transfer to prohibit extraction of groundwater

Minor inspection notations were made, including:

- Pavement has been maintained and improved by Steel-Los III, LP
- Asphalt cover has been repaired and improved in the northwestern portion of the site
- Perimeter fencing is intact
- Front gate security (operated by Steel-Los III, LP) is operational

### **Conclusions and Recommendations**

Since the last inspection, the physical configuration changes in the site are the removal of the small amounts of interior fencing and the improvement in pavement by Steel-Los III, LP.

All remedial elements are operating properly, and there were no observations that Remedial Action Objectives are not being met. Because of the distance from the front gate security, it is recommended to include an interim inspection every 6 months to ensure the integrity of the perimeter fencing is intact.

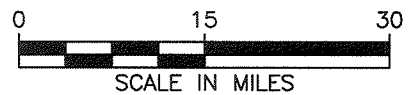
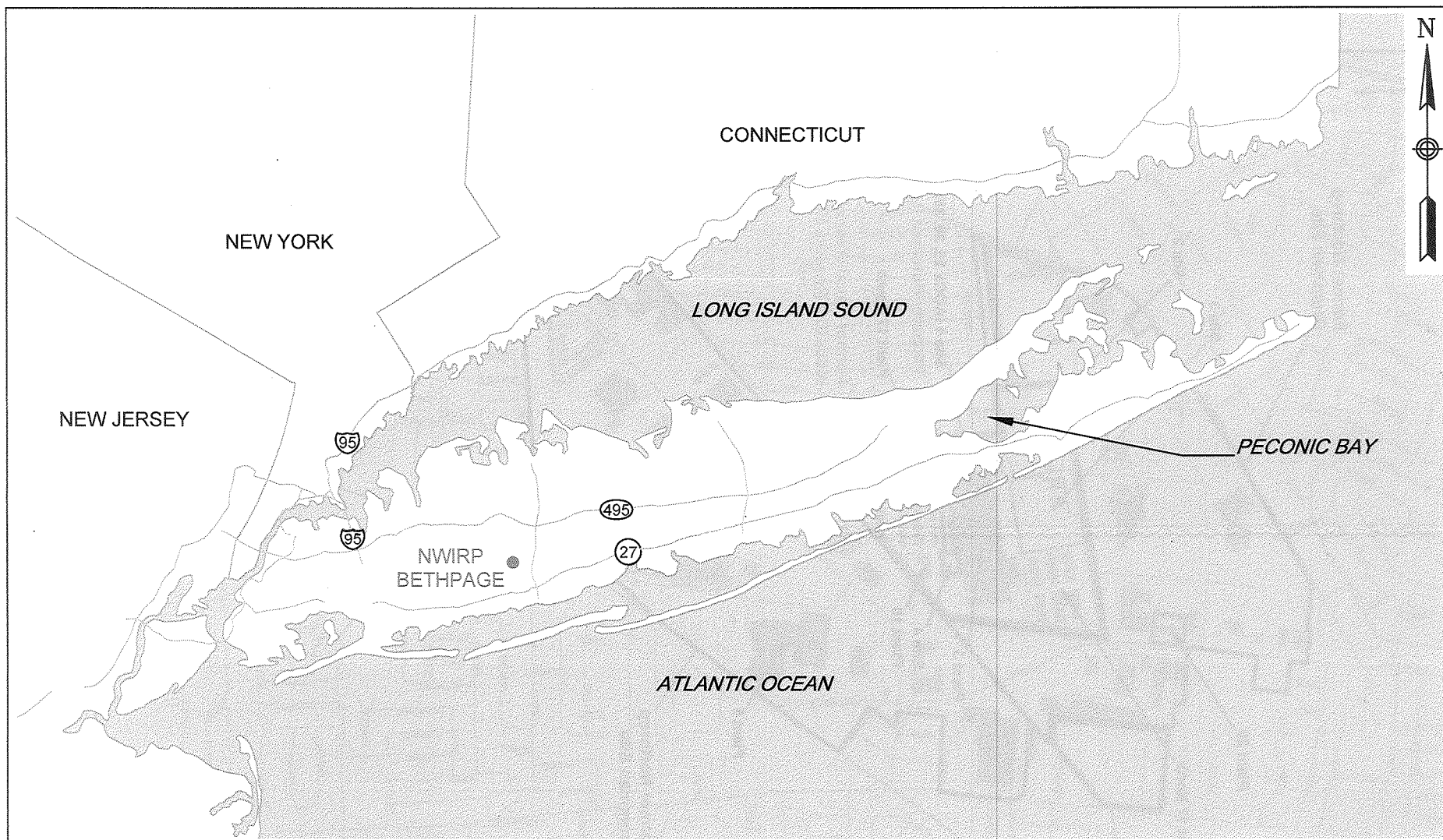
### **Next LUC Inspections**

The next LUC inspections will be performed in May 2014.

**Figures**



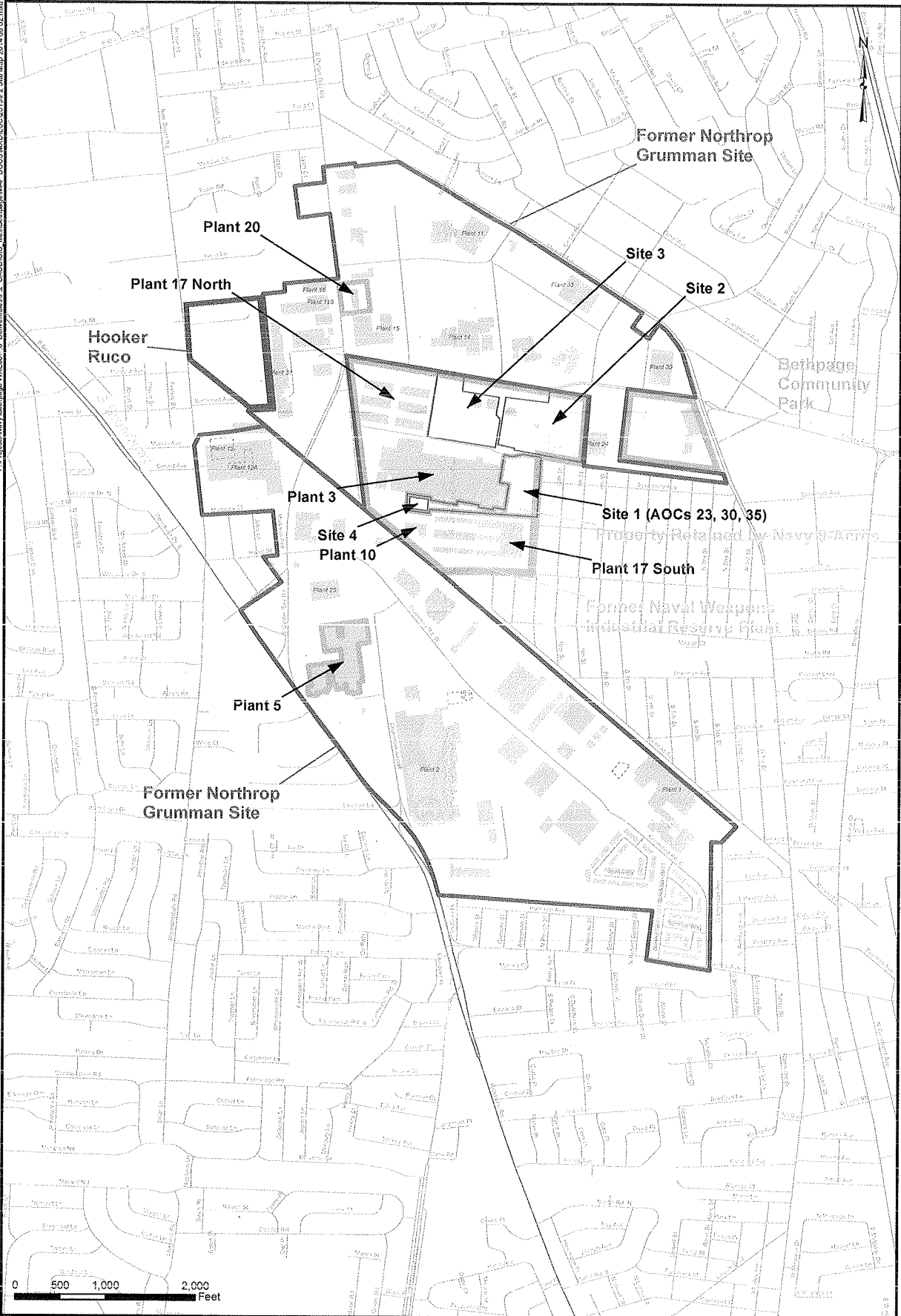
- Figure 1 General Location Map
- Figure 2 Site Map
- Figure 3 Site 1 — Former Drum Marshalling Area Layout Map
- Figure 4 Site 2 — Recharge Basin Layout Map
- Figure 5 Site 3 — Salvage Storage Area Layout Map



GENERAL LOCATION MAP  
NWIRP BETHPAGE  
BETHPAGE, NEW YORK

N62470-11-D-8013		WE08
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1	0	

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SITE MAP

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT  
BETHPAGE, NEW YORK

CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE15
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 2	REV 0



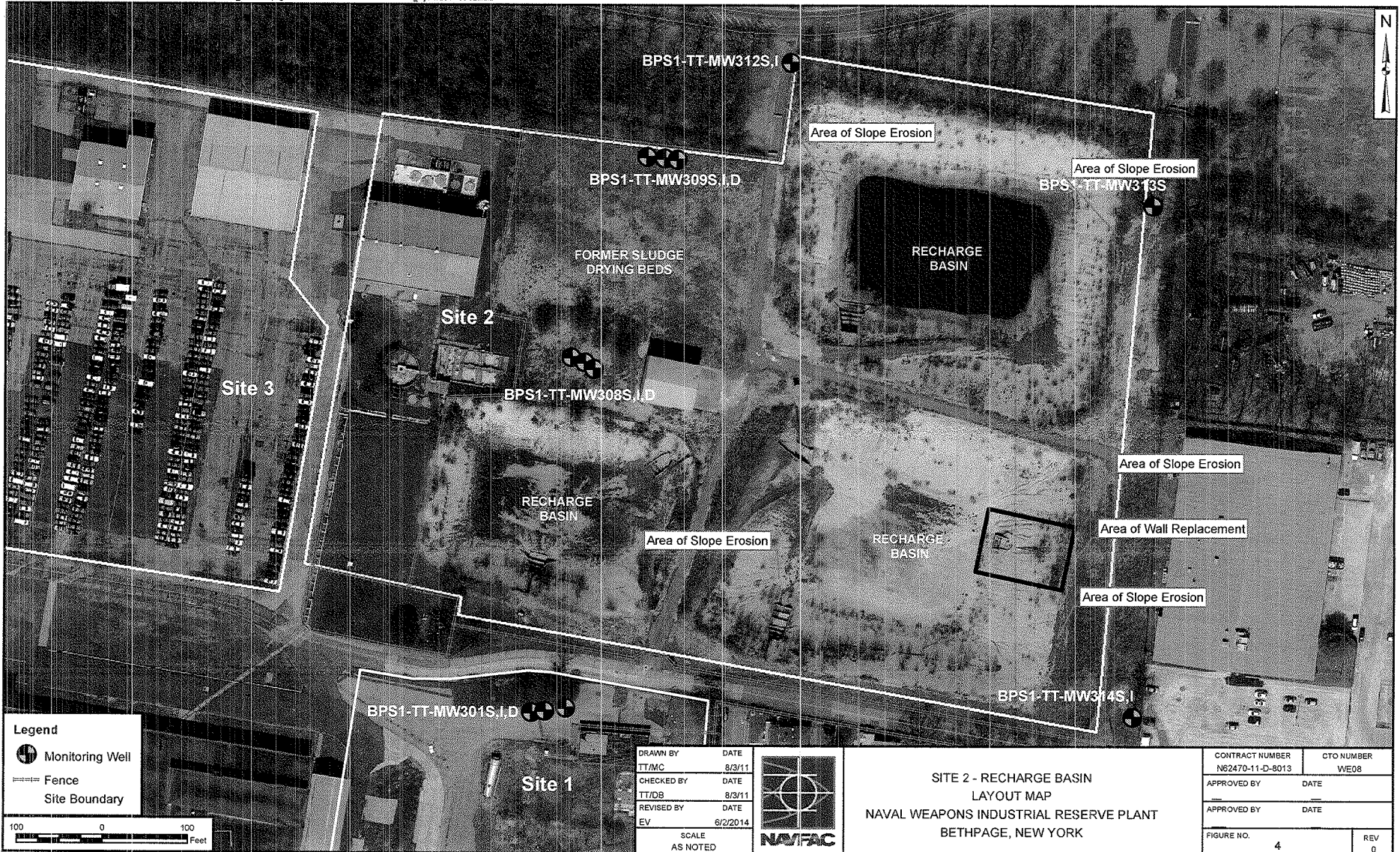


DRAWN BY	DATE	
MC	8/3/11	
CHECKED BY	DATE	
DB	8/3/11	
REVISED BY	DATE	
EV	6/2/2014	SCALE AS NOTED

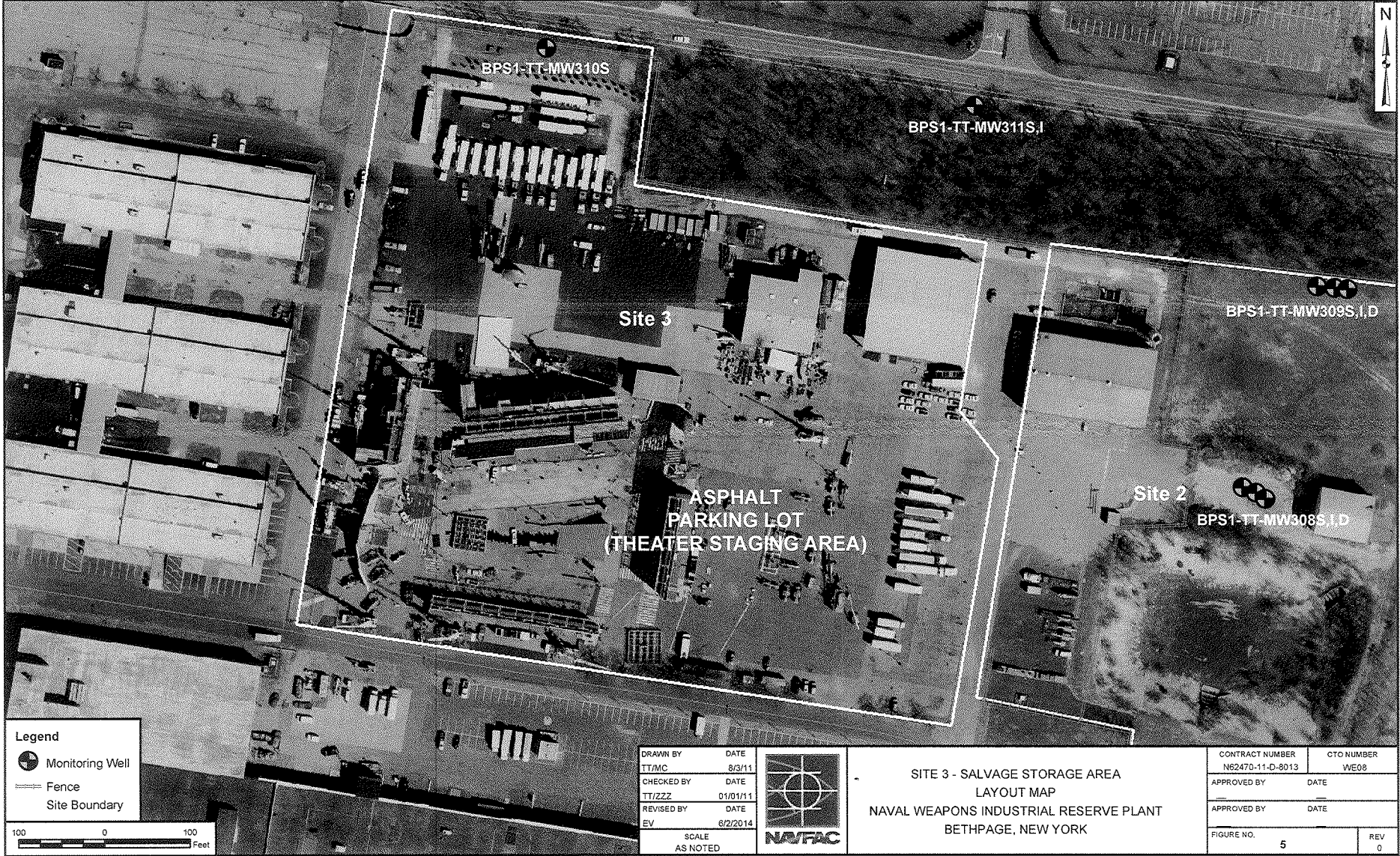
**SITE 1 - FORMER DRUM MARSHALLING AREA**  
**LAYOUT MAP**  
**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT**  
**BETHPAGE, NEW YORK**

CONTRACT NUMBER	CTO NUMBER
N62470-11-D-8013	WE08
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO.	REV
3	1

- Legend**
-  Dry Well
  -  Monitoring Well
  -  Fence
  -  UST Piping
  -  UST
  -  Site Boundary

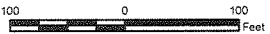






**Legend**

-  Monitoring Well
-  Fence
-  Site Boundary



DRAWN BY	DATE
TT/MC	8/3/11
CHECKED BY	DATE
TT/ZZZ	01/01/11
REVISED BY	DATE
EV	6/2/2014
SCALE AS NOTED	



**SITE 3 - SALVAGE STORAGE AREA  
LAYOUT MAP  
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT  
BETHPAGE, NEW YORK**

CONTRACT NUMBER N62470-11-D-8013	CTO NUMBER WE08
APPROVED BY _____	DATE _____
APPROVED BY _____	DATE _____
FIGURE NO. 5	REV 0



**Appendix A**  
**Five Year Review Inspection Checklists**  
**Five Year Review Interview Summary**



NWIRP Bethpage - Five Year Review Site Inspection Checklist		Remarks
<b>Site Name:</b> Site 1, NWIRP Bethpage		See accompanying figure
<b>Date/Time:</b> May 16, 2013; 8 am		
<b>Inspector:</b> Lora Fly (Navy), Steve Scharf (NYSDEC); Steve Karpinski (NYSDOH)		
<b>Signature:</b>		
<b>Remedial Elements in place:</b> LUCs for soil and groundwater; fencing to limit access; SVE system to address soil and shallow gw contamination and offsite VOC migration; front gate security to property.		SVE system includes Plant 3 subslab soil venting to protect workers and fence line protection to intercept soil vapor and prevent offsite migration to residential area. Five additional SVE wells were installed in October 2011 to address potential VOC under Plant 3 and the South Warehouse. The locations of these wells were between Plant 3 and the Southern Warehouse. Front gate security is present. The fence is bent on two short sections.
	<b>YES</b> <b>NO</b>	
<b>Are institutional controls and LUCs properly implemented and fully enforced?</b> <i>(If no, note on map and explain in Remarks)</i>	X	Interviewed Mr. Al Taormina, Navy Site Coordinator, during inspection.
<b>For active remediation systems, are the following components in good condition and operating properly:</b> <i>(If no, explain in Remarks)</i>		SVE system is operated and maintained by H&S Environmental; quarterly and annual reports are submitted to the Navy and NYSDEC
Pumps and Electrical:	X	
Extraction system pipelines, valves, valve boxes, and appurtenances:	X	
Treatment technologies:	X	
Discharge structures and appurtenances:	X	
Recovery wells:	X	
<b>Do any observations indicate that RAO's are not being met?</b> <i>(If no, note on map and explain in Remarks)</i>		
<b>Has land use on- or offsite changed?</b> <i>(If yes, explain in Remarks)</i>		X
<b>Are monitoring wells functioning, locked and in good condition?</b> <i>(If no, explain in Remarks)</i>		X
<b>Is the site free of identifiable concerns, such as dumping of chemicals or debris, or unanticipated activity?</b> <i>(If no, explain in Remarks)</i>	X	
<b>Are there any previously undocumented features/conditions at the site (ie new wetlands, grading, paving, grade changes, roads, etc.)?</b> <i>(If yes, note on map and explain in Remarks)</i>		X

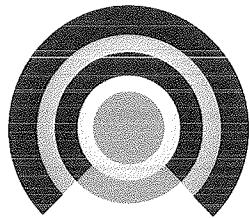
**Resolution of noted issues:** Nuts will be added to Blower 1-B nuts in 2014; onsite well locks will be replaced during next sampling; Facility Manager will arrange to have eastern perimeter fence checked for debris periodically; missing cesspool lids will be replaced.



NWIRP Bethpage - Five Year Review Site Inspection Checklist			Remarks
<b>Site Name: Site 2, NWIRP Bethpage</b>			See accompanying figure
<b>Date/Time: May 16, 2013; 9 am</b>			
<b>Inspector: Lora Fly (Navy), Steve Scharf (NYSDEC); Steve Karpinski (NYSDOH)</b>			
<b>Signature:</b>			
<b>Remedial Elements in place:</b> LUCs for soil and groundwater; soil cover to limit surface exposure; perimeter fencing to limit access; front gate security to property			Soil cover is in good shape, and although sparsely vegetated is not eroding; perimeter fence is intact; front gate security is present
	<b>YES</b>	<b>NO</b>	
<b>Are institutional controls and LUCs properly implemented and fully enforced?</b> <i>(If no, note on map and explain in Remarks)</i>	X		Interviewed Mr. Al Taormina, Navy Site Coordinator, during inspection.
<b>For active remediation systems, are the following components in good condition and operating properly:</b> <i>(If no, explain in Remarks)</i>			Not applicable; no active remediation system
<b>Pumps and Electrical:</b>			
Extraction system pipelines, valves, valve boxes, and appurtenances:			
Treatment technologies:			
Discharge structures and appurtenances:			
Recovery wells:			
<b>Do any observations indicate that RAO's are not being met?</b> <i>(If no, note on map and explain in Remarks)</i>		X	
<b>Has land use on- or offsite changed?</b> <i>(if yes, explain in Remarks)</i>		X	
<b>Are monitoring wells functioning, locked and in good condition?</b> <i>(If no, explain in Remarks)</i>	X		
<b>Is the site free of identifiable concerns, such as dumping of chemicals or debris, or unanticipated activity?</b> <i>(If no, explain in Remarks)</i>	X		Slight erosion noted on sides of slopes of retention basins, but soil cover is intact; no imminent risk of edge collapse of soil cover
<b>Are there any previously undocumented features/conditions at the site (ie new wetlands, grading, paving, grade changes, roads, etc.)?</b> <i>(If yes, note on map and explain in Remarks)</i>		X	



NWIRP Bethpage - Five Year Review Site Inspection Checklist		Remarks
<b>Site Name:</b> Site 3, NWIRP Bethpage		See accompanying figure
<b>Date/Time:</b> May 16, 2013; 10 am		
<b>Inspector:</b> Lora Fly (Navy), Steve Scharf (NYSDEC); Steve Karpinski (NYSDOH)		
<b>Signature:</b>		
<b>Remedial Elements in place:</b> LUCs for soil and groundwater; pavement cover to limit surface exposure; perimeter fencing to limit access; front gate security check to property		Pavement is in good shape; front gate security is present; perimeter fence is intact; interior fence has been removed
	<b>YES</b>	<b>NO</b>
<b>Are institutional controls and LUCs properly implemented and fully enforced?</b>	X	
<i>(If no, note on map and explain in Remarks)</i>		Interviewed Mr. Al Taormina, Navy Site Coordinator, during inspection.
<b>For active remediation systems, are the following components in good condition and operating properly:</b>		Not applicable; no active remediation system
<i>(If no, explain in Remarks)</i>		
<b>Pumps and Electrical:</b>		
<b>Extraction system pipelines, valves, valve boxes, and appurtenances:</b>		
<b>Treatment technologies:</b>		
<b>Discharge structures and appurtenances:</b>		
<b>Recovery wells:</b>		
<b>Do any observations indicate that RAO's are not being met?</b>		X
<i>(If no, note on map and explain in Remarks)</i>		
<b>Has land use on- or offsite changed?</b>		X
<i>(If yes, explain in Remarks)</i>		
<b>Are monitoring wells functioning, locked and in good condition?</b>	X	
<i>(If no, explain in Remarks)</i>		
<b>Is the site free of identifiable concerns, such as dumping of chemicals or debris, or unanticipated activity?</b>		X
<i>(If no, explain in Remarks)</i>		
<b>Are there any previously undocumented features/conditions at the site (ie new wetlands, grading, paving, grade changes, roads, etc.)?</b>	X	
<i>(If yes, note on map and explain in Remarks)</i>		A portion of the parking area is utilized as a movie set; the interior fence has been removed



## **RESOLUTION CONSULTANTS**

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**To:** Lora Fly, DON, NAVFAC MIDLANT; Project File  
**From:** Brian Caldwell, P.G., Resolution Consultants  
**Subject:** **2013 LUC Inspection Interview Summaries – NWIRP Bethpage Sites 1, 2 3 (OU1), NWIRP Bethpage**  
**Date:** 18 Dec 2013

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This memorandum documents interviews conducted during the 2013 Annual Land Use Control (LUC) Inspections performed for Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Sites 1, 2 and 3 (OU1). The Navy performs annual inspections of OU1 to ensure that LUCs designed to minimize risk exposure pathways are being maintained as intended as part of the site remedies.

Site backgrounds for Sites 1, 2 and 3 are provided in the 2013 Five Year Review (Resolution Consultants). Interviewed personnel for these sites include Mr. Al Taormina (H&S Environmental, contracted Facility Manager for the Navy). Interview summaries are provided by site in the following section. These interviews were performed as "rolling interviews" conducted during the site inspections and afterwards as needed. In addition, Mr. Taormina was contacted on December 18, 2013 via phone to confirm outstanding details.



## Interview Summaries

### Site 1:

1. **What is your overall impression of the project?** Mr. Taormina indicated a positive sentiment to the progress of the project. Navy contractor Tetra Tech is preparing an RI addendum and a revised FS to support remediation of the site, addressing both soil and shallow groundwater.
  
2. **What is the remedy and is the remedy functioning as expected?**  
Remedial elements in place include:
  - Perimeter fencing to limit general access (functioning);
  - Interior fencing to limit worker access (functioning);
  - Gravel, concrete and asphalt soil cover outside of interior fencing to limit worker exposure (functioning);
  - SVE system to address soil and shallow groundwater contamination and offsite VOC migration (functioning);
  - Front gate security to property to limit general access (functioning);
  - Deed restriction with property transfer to prohibit extraction of groundwater (functioning).
  
3. **What does the monitoring data show?** Monitoring data of the fence-line soil gas remedy is reported monthly, quarterly, and annually. Results indicate that containment on NWIRP property is successful.
  
4. **Is there a continuous on-site O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspections and activities.** LUCs are enforced through deed restrictions; windshield inspections of site fencing restricting access occur daily through normal vehicle progress to the onsite work trailer at Site 4. O&M activities of the interim SVE remedy are performed by H&S Environmental. The main site entrance from South Oyster Bay Road is maintained by a security check by Steel Equities.
  
5. **Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.**  
Changes have included moving of the site's interior fencing; this was described as moving the western interior fencing approximately 30 feet to the east, and moving the southern interior fencing approximately 100 feet to the north – this was done to provide Steel Equities greater access to their property. The area outside of the interior fencing but within perimeter fencing was covered with gravel and asphalt in accordance with the Site 1 ROD.

6. **Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.** No unexpected difficulties.

7. **Have there been opportunities to optimize O&M, or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.** O&M of the fence-line SVE system is operated by H&S; the system is monitored daily and adjusted at the control warehouse to maintain efficiency.

8. **Do you have any comments, suggestions, or recommendations regarding the project?** Maintain contact with Steel Equities as their operations continue to expand.

#### Site 2:

1. **What is your overall impression of the project?** Mr. Taormina indicated a positive sentiment to the progress of the project. Nassau County conducts periodic inspections of the recharge basins, and repairs were performed at the intake structure on the east side of the southeast basin.

2. **Is the remedy functioning as expected?** Remedial elements in place include:  
Permeable 6-inch cover over the surficial (non-basin) residual contaminated soils on the northwestern portion of the site; and corresponding deed restrictions to limit the use of groundwater and limit worker exposure. The LUCs restrictions limiting the use of groundwater and limiting worker exposure is functioning appropriately.

3. **What does the monitoring data show?** There is no media monitoring as part of the remedy for this site.

4. **Is there a continuous on-site O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspections and activities.** LUCs are enforced through deed restrictions. The main site entrance from South Oyster Bay Road is maintained by a security check by Steel Equities. Soil cover is inspected annually by Nassau County and by the Navy.

5. **Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.**

Repairs (surface stabilization) have been made to the east intake structure in the southeast recharge basin by Nassau County. This repair does not affect the protectiveness or effectiveness of the remedy.

6. **Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.** No unexpected difficulties.

7. **Have there been opportunities to optimize O&M, or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.** There are no O&M systems or sampling performed as part of the remedy; annual inspections by the Navy and Nassau County are performed to ensure integrity of the soil cover and the basin walls. .

8. **Do you have any comments, suggestions, or recommendations regarding the project?** No comments.

### Site 3:

1. **What is your overall impression of the project?** Mr. Taormina indicated a positive sentiment to the progress of the project. Steel Equities is maintaining front gate security and soil cover.

2. **Is the remedy functioning as expected?** Remedial elements in place include:  
A soil cover over the surficial residual contaminated soils and corresponding deed restrictions to limit the use of groundwater and limit worker exposure. LUCs limiting the use of groundwater and limiting worker exposure as specified in the ROD is functioning appropriately.

3. **What does the monitoring data show?** There is no monitoring of site media performed as part of the ROD.

4. **Is there a continuous on-site O&M presence? If so, please describe staff and activities. If there is not a continuous on-site use of the groundwater and presence, describe staff and frequency of site inspections and activities.** Two remedies are implemented for this site: LUCs preventing use of groundwater and maintenance of a soil cover to prevent worker exposure. LUCs are enforced through deed restrictions; windshield inspections of site fencing restricting access occur daily through normal vehicle traffic in the area by Steel Equities. The main site entrance from South Oyster Bay Road is maintained by a security check by Steel Equities. Soil cover is maintained by Steel Equities.

5. **Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.**  
Changes have included repair of asphalt on the northwest portion of the site by Steel Equities. This repair does not affect the protectiveness or effectiveness of the remedy.

6. **Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.** No unexpected difficulties.

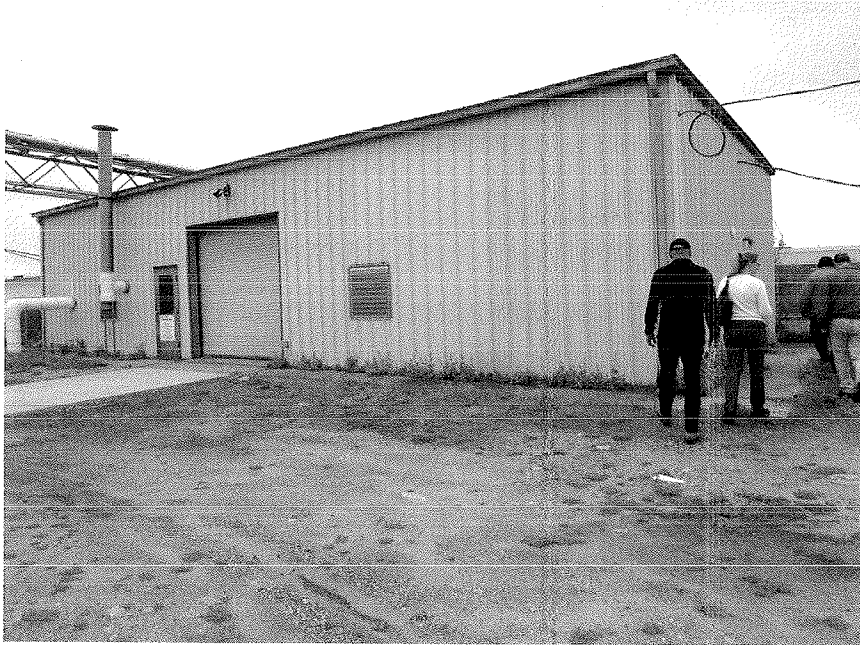
7. **Have there been opportunities to optimize O&M, or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.** There are no O&M systems or media sampling performed as part of the remedy.

8. **Do you have any comments, suggestions, or recommendations regarding the project?** Maintain contact with Steel Equities as their operations continue to expand.

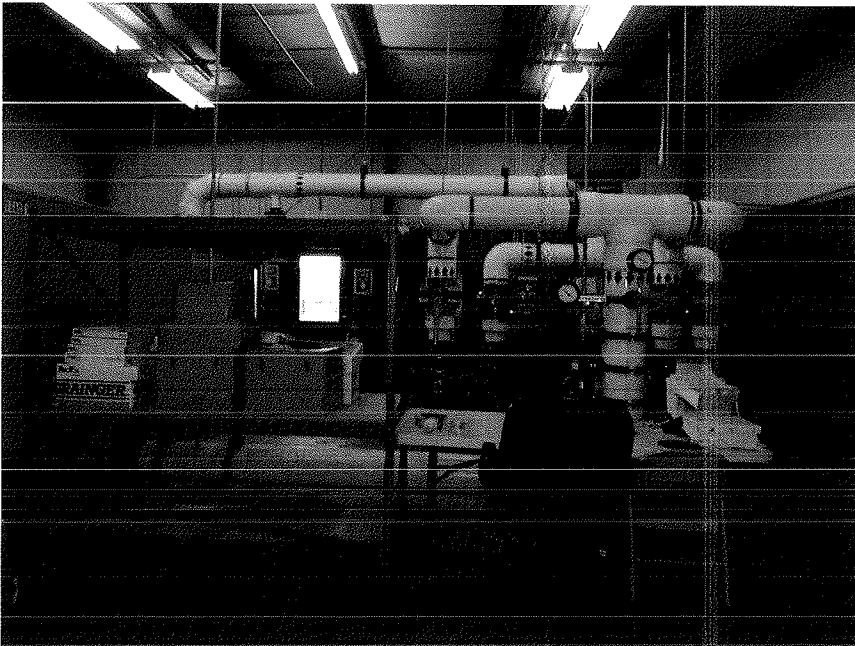


**Appendix B**  
**Annual LUC Site Inspections, May 16, 2013**  
**Photo Log**

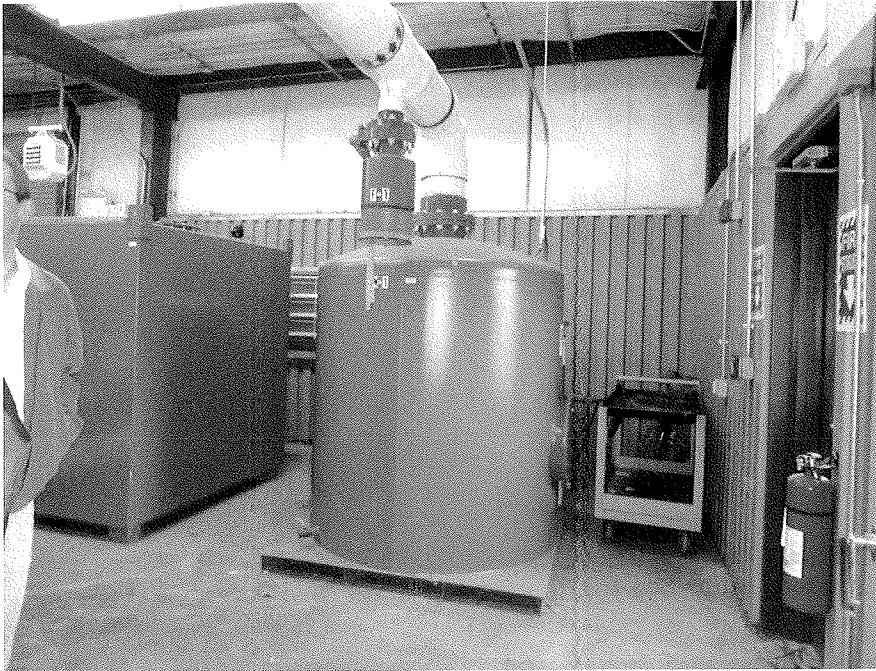
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Outside Soil Vapor Extraction System Building (Site 1) - Building located on Site 4



Site 1 Soil Vapor Extraction System



Condensation Tank – Site 1 SVE system



Site 1 looking north from south fence line



Eastern Perimeter Fence looking north - Site 1



Soil vapor extraction wells – Site 1

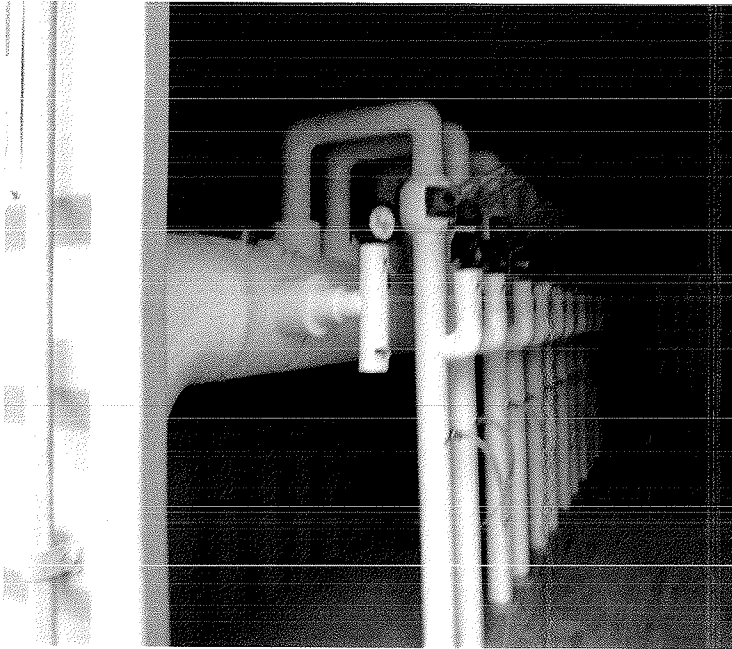




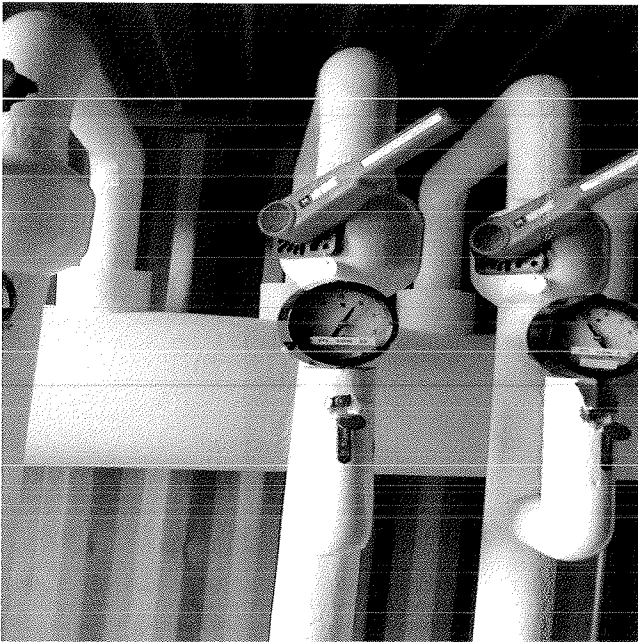
Soil vapor extraction wells 103I & 103D – Site 1



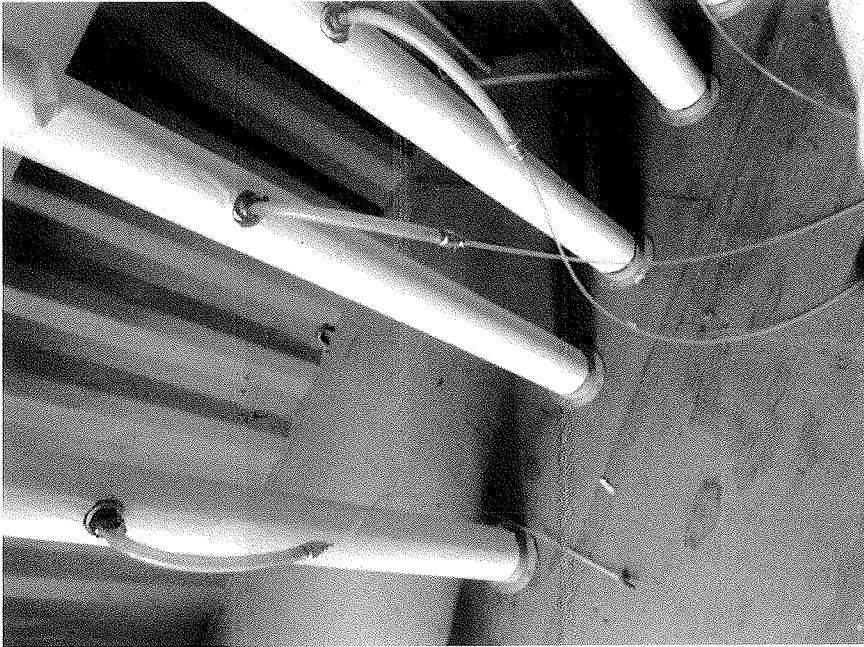
Soil vapor extraction well 102D – Site 1



SVE header system – Site 1



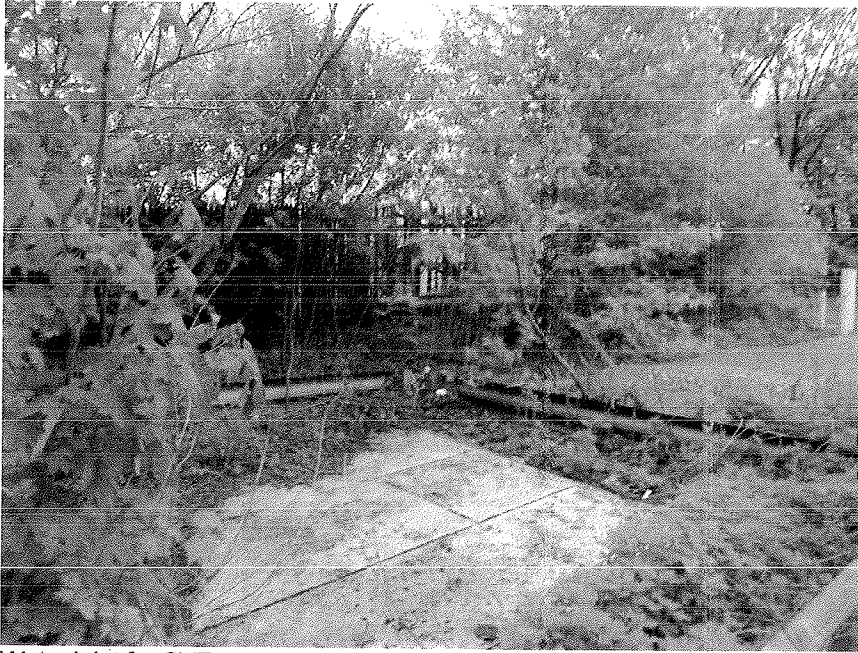
SVE lines and manifold – Site 1



SVE lines and manifold – Site 1



Conex Box that holds Site 1 SVE manifold – Site 1



Water inlet for SVE system – Site 1



Site 1 looking north from southern interior fence





Site 1 looking north from southern interior fence



Site 1 looking north from southern interior fence



Site 1 looking northeast from southern perimeter fence



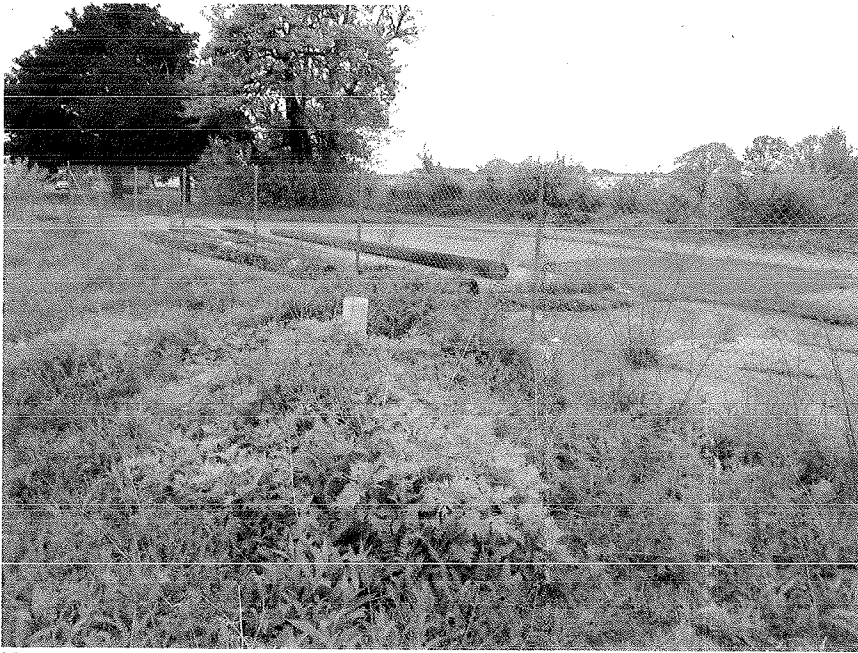
Cess pool – Site 1



SVE Gauge Point SVE PM 13S –Site 1



Western interior fence looking north – Site 1



Northern perimeter fence looking northwest – Site 1



BPSI-HN- MW271 – Site 1 (needs lock)





BPSI-HN-MW27S – Site 1 (needs lock)



Cess Pool between BPSI-HN- MW271 and BPSI-HN-MW27S – Site 1



SVE extraction wells 106I&D – Site 1



SVE extraction wells 105 I&D – Site 1

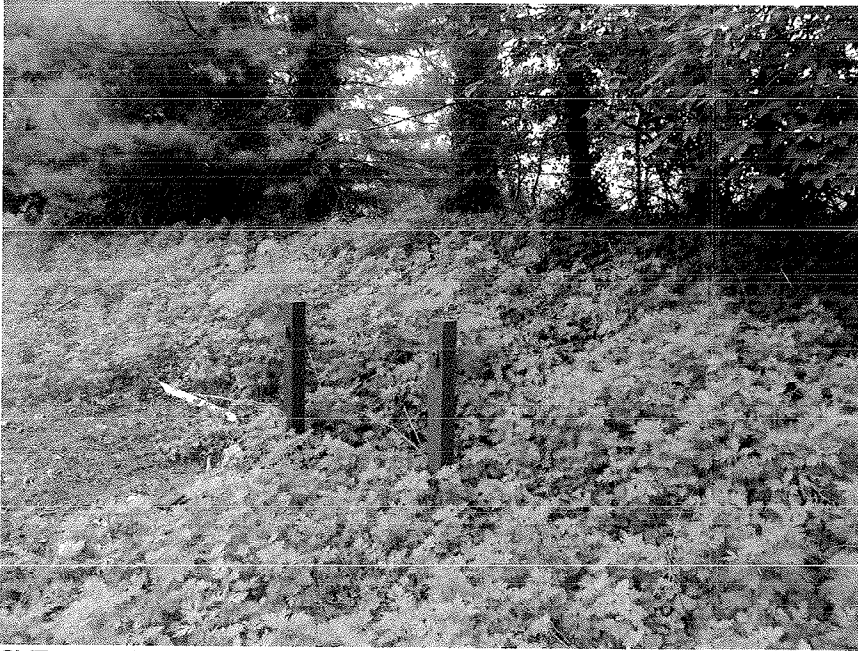


Battery between SVE105 & 104 – Site 1 (needs removal)



SVE extraction wells 104 I&D – Site 1





SVE extraction wells 103 I&D – Site 1



SVE extraction wells 102 I&D – Site 1



Western recharge basin - Site 2



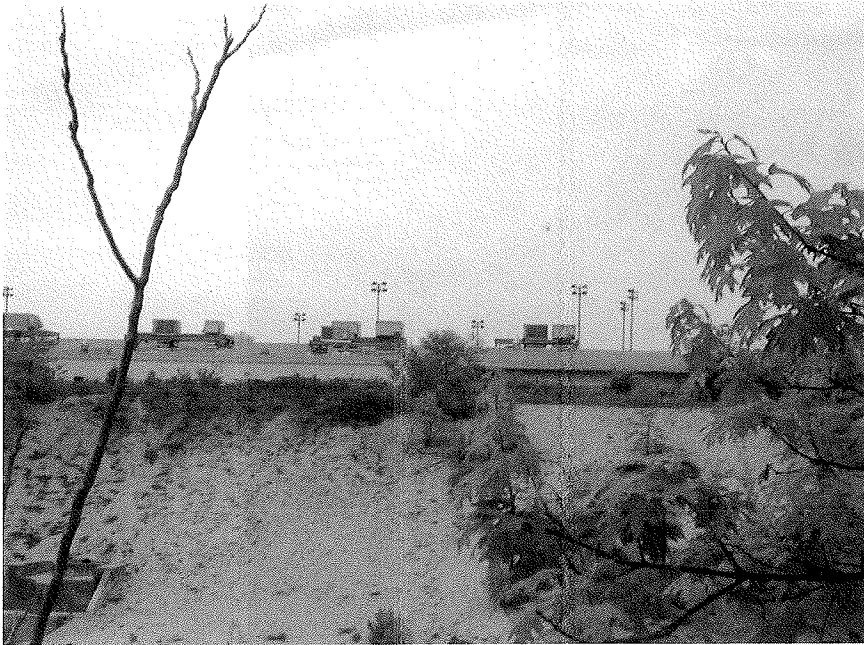
Road cover between east and west recharge basins – Site 2



South recharge basin looking east – Site 2



Outfall in Southern Basin – Site 2



South recharge basin building looking east – Site 2



Southern Basin erosion east side – Site 2





Erosion east side of Southern Basin – Site 2



Erosion east side of Southern Basin – Site 2





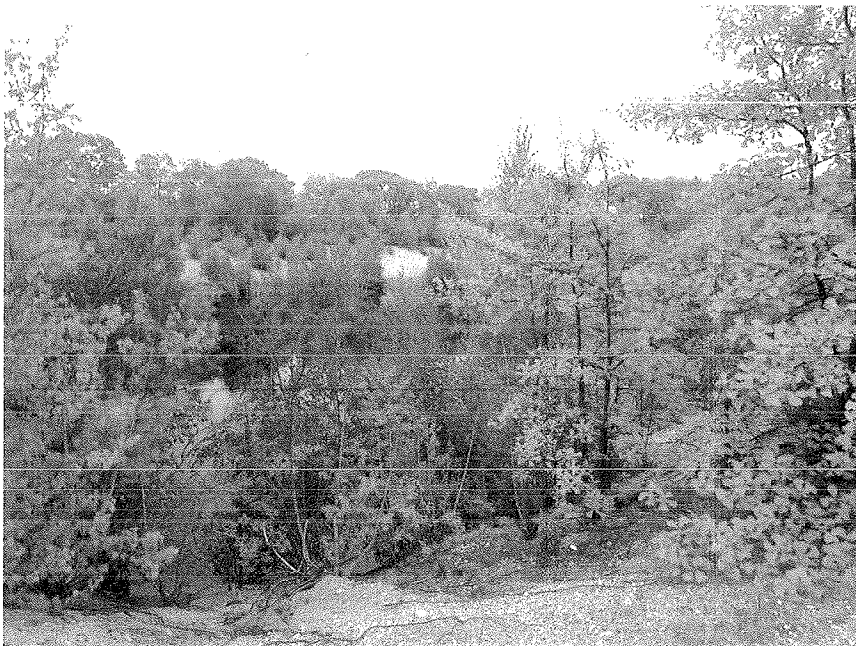
South outfall Southern Basin – Site 2



Salt shed - western portion of Site 2



Valve Distribution Box for OU3 recovery system – Southern Basin Site 2



Northern Basin – Site 2



Northern Basin – Site 2



Soil Cover - Site2



Former sludge drying beds looking west – Site 2



Former sludge drying beds and soil cover, west side of Site 2





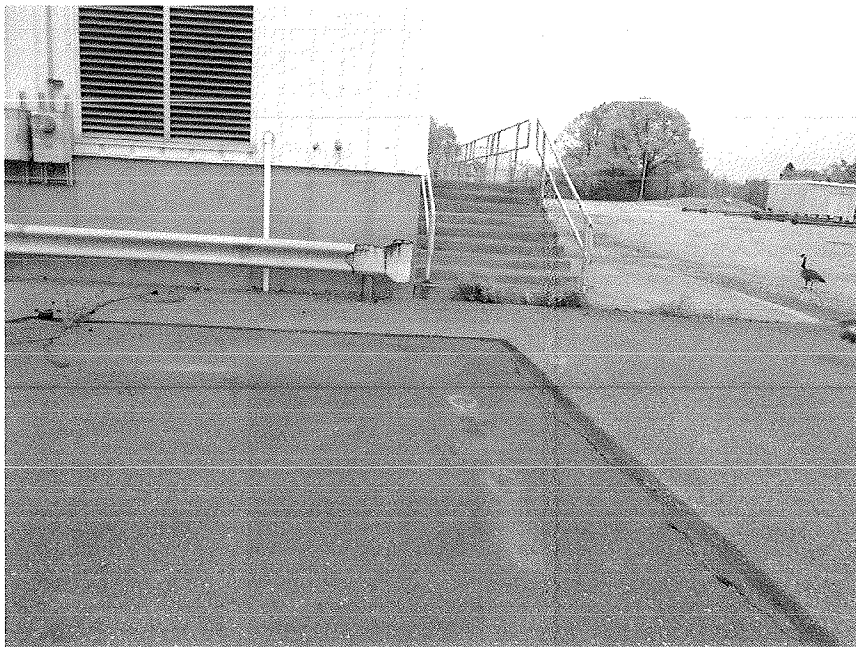
BPSI -TT MW309 D S & I - Site 2



Secondary containment for county waste water treatment tanks – Site 2



Waste Storage – Site 3



County Building and boundary line between Sites 2 and 3



Asphalt cover – Site 3



Asphalt cover over Movie Set – Site 3



Asphalt that was replaced for movie set – Site 3



Asphalt cover over Movie Set – Site 3





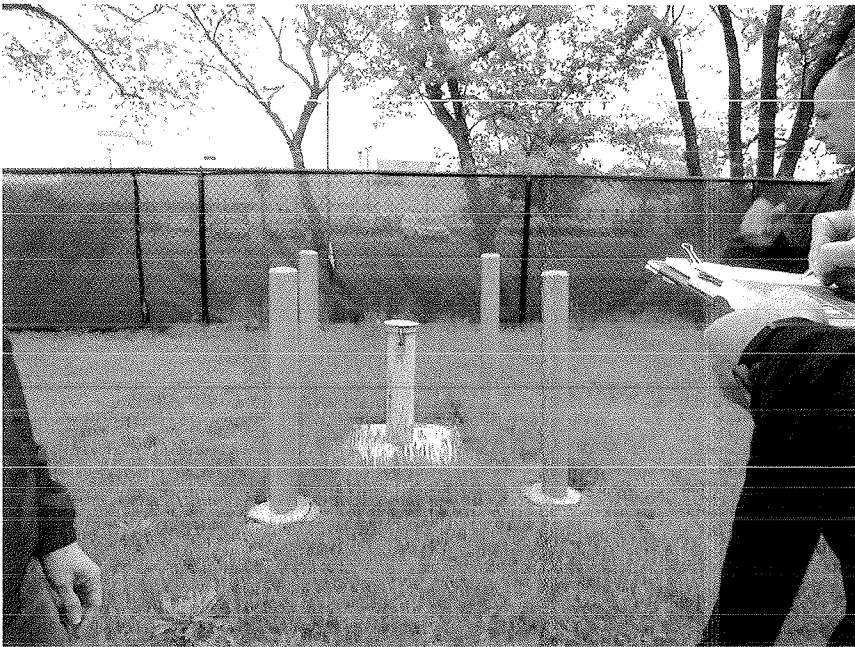
Asphalt cover over Movie Set looking south – Site 3



Asphalt cover on Site 3 looking west



Asphalt cover on Site 3 looking east



PBSI TT MW 301S and northern perimeter fence – Site 3