

***FINAL***  
**RECORD OF DECISION**  
**SITE 3**

**106<sup>TH</sup> RESCUE WING**  
**FRANCIS S. GABRESKI AIRPORT**  
**WESTHAMPTON BEACH, NEW YORK**

**APRIL 2012**



**Prepared for:**

**NGB/A7OR**  
**3501 Fetchet Avenue**  
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**National Guard Bureau Contract**  
**DAHA-92-01-D-0004**  
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## 1.0 Declaration

### 1.1 Site Name and Location

This *Record of Decision*\* (ROD) applies to *Environmental Restoration Program* (ERP) Site 3 – Former Waste Storage Area at the 106<sup>th</sup> Rescue Wing (RQW), Francis S. Gabreski Airport, in Westhampton Beach, New York.

### 1.2 Statement of Basis and Purpose

This ROD presents the *Selected Remedy of No Further Action* (NFA) for Site 3 located at the 106<sup>th</sup> RQW, Francis S. Gabreski Airport, Westhampton Beach, New York. The remedy was selected in accordance with the *Comprehensive Environmental Response, Compensation and Liability Act* (CERCLA) of 1980, as amended by the *Superfund Amendments and Reauthorization Act* (SARA) of 1986 and to the extent practicable, the *National Oil and Hazardous Substances Pollution Contingency Plan* (NCP).

This decision is based on information in the *Administrative Record File* for the site. Information not specifically summarized in this ROD or its references but contained in the Administrative Record has been considered and is relevant to the selection of the remedy at Site 3. The *New York State Department of Environmental Conservation* (NYSDEC) concurs with the Selected Remedy in this ROD (Appendix A).

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\* Definitions for italicized terms are provided in the Glossary at the end of this document.

### 1.3 Statutory Determinations

The *Air National Guard* (ANG) has determined that *Remedial Action* (RA) is not warranted at Site 3. Actual or threatened releases of hazardous substances from the site do not present an imminent or substantial endangerment to human health, welfare or the environment, and unacceptable exposures to hazardous substances from the site will not occur.

## 1.4 Authorizing Signatures

The Selected Remedy for Site 3 is NFA. Actual or threatened releases of hazardous substances from the site do not present an imminent or substantial endangerment to human health, welfare or the environment, and unacceptable exposures to hazardous substances from the site will not occur.

The forgoing represents a determination by the National Guard Bureau (NGB/A7OR) and the NYSDEC that NFA is necessary for Site 3 under CERCLA.

Concur and Recommend for Immediate Implementation:

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BENJAMIN W. LAWLESS, P.E., YF-03  
Chief, Operations Division

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Date

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New York State Department of Environment and Conservation

Concur

Non-Concur (Please Provide Reason)

The New York State Department of Environment and Conservation (NYSDEC) has concurred with the findings of this Record of Decision (ROD) for Site 3. The NYSDEC concurrence letter for the ROD is presented in Appendix A.

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## 2.0 Decision Summary

### 2.1 Site Name, Location and Description

The 106<sup>th</sup> RQW of the New York ANG is located at the Francis S. Gabreski Airport in Suffolk County, New York, on the eastern end of Long Island, approximately 80 miles east of New York City. Francis S. Gabreski Airport, formerly known as Suffolk County Airport, is located on Old Riverhead Road approximately 2 miles north of the Atlantic Ocean shoreline in Westhampton Beach. The United States Air Force leases 89 acres of runways, hangars, and maintenance/ service facilities on the southwest side of the airport, and then licenses the ANG for the property for the 106<sup>th</sup> RQW. The current lease expires on March 31, 2041 (B. Taxier, personal communication). The airport is bounded to the north by undeveloped land, to the east by the Quogue Wildlife Refuge, to the south by the Long Island Railroad, and to the west by Old Riverhead Road [PEER Consultants, P.C. (PEER) 2004a].

The 106<sup>th</sup> RQW is the parent organization of the oldest ANG unit in the country, the 102<sup>nd</sup> Rescue Squadron, which traces its roots back to the 1<sup>st</sup> Aero Company which was formed in 1908 in New York.



The peacetime mission of the 106<sup>th</sup> RQW is two-fold. First, it is tasked with conducting Search and Rescue and Medevac Operations in an area

delineated from the northeast United States, south to the Bahama Islands and east to the Azores. The 106<sup>th</sup> RQW conducts over water search and rescue operations, and operates and maintains the only rescue aircraft in the northeast designed for aerial refueling. This allows the unit to provide long range rescue operations. The 106<sup>th</sup> RQW is also tasked by the New Hampshire Fish and Wildlife Service with conducting extensive mountain search support.

Secondly, the 106<sup>th</sup> RQW provides pararescuemen on board HC-130s for deployment in the event of an emergency. In addition, pararescuemen from the unit are occasionally deployed to overseas locations to provide support to the Air Force (PEER 2004a).

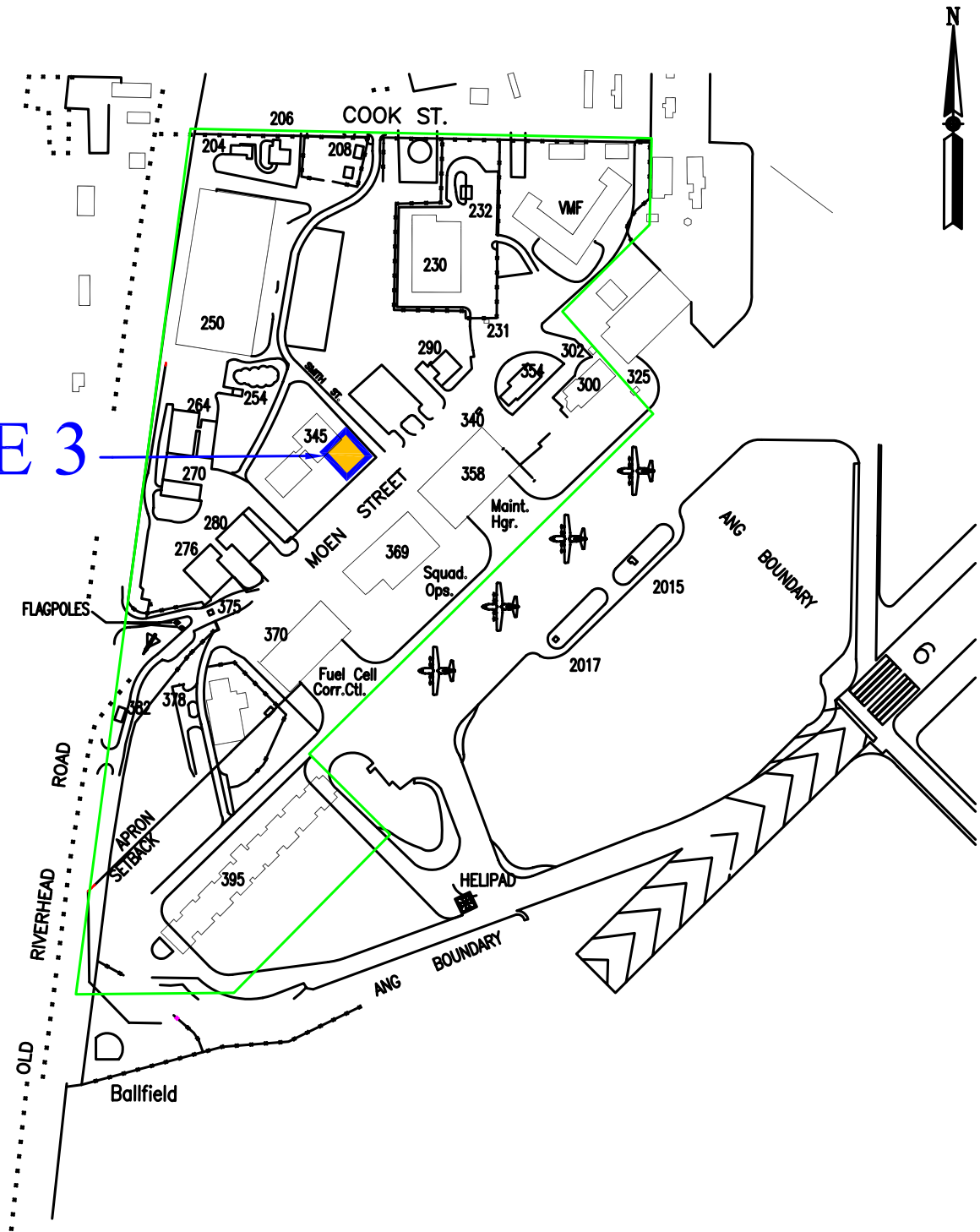
Site 3 - Former Waste Storage Area was the gravel floor of Building 282. Building 282 was formerly located at the western corner of the intersection of Moen Street and Smith Avenue (Figure 2.1). Building 282 was removed from the site in 1989, and afterwards, the site was used for the temporary storage of miscellaneous equipment and parking for mobile aerospace ground support equipment. Currently, the new Base Headquarters (Building 345) is located over a small portion of the site. The remainder the site is covered with grass.

### 2.2 Site History and Enforcement Activities

Past practices at Site 3 included the storage of shop wastes, recovered oils, and waste fuels stored in drums from 1984 to 1989. No spills were reported in association with this site; however, stained gravels and soils were noted during a records search. The cumulative volume of any potential releases was estimated to have been less than 1000 gallons. A *Remedial Investigation (RI)* was conducted at Site 3 in 2000-2001. The associated *risk assessment* concluded that the site did not pose a significant risk or threat to public health or the



**SITE 3**



SITE 3 ROD  
PROJ./3005-038

**SITE 3 LOCATION MAP  
106TH RESCUE WING  
WESTHAMPTON BEACH, NEW YORK**

**FIGURE  
2.1**

environment. Therefore, NFA was recommended for Site 3. There is no history of enforcement activities at the site.

## 2.3 Community Participation

The ANG has encouraged the public to review the relevant project documents (e.g., investigative reports) in the Administrative Record File to gain an understanding of Site 3 and the rationale for the recommendation of NFA. No Further Action is the designation used for sites that have been determined to need no further investigations or cleanup. A copy of this ROD, as well as the entire Administrative Record, is located at the Westhampton Free Library on 7 Library Avenue, Westhampton Beach, New York, or at the 106<sup>th</sup> RQW, New York Air National Guard on 150 Riverhead Road in Westhampton Beach, New York. The Administrative Record may be accessed by contacting either Jay Janoski the library Head of Reference at telephone number 631.288.3335, or the Base Environmental Manager, Lt. Shaun Denton at telephone number 631.723.7349.

The ANG provided a 45-day public comment period for the *Proposed Remedial Action Plan* (PRAP), which was prepared previously to this ROD. Additionally, the ANG held a *Public Meeting* on September 6, 2011 to discuss the PRAP and to address any questions or concerns of the public.

No comments were received from the public during the meeting or the Public Comment Period. The *Responsiveness Summary* is provided in the PRAP (PEER 2011).

## 2.4 Scope and Role of Remedial Action

Actual or threatened releases of hazardous substances from the site do not present an imminent or substantial endangerment to public

health, welfare, or the environment. Unacceptable exposures to hazardous substances from the site will not occur. As a result, the action chosen for Site 3 is NFA.

## 2.5 Site Characteristics

The following subsections summarize the environmental setting, previous investigations and overall conceptual site model for Site 3 – Former Waste Storage Area.

### 2.5.1 Physiography and Climate

The climate of the area surrounding Francis S. Gabreski Airport is humid-continental with a maritime influence characterized by periods of freeze-free temperatures, a reduced range in diurnal and annual temperature, and heavy precipitation in winter relative to that in summer. The winter season lasts about three months with the coolest temperatures generally ranging from 0°F to 10°F [ABB Environmental Services, Inc. (ABB-ES) 1997]. Average temperatures during the winter months (December through February) range from approximately 26°F to 39°F [Stone & Webster Environmental Technology and Services (S&W) 1999]. Temperatures 90°F or higher occur on average 3 to 7 days per year during summer [National Oceanic and Atmospheric Agency (NOAA) 2010]. Average temperatures during the summer months range from approximately 62°F to 81°F (S&W 1999).

The freeze-free growing season is about 200 to 210 days per year in much of Suffolk County (ABB-ES 1997). Precipitation averaged approximately 49 in. per year for the last twenty years, and dry periods during June and July are common. Average snowfall is approximately 28 in. (NOAA 2010). Net precipitation at the base is 14.5 in. per year (Dames & Moore 1986). The 2-year, 24-hour rainfall total for the installation is 3.5 in. Local climatological

data for May 2009 show that an individual rain event totaling 1.37 in. in 24 hours occurred on May 18, 2009 (NOAA 2010).

### **2.5.2 Geology**

Surface soils in the vicinity of the base belong to either the Riverhead-Plymouth-Carver Association or the Plymouth-Carver Association. As the names suggest, both soil associations are characteristically similar, with only subtle variations between them. The former occurs over 95% of the base, and is characterized by deep, nearly level to gently sloping, well-drained to excessively drained, moderately coarse textured and coarse-textured soils. The latter is generally rolling and hilly, with deep excessively well drained, coarse-textured soils on moraines. These glacially derived soils have characteristically low soil moisture content which are not suitable for most agricultural purposes and support only limited types of native vegetation (Dames & Moore 1986).

Five unconsolidated formations are found at or near the Francis S. Gabreski Airport and consist of the Raritan and Magothy formations, the Monmouth Greensand, the Gardiners Clay and the Glacial Deposits. These units dip generally to the south with the thicker units very widespread and underlying most of Suffolk County. The Glacial Deposits are the upper most deposits and directly underlie the base. These upper Pleistocene sediments are composed of glacial outwash deposits; lacustrine and marine deposits; and terminal, ground, and ablation-moraine till deposits. The sediments below the airport are mostly outwash deposits consisting of stratified fine to coarse sand and gravel of light- to dark-brown, tan, and yellowish-brown color. Approximately 100 to 120 ft of these sediments are found below the airport and above the underlying Gardiners clay. Till deposits known as the Ronkonkoma Terminal Moraine are expressed as hills approximately 2

miles north of the airport. Lacustrine and marine deposits are usually thin and discontinuous and are found locally throughout Long Island (ABB-ES 1997).

### **2.5.3 Hydrogeology**

Three aquifers and two aquitards are present in the region around the Francis S. Gabreski Airport. Overlying the bedrock is the Lloyd Aquifer. The Lloyd Aquifer correlates to the Lloyd sand member of the Raritan formation. Overlying the Lloyd is the Raritan clay member, an aquitard which is the upper member of the Raritan formation. Overlying the Raritan clay is the Magothy aquifer, a water-bearing unit which correlates to the Magothy formation. Overlying the Magothy is the Gardiners Clay, an aquitard present beneath and south of the airport.

Overlying the Gardiners Clay at the airport and overlying the Magothy north of the airport is the Upper Glacial Aquifer, a predominantly sand and gravel unit deposited during the Wisconsin glaciation (Dames & Moore 1986).

The Upper Glacial Aquifer correlates to the saturated interval of the glacial outwash deposits of the Wisconsin glaciation. This water-bearing unit is an unconfined aquifer present directly below the airport. *Groundwater* elevations are approximately 15 to 19 ft above the National Geodetic Vertical Datum, but may be less or more due to seasonal variations.

The clean, coarse sand and gravel is very porous and highly permeable. It makes a porous soil, so that a high proportion of rainfall infiltrates where it falls. There is virtually no surface runoff. The glacial deposits store large quantities of water and, due to their high porosity and permeability, yield large quantities of water to wells.

*Hydraulic conductivity* of the outwash deposits was estimated to be about 2000 gallons per day

(gpd)/ft<sup>2</sup> [ $9.4 \times 10^{-2}$  centimeter/second (cm/s)] (ABB-ES 1997), and *transmissivity* is approximately 200 gpd/ft ( $2.9 \times 10^{-1}$ cm<sup>2</sup>/s) (Dames & Moore 1986). The direction of groundwater movement beneath the Francis S. Gabreski Airport (i.e., in the upper glacial aquifer) is toward the south-southeast. Depth to groundwater averages 28 to 45 ft below ground surface (bgs) (PEER 2004a). Slug tests performed on installation *groundwater monitoring wells* and piezometers (screened in the upper glacial aquifer) produced hydraulic conductivities ranging from  $1.6 \times 10^{-2}$  to  $5.2 \times 10^{-2}$  cm/sec (Dames & Moore 1986).

The upward movement of water from the Magothy Aquifer would cause the upper glacial water to flow horizontally toward surface water discharge points. Migration of contaminants downward into lower aquifers is very unlikely (Dames & Moore 1986).

#### **2.5.4 Surface Water Hydrology**

The topography of the Francis S. Gabreski Airport area is such that surface water runoff flows in a southerly and southeasterly direction. Precipitation at the airport mainly percolates into the soil and moves in the subsurface aquifers although some may move short distances as runoff. The airport drains to Aspatuck Creek located near the southeast corner of the installation. This creek flows into Quantuck Bay, which is separated from the Atlantic Ocean by a narrow barrier island (S&W 1999).

#### **2.5.5 Ecology**

The Francis S. Gabreski Airport is located within the Long Island Pine Barrens. The Pine Barrens are characterized by open, sunlit woodlands dominated by pitch pine interspersed with white and scarlet oak. In the immediate area of the airport, the Pine Barrens are characterized by a transition from 33 to 83 ft tall pitch pines. The nearby Quogue Wildlife Refuge is characterized by dwarf pitch pines ranging

from 3 to 6 ft tall. The airport itself is characterized by surrounding wooded areas consisting of 25 ft pitch pines and scattered scrub oak (Dames & Moore 1986).

Of the wildlife, birds are the most abundant in the area. Few mammals inhabit the region. Of those that do, the most common are the whitetail deer and red fox. Large animals generally do not inhabit the airport but may pass through.

The following are the Threatened and Endangered Species potentially located within a 4-mile radius of the site (ABB-ES 1997).

- Northern Harrier (*Circus cyaneus*)
- Osprey (*Pandion haliaetus*)
- Tiger Salamander (*Ambystoma tigrinum tigrinum*)
- Eastern Mud Turtle (*Kinosteron subrubrum subrubum*)

A more detailed description of the vegetation and animal life in the area is provided in the Phase I Records Search (Dames & Moore 1986).

#### **2.5.6 Previous Site Characterization Activities**

The previous investigations and actions at Site 3 are briefly discussed below.

##### **Phase I Records Search - 1986 to 1987**

A Phase I Records Search was conducted for several sites at the base in 1986 (Dames & Moore 1986) and 1987 [Hazardous Materials Technical Center (HMTC) 1987]. The records search by HMTC identified six sites for further investigation. Site 3 was one of the six selected sites (HMTC 1987).

##### **Site Investigation - 1994**

In 1994, a *Site Investigation* was conducted to investigate soil and groundwater at Site 3 using direct-push technology (ABB-ES 1997). The results indicated that silver was detected in subsurface soil

at 15-17 ft bgs at a concentration exceeding the *action level* that was applicable at the time of the Site Investigation. This concentration of silver would not exceed the current action level. Additionally, chromium was detected in groundwater at a concentration exceeding the action level from one direct-push location (DP-016) as shown on Figure 2.2. Because the groundwater sample was collected from a direct-push boring, the level of chromium was attributed to high levels of *entrained sediments* due to sampling methodology (ABB-ES 1997). The presence of entrained sediments in groundwater samples may produce *false-positive* results for certain constituents, especially metals. The report recommended NFA for Site 3 (ABB-ES 1997).

#### **Remedial Investigation - 2000 to 2001**

An RI was conducted at the base from 2000 to 2001 (PEER 2004a). The 2000 to 2001 RI activities at Site 3 were conducted to:

- evaluate the suspected presence of polychlorinated biphenyls in soil;
- assess surface soils for the presence of metals and toluene; and
- determine the presence or absence of silver contamination in subsurface soils;
- confirm or deny the presence of chromium contamination in groundwater; and
- define the extent of contamination.

A total of three direct-push borings were advanced at Site 3 for collection of soil samples and groundwater screening samples. In addition, one new monitoring well was installed and groundwater samples were collected from the newly installed well and one existing well. No contaminants were detected in subsurface soil or groundwater. Cadmium and lead were identified as *contaminants of concern (COCs)* in surface soil at one location (S3-DP02) at Site 3 (Figure 2.3). The risk assessment

indicated that the COCs did not pose unacceptable risks to human health. Therefore, NFA was recommended for Site 3 (PEER 2004a).

#### **NFRAP DD - 2004**

In 2004, a No Further Response Action Planned Decision Document (NFRAP DD) was prepared for Site 3 that summarized the results and conclusions of the previous investigations at the site. The NFRAP DD recommended NFA for Site 3 (PEER 2004b).

#### **Proposed Remedial Action Plan - 2011**

In 2011, the PRAP was prepared to present the *Preferred Alternative* of NFA for Site 3. The NYSDEC has concurred with Preferred Alternative of NFA. The NYSDEC concurrence letter is provided in Appendix A. Additionally, no comments were received from the public during the Public Meeting or the Public Comment Period (PEER 2011).

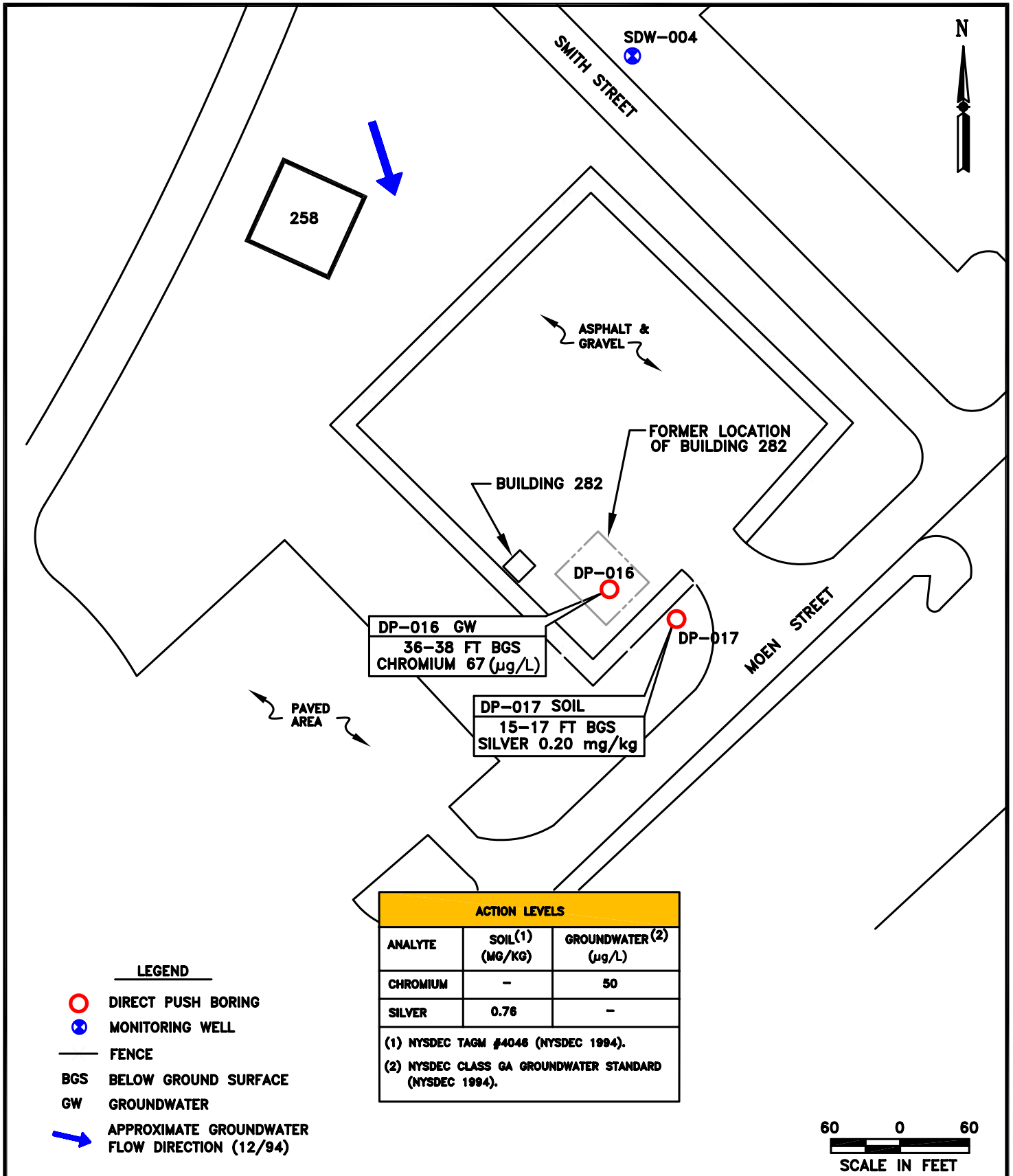
#### **2.5.7 Nature and Extent of Contamination**

As previously described in the 2000 to 2001 RI, no contaminants were detected in subsurface soil or groundwater. Cadmium and lead were identified as COCs in surface soil at one location (S3-DP02) at Site 3 (Figure 2.3).

#### **2.5.8 Conceptual Site Model**

Access to the base is restricted to base personnel and authorized guests only. The base is fenced and Site 3 is located within the base perimeter fence. Future plans call for the base and airport to remain active indefinitely, with no future plans for any residential usage of the property.

The results of the risk assessment indicate that potential risks associated with lead and cadmium in surface soils at Site 3 is acceptable. Exposure to lead and cadmium would only occur during excavation activities. Potential exposure to site



SOURCE: ABB 1997

SITE 3 ROD  
PROJ./3005-038

**SITE 3 - 1994 SITE INVESTIGATION RESULTS  
106TH RESCUE WING  
WESTHAMPTON BEACH, NEW YORK**

**FIGURE  
2.2**

<b>S3-DP01 SOIL</b>		
0-0.2 FT	CADMIUM	ND
	LEAD	1.1 mg/kg

BUILDING 282

S3-DP01

FORMER LOCATION OF BUILDING 282

ASPHALT

S3-MW01

S3-DP02



GRASS

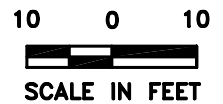
<b>S3-DP02 SOIL</b>		
0-0.2 FT	CADMIUM	6.9 mg/kg
	LEAD	270 mg/kg

ACTION LEVELS	
ANALYTE	SURFACE SOIL <sup>(1)</sup> (mg/kg)
CADMIUM	0.27
LEAD	4.4

NOTE:  
(1) NYSDEC TAGM #4046

**LEGEND**

-  DIRECT PUSH BORING
-  MONITORING WELL
- ND NOT DETECTED



SITE 3 - 2000-2001 REMEDIAL INVESTIGATION RESULTS  
106TH RESCUE WING  
WESTHAMPTON, NEW YORK

FIGURE  
2.3



contaminants can be minimized or eliminated by following good work practices and required safety procedures during any excavation activities. Therefore, no exposures are expected to contaminants in surface soils at the site.

## 2.6 Current and Potential Future Land and Resource Uses

This section of the ROD discusses the current and reasonably anticipated future land uses and current and potential beneficial groundwater uses at the 106<sup>th</sup> RQW and vicinity.

### 2.6.1 Current Land Uses

The Francis S. Gabreski Airport is located within the Long Island Pine Barrens. The Pine Barrens are characterized by open, sunlit woodlands dominated by pitch pine interspersed with white and scarlet oak (Dames & Moore 1986). The Pine Barrens dominate areas to the north and west of the airport while the Quoque Wildlife Refuge and commercial areas are located to the east and south, respectively.

The airport is currently home to the 106<sup>th</sup> RQW and the Hampton Business and Technology Park. The airport consists of over 1,400 acres and has been used by the federal government for military operations since 1942 (Latino 2002). The technology park is being developed as a corporate center with emphasis on high-technology, homeland security and communications industries. The zoning map for Westhampton Beach, New York shows that the land encompassing the airport, technology park and base is classified as business and industrial (Westhamptonbeach.org 2010).

Groundwater is the only water supply source for Suffolk County. Most of the water in the vicinity of the Francis S. Gabreski Airport is obtained from the upper glacial aquifer; the rest is obtained from the

Magothy and Lloyd aquifers. At present, Suffolk County Water Authority supplies the majority of the water in the area; the rest is supplied by several smaller companies. Suffolk County Water Authority operates 18 wells in 4 well fields within a 4-mile radius of the site (PEER 2006). Information on private water wells was researched at the NYSDEC Division of Water, Water Supply, at Stony Brook, New York. Access to NYSDEC files was obtained under the Freedom of Information Act (FOIA), FOIA Request Number 735. According to the information obtained, all residential properties on major and secondary roads in areas directly downgradient of the base currently have access to the public water supply system (PEER 2004a).

### 2.6.2 Reasonably Anticipated Future Land Uses

In the future, the land surrounding the base to the east and west will likely remain undeveloped due to the presence of the Pine Barrens and the Quoque Wildlife Refuge. The land to the north contains the airport and will continue to be classified for business and industrial uses, while land to the south will likely remain residential. The current lease for the ANG property expires in 2041 (Section 2.1). Therefore, it is anticipated that the land encompassing Site 3 will continue to be used for base facilities and as mission areas for the foreseeable future. Accordingly, water resources will likely remain undeveloped in the vicinity of the base.

## 2.7 Summary of Site Risks

### 2.7.1 Human Health Risk Assessment

As a part of the 2000-2001 RI, the ANG evaluated potential risks associated with the COCs detected at Site 3. The risk assessment included evaluating contaminant *migration* and exposure pathways.



Migration pathways define the route and method by which a chemical moves from the source to a location where people could potentially be exposed. Generally, people may be exposed to COCs through direct contact (e.g., touching), breathing (e.g., inhaling dust), or swallowing (e.g., drinking or eating) the affected soil or groundwater.

The COCs identified at Site 3 consist of cadmium and lead which were found in one surface soil location at concentrations exceeding the action levels. Cadmium and lead have a low tendency to migrate due to *adsorption*. Adsorption of metals is exacerbated in the presence of silty or clayey soils. Soils at the base consist mostly of silty sands. Groundwater testing indicates that the COCs have not migrated from surface soils to site groundwater. No realistic exposure pathways were identified for cadmium during the risk assessment. Additionally, the risk assessment indicated that risks associated with lead at the site are within acceptable limits. Therefore, potential risks to human health and the environment due to the COCs at the site are negligible.

### **2.7.2 Ecological Risk**

The most likely exposure pathway to potential ecological receptors would be exposure through impacted surface water. The only surface water body downgradient of Site 3 is Aspatuck Creek. Potential mechanisms for transport of contaminants from the site include surface water runoff. Aspatuck Creek is located approximately 3000 ft southeast of Site 3. Aspatuck Creek receives surface water runoff from the base, but infiltration rates at the base are relatively high and little surface water leaves the base as runoff. Additionally, the majority of Site 3 is covered with grass which effectively eliminates, or significantly limits erosion of impacted soils by surface runoff during high rainfall events. On the basis of the above discussion, it is not likely that surface water bodies in the vicinity of

the base will be impacted by contaminants from the site. Therefore, exposure for ecological receptors to contaminants from Site 3 is not expected.

## **2.8 Selected Remedy**

The Selected Remedy for Site 3 is NFA. The ANG has met and consulted with the NYSDEC concerning the Selected Remedy. In accordance with an agreement made with the NYSDEC, no further investigation or action will be required at Site 3. The NYSDEC has concurred with the ROD (Appendix A).

### 3.0 Responsiveness Summary

#### 3.1 Stakeholder Issues and Lead Agency Responses

The ANG provided a 45-day Public Comment Period for the PRAP, which was prepared previously to this ROD. Additionally, the ANG held a Public Meeting on September 6, 2011, to discuss the PRAP for Sites 2, 3 and 5, and to address any questions or concerns of the public.

No comments were received from the public during the meeting or the Public Comment Period. The Responsiveness Summary is presented in the PRAP (PEER 2011).

#### 3.2 Technical and Legal Issues

There are no technical or legal issues that require further discussions regarding the NFA decision at Site 3.



## 4.0 Selected Remedy

### **Overall Protection of Human Health and the Environment**

The No Further Action decision for the site will be protective of human health and the environment. The site will pose no unacceptable risks to human health or the environment and previous sampling results have shown that contaminants have not migrated to *downgradient* monitoring wells.

### **Compliance with ARARs**

At Site 3, two contaminants were detected (cadmium and lead) at concentrations exceeding action levels in surface soils. The risk assessment indicated that risks associated with impacted surface soil at the site were within acceptable limits. Therefore, the No Further Action decision is in compliance with *Applicable or Relevant and Appropriate Requirements* (ARARs).

### **Long-Term Effectiveness and Permanence**

There are no realistic exposure routes to the elevated cadmium and lead in soils at Site 3, and the site poses no unacceptable risks to human health or the environment.

### **Reduction of Toxicity, Mobility, or Volume through Treatment**

The detection of cadmium and lead at Site 3 were limited to only one direct-push probe, and the analytical results show that cadmium and lead are not present in site groundwater. Additionally, risks due to cadmium and lead at Site 3 were determined to be negligible, and the site poses no unacceptable risks to human health or the environment.

### **Short Term Effectiveness**

The No Further Action decision at Site 3 will maintain reliable protection of human health and the environment over the short term. There are no realistic exposure routes to lead and cadmium in soils at Site 3, and the site poses no unacceptable risks to human health or the environment.

### **Implementability**

No Further Action will be easily implemented at Site 3.

### **Cost**

The cost associated with the No Further Action decision will be minimal.

### **State and Community Acceptance**

Based on the information provided in the PRAP, the ANG and NYSDEC believe that the Selected Remedy is sufficient to allow for proper closure of Site 3. After implementing the Selected Remedy of No Further Action at Site 3, no further investigation of the site should be warranted. The Selected Remedy chosen for this site is in accordance with CERCLA and the NCP, and adequately provides for the protection of human health and the environment.



## List of Acronyms

ABB-ES	ABB Environmental Services, Inc.
ARAR	Applicable or Relevant and Appropriate Requirements
ANG	Air National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
cm/s	centimeters per second
COC	contaminants of concern
EM	Environmental Manager
ERP	Environmental Restoration Program
FOIA	Freedom of Information Act
gpd	gallons per day
HMTC	Hazardous Materials Technical Center
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NFRAP DD	No Further Response Action Planned Decision Document
NGB	National Guard Bureau
NOAA	National Oceanic and Atmospheric Agency
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
PEER	PEER Consultants, P.C.
PRAP	Proposed Remedial Action Plan
RA	Remedial Action
RI	Remedial Investigation
ROD	Record of Decision
RQW	Rescue Wing
SARA	Superfund Amendments and Reauthorization Act
S&W	Stone & Webster Environmental Technology and Services

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## Glossary

**Action Levels:** Regulatory levels for contaminants that are recommended by federal, state or local regulatory programs. Some type of action (i.e., *Remedial Action*) or other response (i.e., further study) may be triggered when a contaminant concentration exceeds the action level.

**Administrative Record File:** A compendium of all documents relied upon to select a *Preferred Alternative for Remedial Action or No Further Action*.

**Adsorption:** The physical process that occurs when a chemical adheres to the surfaces of, or in the pores of, an adsorbent material such as soil or rock. Adsorption is a physical process which occurs without a chemical reaction.

**Air National Guard (ANG):** A civilian reserve component of the United States Air Force that provides prompt mobilization during war and assistance during national emergencies.

**Applicable or Relevant and Appropriate Requirements (ARARs):** A standard, requirement, limitation or criterion that defines

the minimum level of protection that must be provided by a remedy selected and implemented under CERCLA.

**Comprehensive, Environmental Response, Compensation and Liability Act (CERCLA):** The federal law that addresses problems resulting from releases of hazardous substances to the environment, primarily at inactive sites.

**Contaminants of Concern (COCs):** Chemicals present in the environment that do not occur there naturally and/or that are detected at concentrations that exceed federal, state or locally mandated levels.

**Downgradient:** A location of lower *groundwater* elevation toward which *groundwater* is moving.

**Entrained Sediments:** Sediments suspended or carried by *groundwater* within the monitoring well due to the process involved in installing the well. Chemicals tend to adhere to the entrained sediments due to *adsorption* and may negatively impact analytical results or result in *false positives*.

**Environmental Restoration Program (ERP):** The ERP was implemented by the Department of Defense to comply with CERCLA requirements for cleanup of contaminated sites at military installations.

**False Positive:** An incorrect result of a test which erroneously detects a chemical when in fact, it is not present.

**Groundwater:** *Groundwater* is defined as water beneath the ground surface that supplies wells and springs; water in the zone of saturation where all openings in rocks and soil are filled, the upper surface of which forms the water table. *Groundwater* is often extracted from

municipal or domestic wells to be used for drinking water.

**Groundwater Monitoring Well:** A well drilled either on or near a suspected contaminated site for the purpose of evaluating the direction of *groundwater* flow, determining the types and concentrations of contaminants present and the vertical or horizontal extent of contamination.

**Hydraulic Conductivity:** This term describes the ease with which water can move through pore spaces or fractures in soil or rock.

**Migration:** The movement of contaminants through soil or porous and permeable rock.

**New York State Department of Environment and Conservation (NYSDEC):** The state agency responsible for most environmental issues in New York. The NYSDEC helps ensure environmental quality, offers technical and financial assistance, and enforces environmental regulations.

**National Oil and Hazardous Substances Pollution Contingency Plan (NCP):** The Federal Government's plan for responding to oil spills and hazardous substance releases. The NCP has the force of a federal regulation.

**No Further Action (NFA):** No Further Action is the designation used for a site that has been determined to need no further investigation or cleanup activities. It can also include sites where contamination has been left in place because it meets certain cleanup standards.

**Proposed Remedial Action Plan (PRAP):** The PRAP is a document used to facilitate public involvement in the remedy selection process. The document presents the lead agency's preliminary recommendation concerning how

best to address any contamination at a site, presents alternatives that were evaluated for the site, and explains the reasons the lead agency recommends the *Preferred Alternative*.

**Preferred Alternative:** The alternative selected to address contamination at site from a comprehensive evaluation of potential alternatives. The *Preferred Alternative* can change in response to public comment or new information.

**Public Meeting:** An announced meeting conducted by the ANG designed to facilitate public participation in the decision-making process and to assist the public in gaining an informed view of the environmental issues at a particular site.

**Record of Decision (ROD):** A document that documents the final *Preferred Alternative* (e.g., cleanup action or *No Further Action*) approved by the regulatory agencies that is required for CERCLA and *Superfund* sites.

**Remedial Action:** An action taken to clean up contaminated sites.

**Remedial Investigation (RI):** An RI is a detailed study of a site or group of sites that is conducted after a determination that contamination is present. The RI involves far greater and more detailed studies than those conducted during a *Site Investigation*.

**Remediate:** Reversing or mitigating environmental damage through various methods.

**Responsiveness Summary:** A summary of oral or written public comments.

**Risk Assessment:** A qualitative and quantitative evaluation of the risk posed to human health

and/or the environment by the actual or potential presence of contaminants.

**Selected Remedy:** The preferred remedial action for a site is presented to the public in the Proposed Plan. Following receipt and evaluation of public comments, if any, on the Proposed Plan, stakeholders make the final decision and document the selected remedy in the ROD.

**Site Investigation:** The main objectives of the site investigation are to determine whether a release has occurred and to gather sufficient information to determine if the site has the potential to pose a threat to human health or the environment.

***Superfund Amendments and Reauthorization***

**Act (SARA):** SARA amended CERCLA in 1986.

SARA's changes stressed the importance of state and federal environmental laws and regulations; increased state involvement; increased the focus on human health; and encouraged greater citizen participation in making decisions on how sites should be cleaned up.

**Transmissivity:** The rate at which groundwater flows through an aquifer.

**Upgradient:** A location of higher *groundwater* elevation from which *groundwater* is moving.

**Appendix A**

**No Further Action Concurrence Letter from the New York State Department of  
Environment and Conservation**



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**New York State Department of Environmental Conservation**

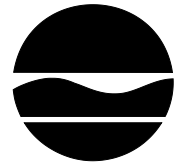
**Division of Environmental Remediation**

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625 Broadway, Albany, New York 12233-7015

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Joe Martens  
Commissioner

March 8, 2012

Ms. Jody Murata  
Environmental Remediation Branch  
Air National Guard/CEVR  
3500 Fetchet Avenue  
Andrews AFB, MD 20762-5157

RE: Suffolk County Air National Guard  
Francis S. Gabreski Airport  
106th Rescue Wing, Westhampton Beach, NY  
Site 3 Record of Decision  
January 2012

Dear Mr. Murata:

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed the January 2012 Record of Decision for Site 3, Former Hazardous Waste Storage Area, at the Suffolk County Air National Guard Base in Westhampton Beach, NY. Site 3 is not listed in the New York State Registry of Inactive Hazardous Waste Disposal Sites.

The State concurs with the findings of the January 2012 Site 3 Record of Decision for No Further Action at Site 3.

If you have any questions please contact John Swartwout at (518) 402-9620.

Sincerely,

A handwritten signature in black ink that reads "James B. Harrington".

James B. Harrington, P.E.  
Bureau Director  
Remedial Bureau A

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