# FINAL RECORD OF DECISION SITE 8

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

# **APRIL 2012**



# **Prepared for**

NGB/A7OR 3501 Fetchet Avenue Andrews AFB, MD 20762

under National Guard Bureau Contract DAHA-92-01-D-0004 Delivery Order No. 034

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#### LIST OF ACRONYMS

NGB/A7OR National Guard Bureau, Operations Restoration Branch

ANG Air National Guard
bgs below ground surface
COC contaminant of concern
EM Environmental Manager

ERP Environmental Restoration Program

FOIA Freedom of Information Act
MCL Maximum Contaminant Level

NCP National Oil and Hazardous Substances Pollution Contingency Plan

NFRAP DD No Further Response Action Planned Decision Document

NFA No Further Action
NGB National Guard Bureau

NOAA National Oceanic and Atmospheric Agency

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 SCDHS Suffolk County Department of Health Services

TCE trichloroethylene

TCRA Time Critical Removal Action

SCDHS Suffolk County Department of Health Services

SVOC semivolatile organic compound VOC volatile organic compound

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#### 1.0 DECLARATION

#### 1.1 SITE NAME AND LOCATION

This Record of Decision (ROD) presents the Selected Remedy for Site 8 – Old Base Septic Systems at the 106<sup>th</sup> Rescue Wing (RQW), Francis S. Gabreski Airport, New York Air National Guard (ANG), Westhampton Beach, New York.

#### 1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedy for the Site 8 which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record file for Site 8. 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 the site. The state of New York, acting through the New York State Department of Environmental Conservation (NYSDEC), concurs with the selected remedy outlined in the ROD as documented in the *Final Meeting Minutes for the Proposed Remedial Action Plan and Record of Decision for Site 8*, dated September 16, 2008 (Attachment A), and in the NYSDEC concurrence letter (Attachment B).

#### 1.3 SELECTED REMEDY

The chosen action for Site 8 consists of:

- collecting an additional round of groundwater samples to confirm that groundwater at monitoring well MW-009 has not been adversely impacted;
- submitting the samples to a laboratory for analysis;

- presenting the analytical results in a Letter Report; and
- recommending NFA for Site 8.

The additional round of groundwater sampling is being conducted at the request of the NYSDEC, and will include collection and analysis of samples for total and dissolved metals (copper only) to confirm that groundwater at monitoring well MW-009 has not been adversely impacted. The results will be used to provide evidence that elevated copper concentrations were inadvertently produced by entrained sediments at the well. Once the sampling and analyses are complete, then no further investigation or action will be necessary at Site 8 (PEER 2008).

#### 1.4 STATUTORY DETERMINATIONS

The National Guard Bureau (NGB) has determined that no additional Remedial Action (RA) is necessary at Site 8. 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.

#### 1.5 AUTHORIZING SIGNATURES

The selected remedy for Site 8 consists of No Further Action with monitoring to confirm that groundwater at monitoring well MW-009 is not adversely impacted. Previous removal actions eliminated the need to conduct additional RA at the site, and ensured protection of human health and the environment at Site 8. No 5-year revisions are necessary. The forgoing represents a determination by the National Guard Bureau (NGB/A70R) and the NYSDEC that no further RA is necessary for Site 8 under CERCLA.

Concur	r and Recommend for Immediate Imp	plemen	tation:
	MIN W. LAWLESS, P.E., YF-03 Operations Division		Date
New Yo	ork State Department of Environmen	nt and C	onservation
[X]	Concur	[]	Non-Concur (Please Provide Reason)

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the Record of Decision (ROD) for Site 8. The NYSDEC concurrence letter for the ROD is presented in Attachment B.

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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, New York (Figure 2.1).

Site 8 is a composite of underground structures including cesspools, septic tanks, distribution boxes, oil/mud traps, and dry wells at numerous locations throughout the base. Initial environmental studies performed at Site 8 indicated that the site had the potential to cause environmental impacts and warranted further assessment and/or action. As of 2002, most of the structures making up the Old Base Septic Systems have been removed, while others have been abandoned in place.

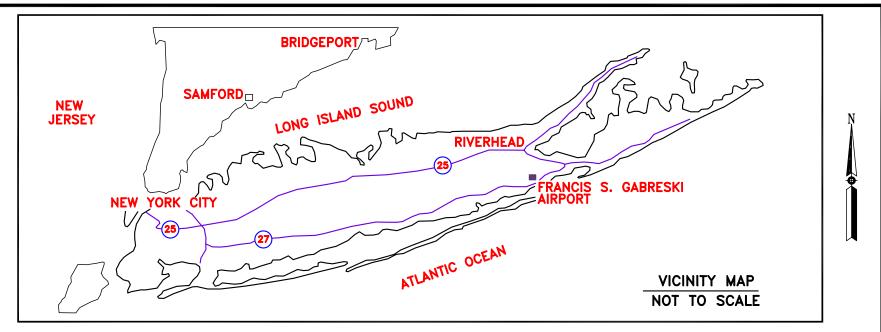
Additional information concerning Site 8 is detailed in Section 2.5.

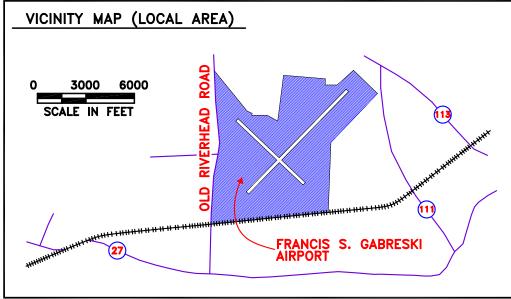
The airport is owned by the Suffolk County Department of Public Works. The Francis S. Gabreski Airport Master Plan reports the current area of the airport as 1,486 acres (Latino 2002). The United States Air Force leases approximately 89 acres of runways, hangars, and maintenance/service facilities on the southwest side of the airport from Suffolk County, and then licenses the property to the ANG. The current lease expires on March 31, 2041. 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 2006).

#### 2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

The airport property was acquired in 1942 by the Civil Aeronautics Authority and was used for military training, aircraft maintenance, and armed forces support until 1969. As of 1958, the airport occupied approximately 2,500 acres of relatively flat terrain. Since 1970, Suffolk County has leased portions of the airport to numerous tenants, including the New York ANG. In 1990, Suffolk County purchased the property and began operation of Suffolk County Airport.

The airport was renamed the Francis S. Gabreski Airport in 1999, in honor of Colonel Francis S. Gabreski, World War II and Korean War Veteran, and former Base Commander (PEER 2006). 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 Squadron, was formed in 1908 in





PROJ./3005-034 ROD/FIG 2.1

FRANCIS S. GABRESKI AIRPORT AND ANG BASE LOCATION
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE 2.1

6

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. Pararescuemen from the unit are occasionally deployed to overseas locations to provide support to the Air Force (PEER 2006).

There is no history of enforcement activities at the site.

#### 2.3 COMMUNITY PARTICIPATION

The ANG has encouraged the public to review the project documents and other relevant documents in the Administrative Record File to gain an understanding of Site 8, and the rationale for the additional groundwater sampling which will be followed by an NFA recommendation. NFA is the designation used for a site that has been determined to need no further investigation or cleanup activities. A copy of this ROD, as well as the entire Administrative Record, is located at the 106<sup>th</sup> Rescue Wing, New York Air National Guard on 150 Riverhead Road in Westhampton Beach, New York. The Administrative Record may be accessed by contacting the Base Environmental Manager (EM), 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 (PEER 2012). The Public Comment Period extended from January 19 to March 5, 2012, and no comments were received from the public. The availability of the PRAP and information regarding the Public Meeting was announced in the western edition of the Southampton Press on January 19 and February 16, 2012. Additionally, the ANG held a Public Meeting on the evening of February 23, 2012 at the Westhampton Free Library in Westhampton Beach, New York. The availability of the PRAP and information regarding the Public Meeting was announced in the western edition of the Southampton Press on January 19 and February 16, 2012. A transcript of the meeting is provided as an appendix of the Final Responsiveness Summary (Attachment C).

### 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 8 is for one additional round of groundwater sampling followed by a recommendation of NFA.

#### 2.5 SITE CHARACTERISITICS

Site 8 is a composite of underground structures including cesspools, septic tanks, distribution boxes, oil/mud traps, and dry wells at numerous locations throughout the base (Figure 2.2). Most of the structures have been removed, while others have been abandoned in place. None of the septic system structures are still in use. Together, the individual structures (former and abandoned in place) make up the Old Base Septic Systems. Site 8 includes 21 subsites, designated as Subsites 8A through 8U, based on the individual structures and subsystems that were identified. Subsite 8Q was further subdivided into 8 additional subsites, referred to as 8QA through 8QH, all associated with Building 250. The subsites are grouped together in regions of the base called cells (e.g., Cells 1, 2, 3, 4, and 5) as shown on Figure 2.3.

Environmental studies were performed at Site 8 from 1991 to 2005. The initial studies indicated that Site 8 had the potential to cause environmental impacts and warranted further assessment and/or action. Based on the initial investigations, remedial action was taken to mitigate any potential impacts to soil or groundwater at Site 8. Subsequently, an additional investigation was conducted to determine the extent of any soil or groundwater contamination remaining at the site. Only localized occurrences of low-level contaminants were found at the site.

The current focus for Site 8 is to:

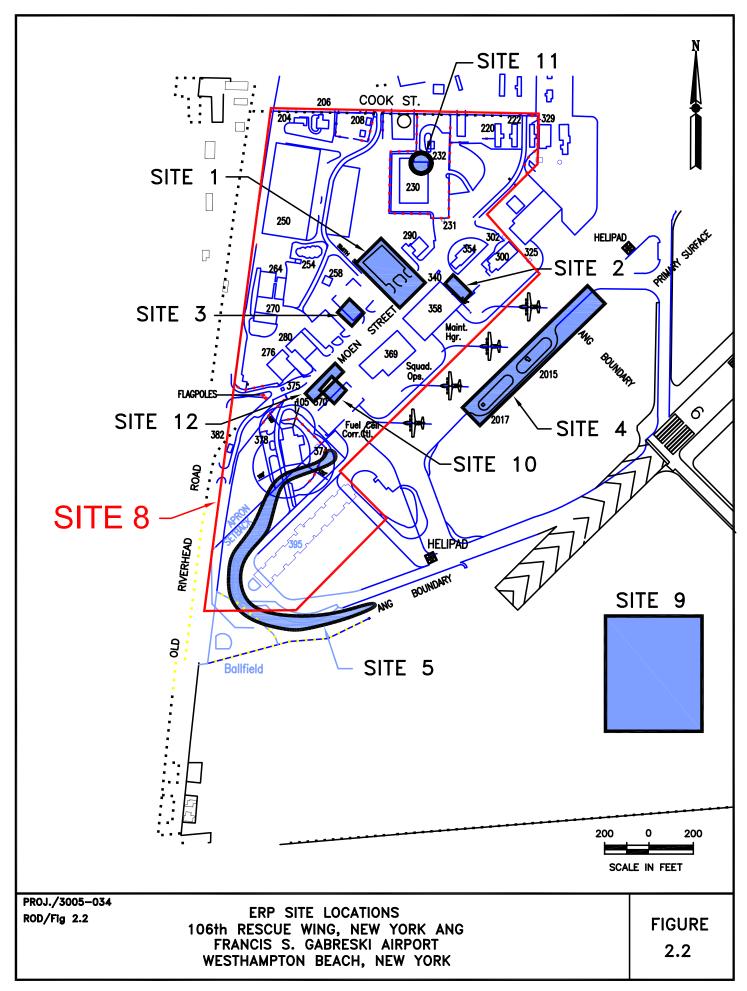
- collect additional groundwater samples from one groundwater monitoring well (MW-009) to confirm that groundwater at the well has not been adversely impacted; and to
- select NFA for the site as the final alternative.

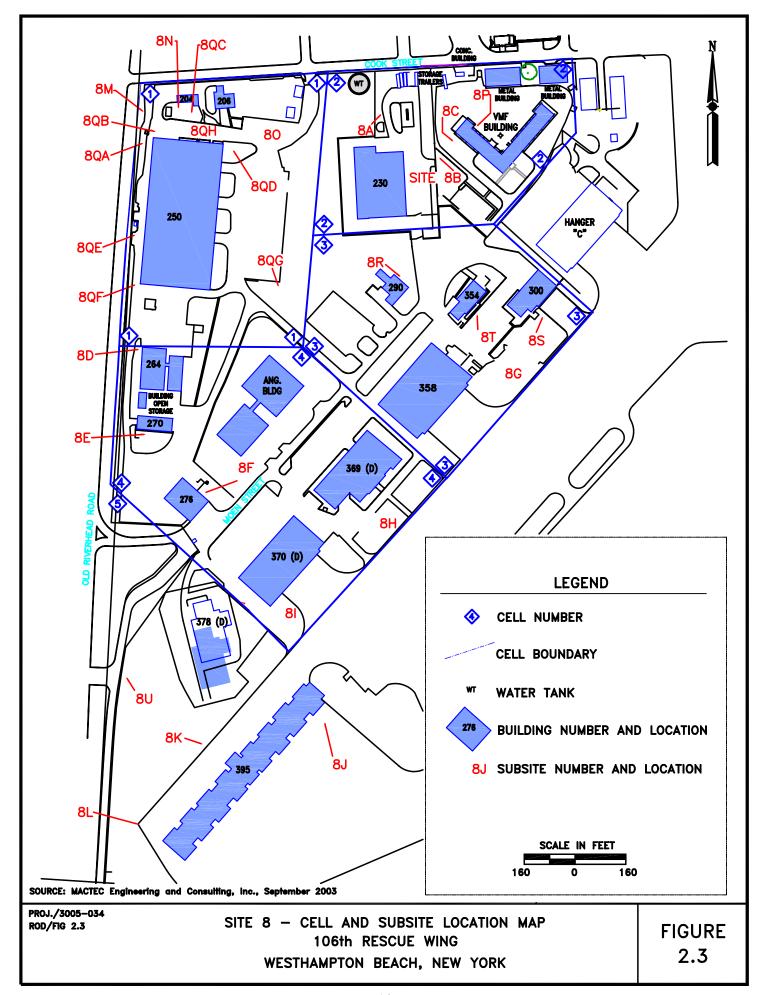
Based on the information contained in the Administrative Record, the ANG and NYSDEC believe that the actions as listed in the above bullets are sufficient to allow for proper closure of the site. After completing the sampling event, no further investigation of Site 8 should be warranted. The actions chosen for this site are in accordance with CERCLA and the NCP, and adequately provide for the protection of human health and the environment.

The following subsections summarize the environmental setting, previous investigations and overall conceptual exposure model for Site 8 – Old Base Septic Systems.

## 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-ES 1997). Average temperatures during the winter months (December through February) range from approximately 26°F to 39°F (S&W 1999). Temperatures 90°F or





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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, and dry periods during June and July are common (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 airport 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 installation, 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 general characteristics of each aquifer and aquitard including hydrologic properties are summarized on Table 2.1.

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.

Table 2.1

Hydrologic Properties of Regional Aquifers

106<sup>th</sup> Rescue Wing

New York Air National Guard

Westhampton Beach, New York

Unit	Texture	Thickness (ft)	Hydraulic Conductivity (gpd/ft²) (cm/s)	Estimated Transmissivity (gpd/ft) (cm²/s)
Upper Glacial	Sand and gravel	120	2,000 (9.4 x 10 <sup>-2</sup> )	200 (2.9 x 10 <sup>-1</sup> )
Gardiners Clay	Clay and silt	40	Aquitard	Aquitard
Magothy Formations	Sand, clayey sand	930	380 (1.8 x 10 <sup>-2</sup> )	300 (4.5 x 10 <sup>-1</sup> )
Raritan Clay	Clay and silt	200	Aquitard	Aquitard
Lloyd Sand	Sand and gravel	400	300 (1.4 x 10 <sup>-2</sup> )	75 (1.1 x 10 <sup>-1</sup> )
Bedrock	Granitic gneiss		Aquiclude	Aquiclude

<sup>--</sup> Measurement not available

Hydraulic conductivity of the outwash deposits was estimated to be about 2000 gpd/ft $^2$  (9.4 x  $10^{-2}$  cm/s) (ABB-ES 1997), and transmissivity is approximately 200 gpd/ft (2.9 x  $10^{-1}$ cm $^2$ /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 2006). Slug tests performed on installation monitoring wells and piezometers (screened in the upper glacial

aquifer) produced hydraulic conductivities ranging from 1.6 x  $10^{-2}$  to 5.2 x  $10^{-2}$  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 1995).

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

This section briefly discusses the previous investigations and the RA conducted at Site 8, and summarizes any environmental impacts that have been identified. . For the purposes of this ROD, constituents detected during the previous investigations were evaluated with respect to current action levels. Additional details concerning the investigations or RA can be obtained from the documents in the Administrative Record File available through the Base EM Lt. Shaun Denton at the 106<sup>th</sup> RQW

## Initial Site Survey-1991

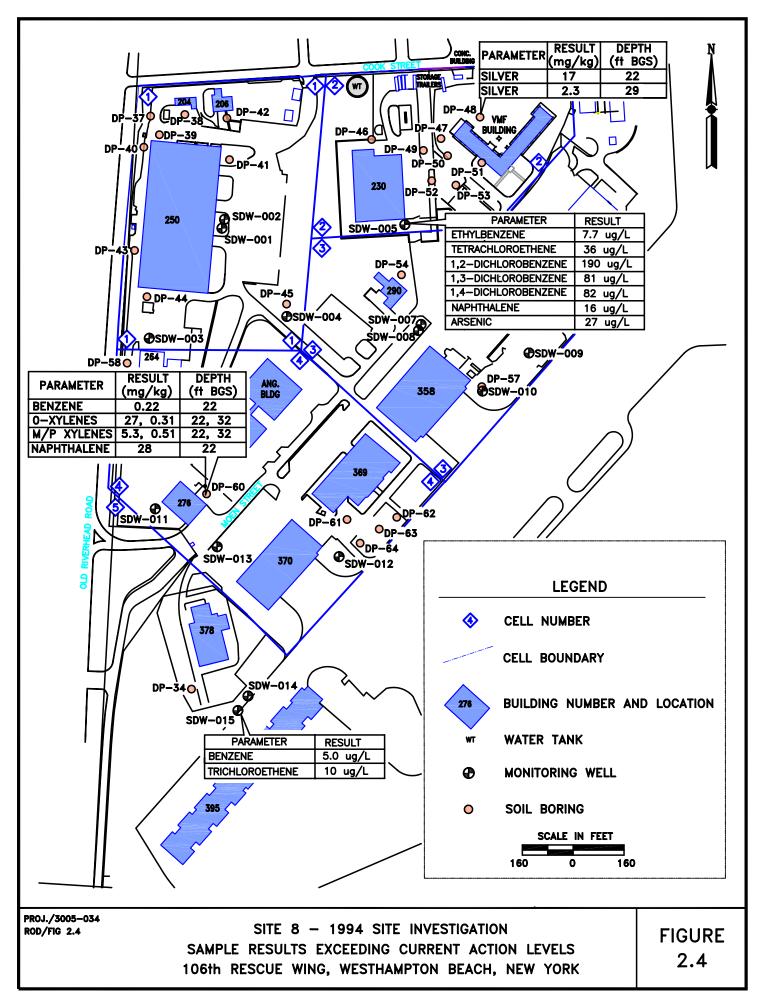
An initial site survey was conducted for several cesspools and septic tanks at Site 8 in August 1991 in response to a request by the Suffolk County Department of Health Services (SCDHS). The survey involved sampling sludge and liquid from 29 structures at Site 8, including septic tanks, cesspools, distribution boxes, and an oil/mud trap. Several of the samples contained concentrations of volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs) which are generally associated with fuels (ABB-ES 1991).

#### Survey and Source Characterization-1994

Cells 1, 2, 3, 4 and 5 were investigated during the November 1994 Survey and Source Characterization of Site 8. Sludge samples were collected and submitted to a field-operated laboratory for analysis of VOCs, SVOCs and metals (ABB-ES 1995). The primary contaminants of concern (COCs) found in the sludge and liquids of the septic system were chromium, and VOCs (ABB-ES 1995).

#### Site Investigation-1994

In 1994, a Site Investigation was conducted to determine if the contaminants detected in the septic systems had migrated to soil and/or groundwater in the vicinity of Cells 1, 2, 3, 4, and 5. The following compounds exceeded current soil action levels (Part 375 SCOs): benzene, xylenes, naphthalene and silver. Several constituents exceeded the current groundwater action levels (NYS Class GA Groundwater Standards) including four VOCs (benzene, ethylbenzene, and tetrachloroethene, trichloroehene), four SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene and naphthalene) and one metal known as arsenic. The majority of these contaminants were detected in one well (SDW-005). Figure 2.4 shows the locations of the contaminants detected during the 1994 Site Investigation that exceed the current NYSDEC Action Levels. Generally, organic constituents (VOCs and SVOCs) tend to degrade over time, and it is not likely that they still exist at the site. This is supported by the fact that these constituents were not confirmed during subsequent sampling. Arsenic exceeded the current action level in only one sample collected during a single round of groundwater sampling and was most likely due to entrained sediments (HAZWRAP 1997). Metals tend to adsorb onto sediments in groundwater and may result in false positives or elevated concentrations during



analysis which likely resulted in the single elevated concentration of arsenic. This is supported by the fact that arsenic was only detected above the action level during the second round of sampling during the 1994 Site Investigation.

#### Remedial Investigation-1998

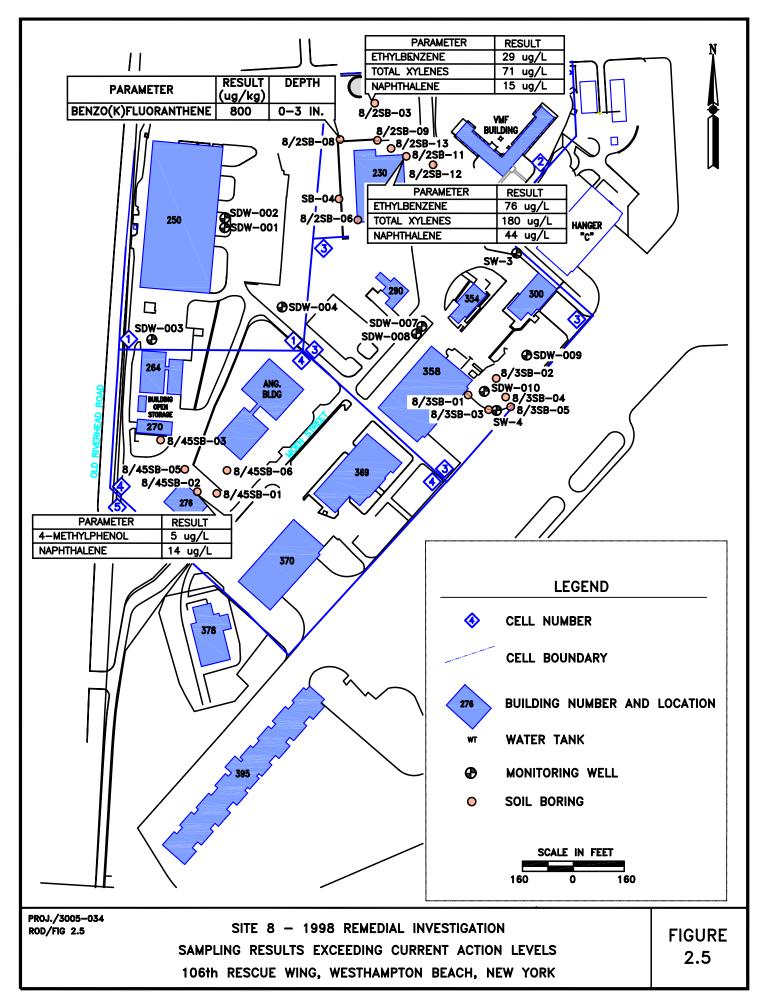
In 1998, an RI was conducted at Site 8 in the vicinity of Cells 2 and 4. Surface and subsurface soil and groundwater samples were collected using direct-push technology. The samples were analyzed for VOCs and SVOCs. No contaminants associated with the septic systems were identified during the 1998 RI, but the report recommended additional investigation (Stone & Webster 1999).

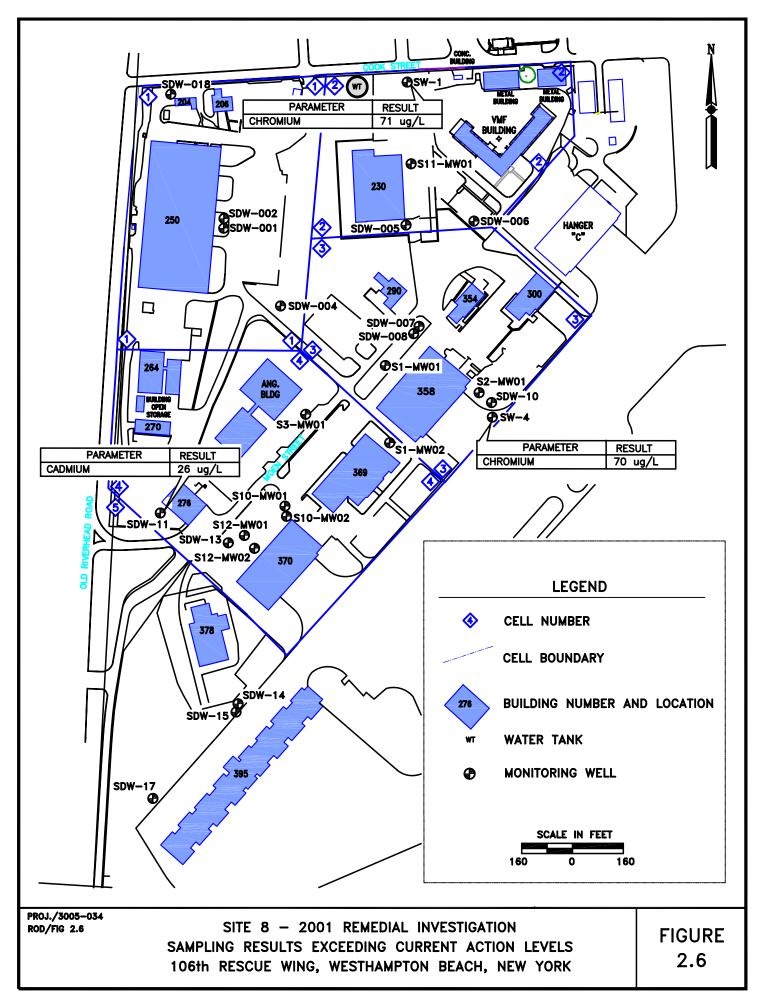
One SVOC [benzo(k)fluoroanthene] from the 1998 RI was detected at a concentration equal to the current action level in site soils. Several VOCs and SVOCs exceeded the current groundwater action levels including ethylbenzene, total xylenes, phenol, naphthalene and 4-methylphenol. VOCs and SVOCs tend to degrade over time and it is not likely that these constituents still exist at the site. This is supported by the fact that the presence of these contaminants was not confirmed during subsequent investigations. Figure 2.5 shows the

locations of the contaminants detected during the 1998 RI that exceeded the current action levels. No metals were detected at concentrations exceeding the current action levels in soil or groundwater, and no contaminants associated with the septic systems were identified during the 1998 RI, but the report recommended additional investigation (Stone & Webster 1999).

#### Additional Remedial Investigation-2001

An additional RI was conducted at the base including Site 8 from 2000 to 2001. No soil samples were collected at Site 8 during the 2001 RI (PEER 2004a). Two metals (cadmium and chromium) exceeded the current action levels for groundwater (Figure 2.6). These metals detections were likely due to entrained sediments in the wells, especially the detection of cadmium. Chromium and cadmium were detected in samples containing excessive quantities of entrained sediments. The report for the 2001 RI indicated that the metal chromium was naturally occurring, and risks due to cadmium were deemed negligible. Neither of the metals were detected in downgradient monitoring wells indicating that migration of the metals had not occurred. The report for the 2001 RI recommended that contents in the septic system structures be removed and that the system structures be abandoned in place or removed. It also recommended no further investigation of the site. The NYSDEC concurred with the remedial action recommendation. Once the remedial action was complete, the NYSDEC requested additional investigation of soil and groundwater at Subsites 8D, 8F (groundwater only), 8M, 8N, 8QF and 8QH.





#### Septic System Remediation-2002

Based on the recommendations of the 2000 to 2001 RI Report, a Time Critical Removal Action (TCRA) was conducted to remediate the septic systems at Site 8. The TCRA was performed in the summer of 2002 (MACTEC 2003). During the TCRA, 23 septic system subsites were remediated including 20 septic tanks, 49 cesspools, and 10 distribution boxes. Approximately 44,000 gallons of water, 158 cubic yards of sludge and 840 cubic yards of construction debris were removed and transported off-base for disposal.

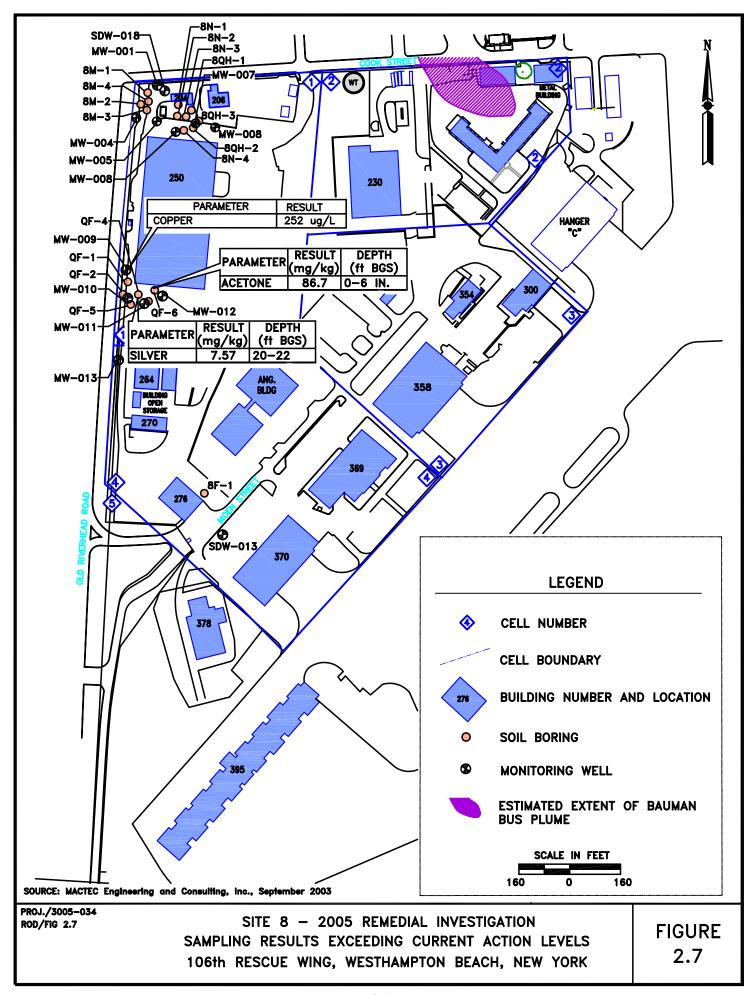
Based on the results of the TCRA, the SCDHS requested additional groundwater sampling at Subsites 8D, 8F and 8QF (MACTEC 2003). Subsites 8M and 8QH had exceedances of action levels in initial samples, and 8N had exceedances of action levels in one end point sample (MACTEC 2003). The SCDHS and the NYSDEC requested that groundwater samples be collected from Subsite 8F due to historically high levels of VOCs.

## Remedial Investigation-2005

The 2005 RI was conducted in response to NYSDEC comments on the TCRA. The RI objectives included further investigation to determine whether or not soil and/or groundwater contamination existed at six of the Site 8 subsites, and assessing risks associated with any identified threats to human health or the environment. The Site 8 subsites that were investigated included 8D, 8F, 8M, 8N, 8QF, and 8QH. The Bauman Bus Plume, which is unrelated to Site 8, was also investigated during the 2005 RI. The plume, consisting of petroleum-based contaminants, originates from Suffolk County property, crosses Cook Street, and extends onto the northeast portion of the base. The estimated extent of the plume is shown on Figure 2.7 (PEER 2006).

Lead (Subsite 8D), and chromium and silver (Subsite 8QF) were detected in subsurface soils at concentrations exceeding current action levels (Figure 2.7). The contaminants were detected from 20 to 40.5 ft bgs. The report stated that the lead, chromium, and silver would tend to be immobilized in the soil by adsorption, and that downward migration of the metals to groundwater was not likely. This was supported by the fact that the metals detected in soils at Subsites 8D and 8QF were not detected in groundwater at concentrations exceeding action levels. Therefore, soils at Subsites 8D and 8QF were determined to pose no risk to human health or the environment, and NFA was recommended (PEER 2006). The NYSDEC agreed with this recommendation for site soils (PEER 2008).

Copper detected in one monitoring well (MW-009) exceeded the current action level for groundwater and was likely due to entrained sediments in the well (Figure 2.7). Metals such as copper tend to adsorb onto sediments in the groundwater and may result in false positives or elevated concentrations during analysis. Subsequently, the NYSDEC requested additional sampling at the affected well (MW-009) to include analysis of both dissolved and total copper (PEER 2008) to confirm that groundwater had not been adversely impacted. Samples submitted for analysis of dissolved constituents are filtered prior to analysis while samples



submitted for analysis of total constituents are not filtered. Filtering of the sample prior to analysis removes any entrained sediments and reduces the possibility for false positives or elevated concentrations. Together, the results for both dissolved and total copper samples will likely provide evidence that the elevated copper concentrations at the site were due to entrained sediments in the well (MW-009). Copper was not detected in downgradient monitoring wells indicating that migration of the cooper did not occur at the site.

# 2.5.7 Nature and Extent of Contamination

As previously described for the 2005 RI, groundwater contamination at Site 8 is limited to one well (MW-009) and consists of elevated concentrations of copper in groundwater (Figure 2.5).

# 2.5.8 Conceptual Exposure Model

There are no realistic exposure pathways based on the location of the copper in the subsurface, and groundwater is not used as a drinking water source. Therefore, no unacceptable exposures to hazardous substances from the site will occur, and no conceptual exposure models were prepared.

#### 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> Rescue Wing 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> Rescue Wing 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 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 immediately to the south will likely remain commercial. It is anticipated that the land encompassing Site 8 will continue to be used for base facilities and as mission areas for the foreseeable future. The current base lease is in effect until 2041. Water resources will likely remain undeveloped in the vicinity of the base.

#### 2.7 SUMMARY OF SITE RISKS

As a part of the 2005 RI, the ANG evaluated potential risks associated with the contaminants detected at Site 8. Additional information on the potential risks to human health and the environment is presented in the report for the 2005 RI (PEER 2006).

# 2.7.1 Human Health Risk Assessment

In order for an exposure to occur, four factors must exist: (1) a source of contaminants; (2) a migration pathway; (3) an exposure mechanism; and (4) a receptor. Without all of these factors, the exposure pathway is incomplete. Migration pathways define the route and method by which a chemical moves from the source to a location where an exposure could potentially occur. Generally, exposures occur through direct contact (touching), breathing (e.g., inhaling dust), or swallowing (e.g., drinking or eating) the affected soil or groundwater.

Only localized occurrences of low-level contaminants were found at Site 8. The contaminants consist of metals (chromium, copper, lead and silver) that have a low tendency to migrate due to adsorption. Adsorption is a process where chemicals adhere to soil particles and remain immobile in the subsurface. This process especially takes place with metals in the presence of silty or clayey soils like those at the base which consist mostly of silty sands. The COCs in site soils (silver, chromium and lead) were detected at depths greater than 20 ft bgs, and are likely immobilized in the soil due to absorption. This supposition is supported by that fact that none of the soil COCs were detected in groundwater at concentrations exceeding state action levels. The COC in site groundwater (copper) was detected above the state action level in one well

(during two rounds of sampling) at a depth of approximately 40 ft bgs. Neither concentration of copper exceeded the Federal MCL. These concentrations of copper were likely false positives due to the presence of entrained sediments in site groundwater. Copper was not detected in down gradient monitoring wells at concentrations exceeding action levels.

Groundwater testing at the site indicates that the COCs have not migrated beyond Site 8. Based on the locations of the contaminants beneath the ground surface and the evidence that the contaminants have not migrated, there are no realistic exposure routes. Therefore, potential risks to human health or the environment due to the contaminants at the site are negligible.

# 2.7.2 **Ecological Risk**

Exposures to ecological receptors are not likely due to the location of the contaminants in the subsurface and the fact that the contaminants are not migrating.

#### 2.8 SELECTED REMEDY

The selected remedy consists of NFA with monitoring to confirm that groundwater at monitoring well MW-009 is not adversely impacted. 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 the site once monitoring is complete (PEER 2008).

Copper was detected in one well (MW-009) during groundwater sampling (two rounds) at concentrations exceeding the state action levels (PEER 2006). The levels detected did not exceed Federal MCLs and there is no known source for the elevated copper concentrations. Access to the site is controlled and restricted to military personnel and authorized quests, and risks to human health and the environment due to the copper exceedances in groundwater at the site are negligible. Analytical results from down gradient monitoring wells indicate that copper is not migrating. Additionally, there are no realistic exposure pathways based on the location of the copper in the subsurface and the fact that groundwater is not used as a drinking water source. Therefore, no unacceptable exposures to hazardous substances from the site will occur.

Monitoring well MW-009 will be purged using low-flow sampling techniques and sampled for copper. Two samples will be collected from the well and submitted to the laboratory for analysis of total and dissolved copper (filtered and unfiltered). The sampling results will be presented and briefly discussed in a Letter Report to the ANG and NYSDEC. The letter will state that the additional sampling is complete and that no further investigation or additional RA is warranted for Site 8. Table 2.2 presents the estimated costs for the additional groundwater sampling.

Table 2.2

Cost Estimate Summary – Costs for Additional Groundwater Sampling

106<sup>th</sup> Rescue Wing

Westhampton Beach, New York

Description	Quantity	Unit	Unit Cost	Cost		
Groundwater Sampling (One Event)						
Travel <sup>(1)</sup>	LS	1	\$2,900	\$2,900		
Field Sampling/Analysis <sup>(2)</sup>	LS	1	\$2,100	\$2,100		
Reporting						
Letter Report	LS	1	\$950	\$950		
	\$5,950					
	\$890					
	\$300					
Total Cost				\$7,140		

#### Notes:

- LS Lump sum
- (1) Travel costs include labor, airfare, lodging, meals, and rental vehicle.
- (2) Field sampling and analysis costs include labor, equipment and supplies, and analytical costs. Sampling will be conducted in accordance with the Site 8 RI Work Plan (PEER 2004b).

#### 3.0 RESPONSIVENESS SUMMARY

# 3.1.1 Stakeholder Issues and Lead Agency Responses

The ANG provided a 45-day Public Comment Period (January 19 through March 5, 2012) for the PRAP for Site 8, which was prepared previously to this ROD. Additionally, the ANG held a Public Meeting on February 23, 2012 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 presented in Attachment C.

# 3.1.2 Technical and Legal Issues

There are no technical or legal issues that require further discussions regarding the NFA Decision for Site 8.

#### 4.0 REFERENCES

ABB-Environmental Services, (ABB-ES), Site Investigation Technical Memorandum, Interim Report of Findings for Cesspool/Septic Tank Survey-Field Screening Results, 106<sup>th</sup> Rescue Group, New York Air National Guard, Francis S. Gabreski Airport, Westhampton Beach, New York, 1991.

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DoD, Defense Environmental Restoration Program Manual, April 1991.

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Latino Patricia, Francis S. Gabreski Airport Master Plan, February 2002.

MACTEC Engineering and Consulting, Inc, *Technical Memorandum, Site 8 Septic System Remediation Completion Report*, 2003.

National Oceanic and Atmospheric Administration (NOAA). *Climate and Weather Information*. Internet Accessed at <u>noaa.gov</u> on June 9, 2010.

O'Brien and Gere Engineers, Inc., Site Investigation Report, Airport Development District, Francis S. Gabreski Airport, Westhampton, New York, prepared for Rebuild Now-NY Empire State Development, January 2004.

PEER Consultants, P.C. (PEER), Final Remedial Investigation Report for Sites 1, 2, 3, 4, 7, 8, 9, 10, 11, and 12, 106<sup>th</sup> Rescue Wing, New York Air National Guard, Francis S. Gabreski Airport, Westhampton Beach, New York, May 2004a.

PEER, Final Remedial Investigation/Feasibility Study Work Plan for Site 8 – Old Base Septic Systems, 106<sup>th</sup> Rescue Wing, New York Air National Guard, Francis S. Gabreski Airport, Westhampton Beach, New York, December 2004b.

PEER, Final Remedial Investigation Report for Site 8 – Old Base Septic Systems, 106<sup>th</sup> Rescue Wing, New York Air National Guard, Francis S. Gabreski Airport, Westhampton Beach, New York, May 2006.

PEER, Final Meeting Minutes for the Proposed Remedial Action Plan and Record of Decision for Site 8, 106<sup>th</sup> Rescue Wing, New York Air National Guard, Gabreski Airport, Westhampton Beach, New York, September 16, 2008.

PEER, Draft-Final Proposed Remedial Action Plan for Site 8, 106<sup>th</sup> Rescue Wing, New York Air National Guard, Gabreski Airport, Westhampton Beach, New York, March, 2009.

PEER, Final Proposed Remedial Action Plan for Site 8, at the 106<sup>th</sup> Rescue Wing, Francis S. Gabreski Airport, Westhampton Beach, New York, March 2012.

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Stone & Webster Environmental Technology and Services, *Revised Draft Remedial Investigation Sites 4, 5, 8, and 9,* January 1999.

The Hazardous Materials Technical Center, Phase I Records Search, 1987

Westhamptonbeach.org, Francis S. Gabreski Airport and Westhampton Beach, NY Zoning Map, Internet accessed at <a href="http://www.westhamptonbeach.org/26abreski-airport.php">http://www.westhamptonbeach.org/26abreski-airport.php</a> on June 7, 2010.

# ATTACHMENT A FINAL MEETING MINUTES FOR THE PROPOSED REMEDIAL ACTION PLAN AND RECORD OF DECISION FOR SITE 8

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78 Mitchell Road • Oak Ridge, TN 37830 Phone: 865-483-3191 • Fax: 865-483-8617

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SEP 1 6 2008

Ms. Jody Murata Program Manager National Guard Bureau/A7OR 3500 Fetchet Avenue Andrews AFB, MD 20762

REFERENCE:

PEER TASK NO. 003005-034; NGB CONTRACT NO.

DAHA92-01-D-004; DELIVERY ORDER NO. 0034; PROPOSED REMEDIAL ACTION PLAN AND RECORD OF DECISION FOR

SITE 8, 106<sup>TH</sup> RESCUE WING, GABRESKI AIRPORT,

WESTHAMPTON BEACH, NEW YORK

SUBJECT;

FINAL MEETING MINUTES (TASK 1B)

Dear Ms. Murata:

Attached are one hard copy and one electronic copy (on CD ROM) of the Final Meeting Minutes for the Kickoff Meeting that was conducted on Thursday, August 21, 2008.

If you have any questions or comments, please call me at (865) 483-3191.

Sincerely,

Richard Stout, P.G. Project Manager

RJS:dfb

Attachments: (1)

) Final Meeting Minutes

(2) List of Attendees

(3) Presentation Slides and Figures

cc:

Barbara Moore (NGB-J8C) (w/o attachments)

Lt. Col. Jerry Webb (106<sup>th</sup> Rescue Wing) (1 copy and 1 CD)

Heather Bishop (NYSDEC) (1 copy and 1 CD) John Swartwout (NYSDEC) (1 copy and 1 CD) John Morris (Native Energy) (1 copy and 1 CD)

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# FINAL KICKOFF MEETING MINUTES PROPOSED REMEDIAL ACTION PLAN AND RECORD OF DECISION FOR SITE 8 106<sup>TH</sup> RESCUE WING AT THE GABRESKI AIRPORT WESTHAMPTON BEACH, NEW YORK

#### **AUGUST 21, 2008**

A Kickoff Meeting was held at the New York State Department of Environment and Conservation (NYSDEC), Albany, New York, on August 21, 2008 to discuss the planned Proposed Remedial Action Plan (PRAP) for Site 8. This Kickoff Meeting was conducted in conjunction with the No Further Response Action Planned Decision Document (NFRAP DD) for Site 5. The meeting was attended by the Base Environmental Manager (EM), the PEER Consultants, P.C. (PEER) Project Manager, the Air National Guard (ANG), Environmental Restoration Program (ERP) Program Manager, and representatives from the NYSDEC. The list at attendees is provided in Attachment A.

Richard Stout (PEER Project Manager) began the meeting by giving a presentation describing the site, discussing any previous investigations, and discussing the proposed PRAP.

The presentation for the Kickoff Meeting and follow-on discussions are described in the following paragraphs. A copy of the briefing slides and figures are provided in Attachment B.

#### Site 8 – Old Base Septic System

Site 8 is a composite of underground structures including cesspools, septic tanks, distribution boxes, oil/mud traps, and dry wells at numerous locations throughout the base. Together, these individual structures make up the Old Base Septic System. The various structures were each associated with a particular building, or buildings, and would have received wastes from various processes within the buildings. As a whole, the system was not contiguous, and consisted of many individual structures. Some structures were interconnected, making up small sub-systems. Site 8 was divided into 16 subsites, designated as Subsites 8A through 8U, based on the individual structures and sub-systems that were identified. Several investigations have been conducted at Site 8 and are described below.

#### Previous Investigations at Site 8

An initial site survey was conducted for several cesspools and septic tanks at Site 8 in August 1991. The survey involved sampling sludge and liquid from 29 structures at Site 8, including septic tanks, cesspools, distribution boxes, and an oil/mud trap. Several of the samples contained concentrations of volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs).

In 1994, a Survey and Source Characterization was conducted at Site 8 to locate cesspools and septic tanks that were inaccessible in the previous survey. Sludge samples were collected from 24 locations at Site 8.

In 1994 and 1998, a Site Investigation and Remedial Investigation (RI) were conducted. The investigations consisted of collecting soil and groundwater samples at Site 8. During the investigations, analyses included volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs), and metals. The reports for both investigations recommended further investigation for Site 8.

In 2000 to 2001, an additional RI was conducted at several sites, and four sites (Sites 4, 5, 8, and 9) were evaluated based on previous field studies. The report recommended removal of sludge and abandonment of septic tank structures at Site 8.

In 2002, remedial actions were conducted at several of the Site 8 septic system structures (e.g., cesspools and septic tanks). In addition, a Time Critical Removal Action was conducted at four of the locations. Activities included locating structures with ground penetrating radar, confirmatory soil sampling and remediation of septic system structures by excavation, removal and abandoning in place. The Technical Memorandum recommended further groundwater sampling at Subsites 8D, 8QF and 8F.

In 2005, an RI was conducted at several of the Site 8 subsites. The RI objectives included determining if soil and/or groundwater contamination existed at six of the Site 8 subsites, and assessing risks associated with any identified threats to human health or the environment. The Site 8 subsites that were investigated during the 2005 RI include Subsites 8D, 8F, 8M, 8N, 8QF, and 8QH. No contaminants were detected in soil or groundwater at Subsites 8M, 8N and 8QH, and the RI Report recommended No Further Action (NFA) at those subsites.

Silver and chromium were detected above the action levels in one subsurface sample at Subsite 8QF, and lead was detected above action levels in one subsurface soil sample at Subsite 8D. The chromium and lead levels in soil were within the range of background concentrations for the eastern United States, and were not detected above action levels in groundwater. The RI Report recommended NFA for soils at Subsites 8D and 8QF.

No constituents were detected above action levels in groundwater at 8D or 8F. Copper was detected above the NYS action level in one upgradient well at Subsite 8QF during two rounds of sampling. The copper results did not exceed the Federal Drinking Water Standard MCL. The exposure pathway evaluation indicated that the probability for exposure to copper in groundwater as a result of contaminant migration is low, which is supported by data that indicate that copper does not exist in downgradient monitoring wells at significant concentrations. In addition, copper is recognized by the EPA as an essential human nutrient. Therefore, NFA was recommended for groundwater at Subsites 8D, 8F and 8QF.

#### Proposed Remedial Action Plan and Record of Decision for Site 8

In 2008, the ANG made the decision to prepare a PRAP and ROD for Site 8. The scope of the project includes:

- Preparing a PRAP to document and summarize the decision that lead to the recommended remedial alternative for Site 8;
- Publishing a Public Notice to announce the availability of the PRAP for review by the public;
- Holding a Public Meeting and preparing minutes of the meeting;
- Preparing a ROD to document the remedy selection decision for Site 8.

These planned documents will be prepared to properly document the various investigations and the selected remedy for Site 8 and to facilitate closure of the site.

#### Optional Task for Site 2

If approval is obtained from the ANG, a Decision Document will be prepared for Site 2. Site 2, Former Hazardous Waste Storage Area, was investigated as a part of a 2007-2008 Data Gap Investigation at the base. Once constituent (chromium) was detected above action levels in a total metals groundwater sample collected at the site. Chromium was not detected in the dissolved (filtered) sample from the same well. Therefore, there are no Contaminants of Concern for Site 2 and the report for the Data Gap Investigation recommends NFA for Site 2.

#### Follow-On Discussion

Additional topics concerning Site 8 were discussed after the presentation. These topics are briefly discussed below.

1. Richard Stout (PEER Project Manger) asked the NYSDEC representatives if the state would concur with an NFA recommendation for Site 8. He explained that copper exceeded the NYS action level in one well (MW-009) at Subsite 8QF (copper did not exceed the federal MCL), but was not detected at concentrations exceeding the action level in downgradient wells. John Swartwout (NYSDEC) stated that closure of the site seemed reasonable but that further investigation of the reason for the low NYS action level was necessary before making a decision. Heather Bishop (NYSDEC) researched the reasoning behind the low NYS action level (200 μg/L versus the MCL of 1300 μg/L) and determined that it was due to both human health and aesthetic properties.

Mr. Stout asked if the state would be more likely to concur with an NFA request for Site 8 if the PRAP recommended additional sampling at well MW-009 (one round for total and dissolved metals). Mr. Stout explained that well MW-009 had not been sampled for dissolved metals previously and that turbidity (>20 NTUs) may have contributed to the elevated copper concentrations. He also stated that the sampling results could be included in the ROD. Mr. Swartwout stated that the state would concur with NFA for Site 8 if additional groundwater sampling was conducted because the elevated copper is

- limited to one well, downgradient wells do not contain elevated levels of copper, and there is no known source for the copper contamination.
- 2. The optional task for Site 2 was also discussed. Mr. Stout stated that one well at Site 2 (SW-04) contained chromium at a concentration exceeding the action level in the total metals sample, but that chromium was not detected in the dissolved (filtered) metals sample. Mr. Swartwout stated that the state would concur with NFA for Site 2.

#### ATTACHMENT A

## LIST OF ATTENDEES KICKOFF MEETING MINUTES PROPOSED REMEDIAL ACTION PLAN AND RECORD OF DECISION FOR SITE 8

## 106<sup>TH</sup> RESCUE WING AT THE GABRESKI AIRPORT WESTHAMPTON BEACH, NEW YORK

Name	Organization/Address	Telephone/email
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Heather Bishop	NYSDEC, Division of	(518) 402-9692
	Environmental Remediation	hlbishop@gw.dec.state.ny.us
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	Albany, NY 12233-7015	
John Swartwout	NYSDEC, Division of	(518) 402-9622
	Environmental Remediation	jbswarto@gw.dec.state.ny.us
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Lt. Col. Jerry Webb	106th Rescue Wing	(631) 723-7349
		jerry.webb@nysuff.ang.af.mil
Richard Stout	PEER Consultants, P.C.	(865) 483-3191
	78 Mitchell Road	stoutr@peercpc.com
	Oak Ridge, TN 37830	A STATE OF THE STA

## ATTACHMENT B PRESENTATION SLIDES AND FIGURES





## Kickoff Meeting for the

- Site 5 No Further Response Action Planned Decision Document
- Site 8 Proposed Remedial Action Plan and Record of Decision

106th Rescue Wing Westhampton Beach, New York August 21, 2008



### Site 5 Description

Site 5 - Southwest Storm Drainage Ditch is a storm drainage ditch made up of a series of swells that originate southwest of Building 370 and meander south-southwest to the base boundary. Storm runoff from the southwest portion of the base drains into the ditch.



### Investigation History for Site 5:

- 1994/1998 Site Investigation/Remedial Investigation-Consisted of groundwater, soil and sediment sample collection in drainage swells. PAHs, metals, benzene and toluene detected above action levels in soils.
- 2000-2001 Remedial Investigation-Consisted of sampling of existing wells. No COCs identified in groundwater.



#### Investigation History for Site 5 (continued):

- 2004 NFRAP Decision Document –Recommended NFA for Site 5. NYSDEC did not concur with NFA decision and requested further delineation of contaminants. Additionally, requested that soils at levels exceeding action levels be removed.
- December 2007-Data Gap Investigation-consisted of additional soil sampling along the ditch, especially in areas where contamination was previously detected. PAHs and metals detected above action levels in four areas of ditch.



# Site 5 NFRAP DD Project Objective

To ensure and document that all contaminated soils at Site 5
are excavated and disposed of properly to allow closure of the
site in accordance with NYSDEC guidance and requirements.



### **Project Activities**

- Providing on-site technical support during the excavation activities;
- Collecting soil samples to characterize excavated soils and ensure that contaminated soils are removed;
- Disposing of the soil at a licensed disposal facility; and
- preparing an NFRAP DD for Site 5.

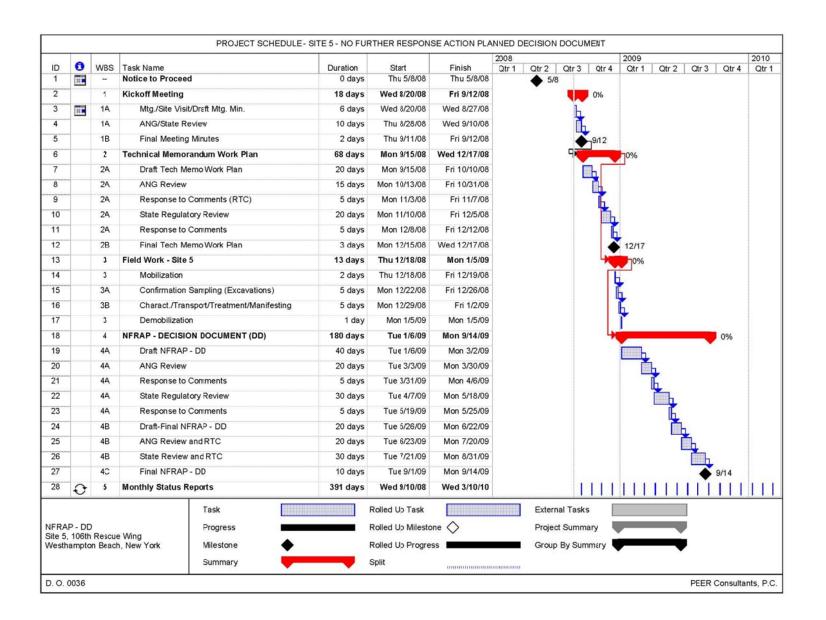


## **Project Deliverables**

- Draft and final Work Plans
- Draft and Final NFRAP DDs
- Monthly Progress Reports



## Site 5 NFRAP DD Project Schedule





#### Site 8 Description

Site 8 - Old Base Septic Systems consisted of septic tanks, cesspools, oil/mud traps, connection boxes, dry wells. Most of the structures were either removed or abandoned in place. The site is divided into Cells 1 -5 with Subsite designations 8A through 8U.



### **Investigation History for Site 8:**

- 1991/1994 Site Survey/Survey and Source Characterizationconsisted of locating cesspools, septic tanks and sludge sampling. Some samples contained VOCs and SVOCs.
- 1994 to 1997 Site Investigation-Conducted investigation at nine sites (including Site 8). Recommended additional investigation of Site 8.



### Investigation History for Site 8 (Continued):

- 1998 Remedial Investigation-Investigated four sites including Site 8. Recommended further investigation at Site 8 due to exceedances of NYSDEC screening levels.
- 2000 to 2001 Additional Remedial Investigation-Conducted an RI at eleven sites. At Site 8, collected groundwater samples from wells in vicinity. Recommended removal of sludge and abandonment of septic tank structures.



#### Investigation History for Site 8 (Continued):

- 2002 Septic System Remediation-Conducted remedial actions at Site 8 consisting of Time Critical Removal Action at four locations. Recommended further groundwater sampling at Subsites 8D, 8QF, and 8F.
- 2006 Remedial Investigation-Conducted investigation at Subsites 8M, 8N, 8QH, 8D, 8QF. Copper detected in MW-009 (8QF) above action levels, but was not detected downgradient. Recommended NFA for Site 8.



# Site 8 PRAP and ROD Project Objective

 To prepare a PRAP with input from the public and NYSDEC which will lead to preparation of a ROD and closure of the site.



### **Project Activities**

- Preparing a PRAP for Site 8;
- Publishing a Public Notice announcing the availability of the PRAP for review;
- Holding a Public Meeting for the PRAP and preparing meeting minutes; and
- Preparing a ROD for Site 8.

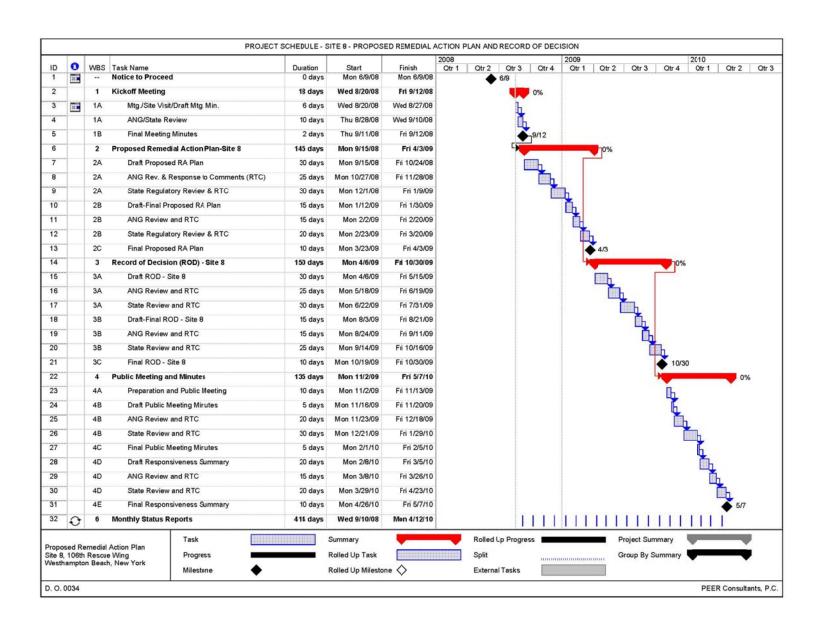


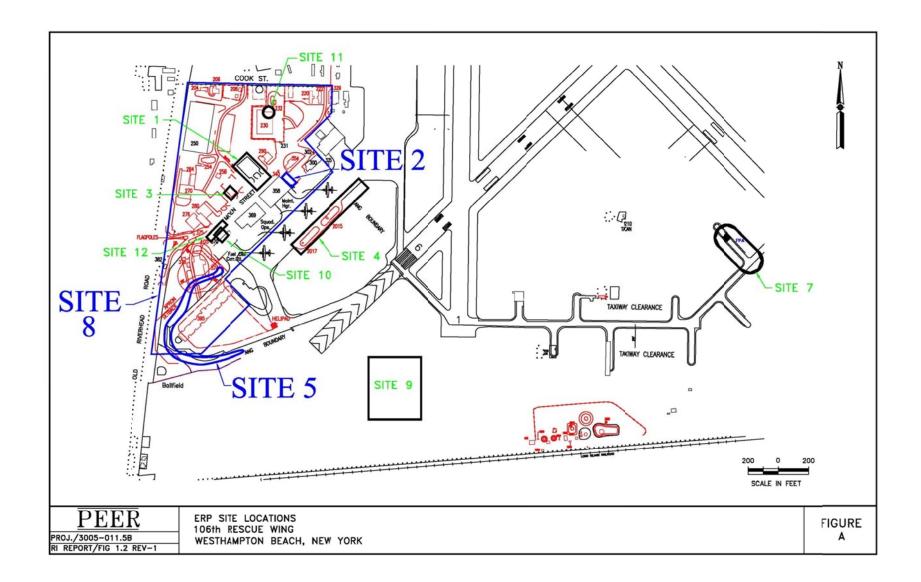
### **Project Deliverables**

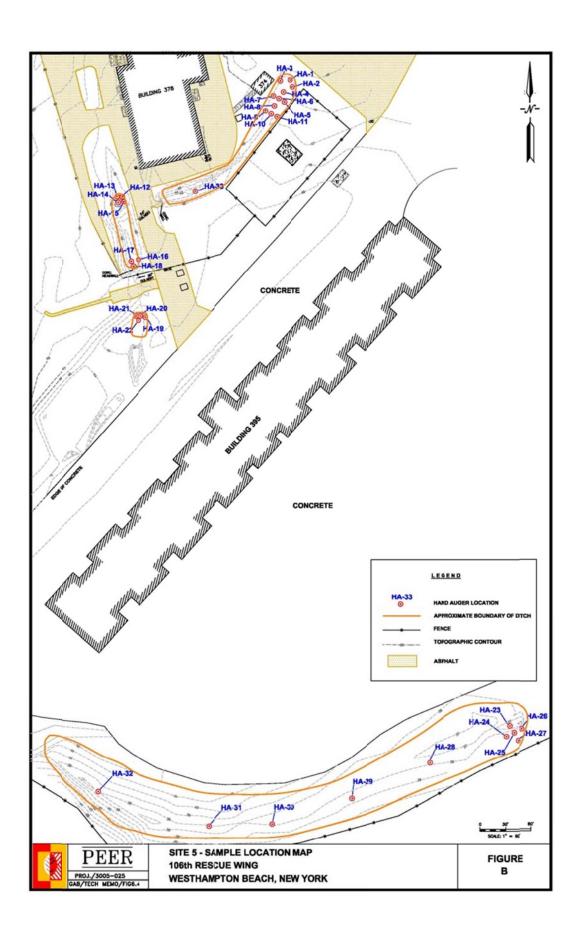
- · Draft, Draft-Final, and Final PRAP
- Public Notice
- Draft and Final Meeting Minutes for the Public Meeting
- Draft, Draft-Final, and Final ROD
- Monthly Progress Reports

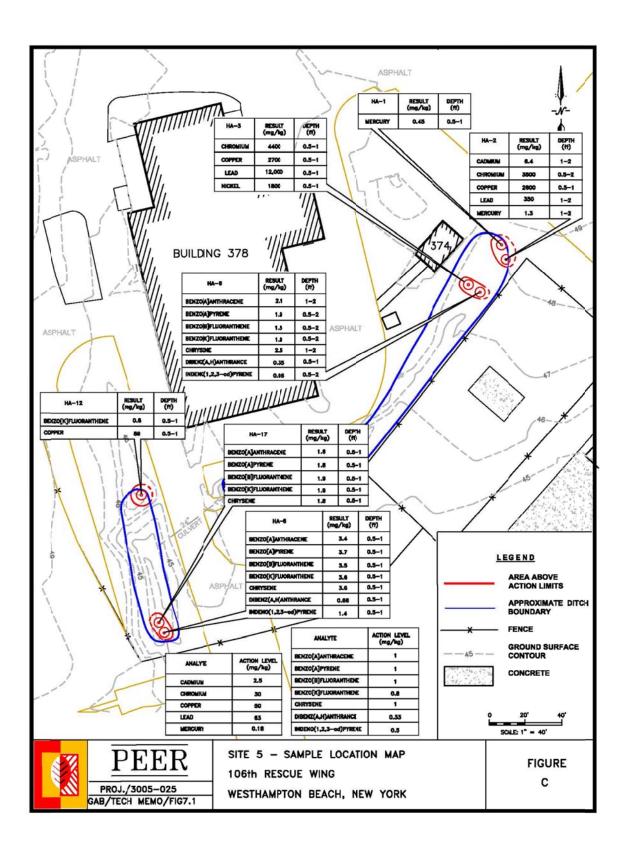


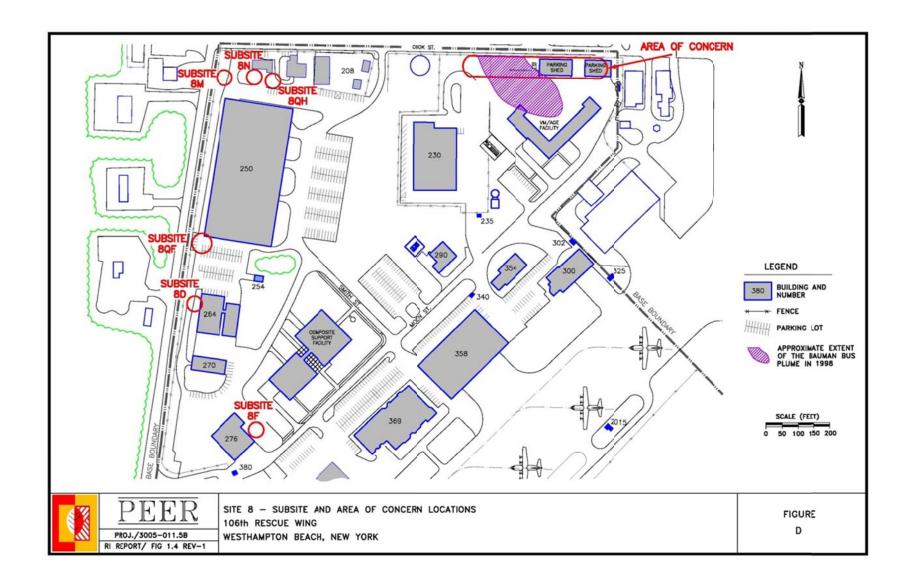
## Project Schedule

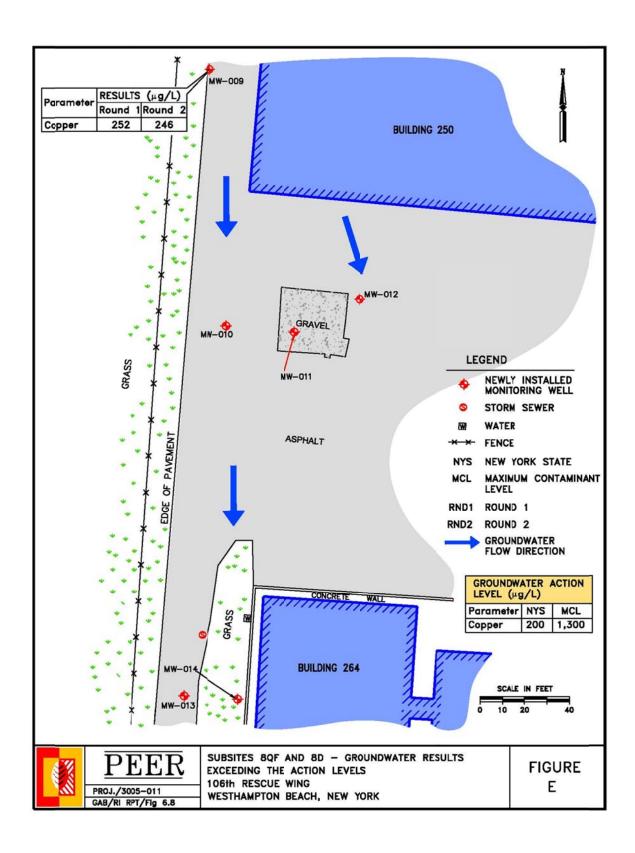


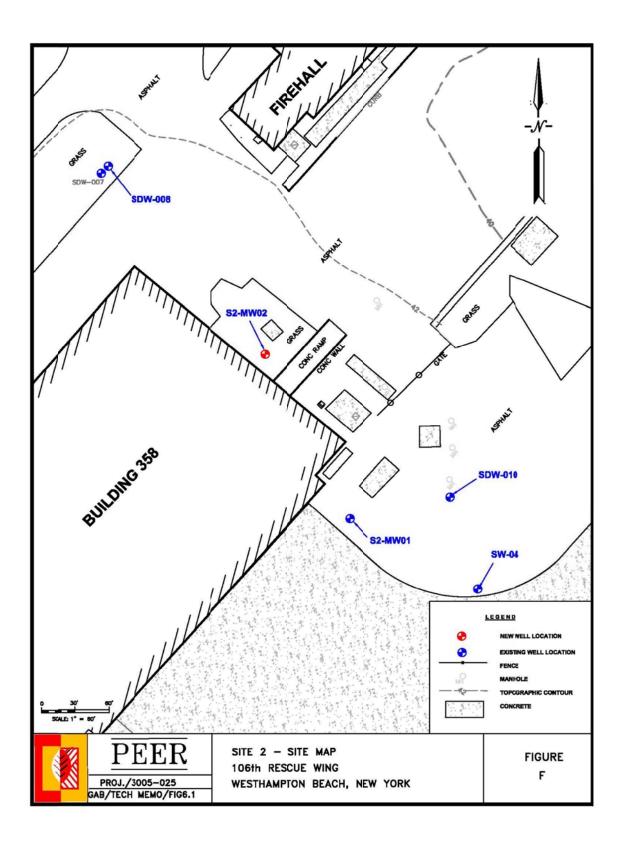












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## ATTACHMENT B NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CONCURRENCE LETTER

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#### New York State Department of Environmental Conservation Division of Environmental Remediation

Office of the Director, 12th Floor

625 Broadway, Albany, New York 12233-7011

Phone: (518) 402-9706 • Fax: (518) 402-9020

Website: www.dec.ny.gov

#### Sent Via Email Only

March 29, 2012

Ms. Jody Ann Murata Program Manager NGB/CEVR Shepperd Hall 3501 Fetchet Avenue Andrews AFB, MD 20762-5157

Re: Suffolk County ANG Base Septic Systems, Site 8

Site No.: 152148

Draft-Final Record of Decision Concurrence

Dated March 2012

Dear Ms. Murata,

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed the March 2012 Draft-Final Record of Decision for Site 8 of the 106th Rescue Wing, Air National Guard Base at the Francis S. Gabreski Airport located in the Village of Westhampton, Suffolk County, NY. Based on our review, we understand that the Time Critical Removal Actions have removed source contamination from the site.

The State concurs with the proposed alternative which combines collecting additional groundwater samples from one groundwater monitoring well to confirm that site groundwater is no longer adversely impacted with no further action as the final alternative for the site.

If you have any questions, please contact Mr. John Swartwout at (518) 402-9625.

Sincerely.

Robert W. Schick, P.E.

Durchis

Acting Director

Division of Environmental Remediation

ec: Jody Murata, CEVR (<u>iody.murata@ang.af.mil</u>)

Richard Stout, PEER (stoutr@peercpc.com)

Andrew Rapiejko, SCDHS, (andrew.rapiejko@suffolkcountyny.gov)

Charlotte Bethoney, NYSDOH Steve Karpinski, NYSDOH

Jim Harrington Walter Parish

John Swartwout

Heather Bishop



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## ATTACHMENT C RESPONSIVENESS SUMMARY

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# FINAL RESPONSIVENESS SUMMARY

# FOR THE DRAFT-FINAL (VERSION 4) PRAP FOR SITE 8

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

### **MARCH 2012**



### **Prepared for**

NGB/A7OR 3501 Fetchet Avenue Andrews AFB, MD 20762 under National Guard Bureau Contract DAHA-92-01-D-0004 Delivery Order No. 034

**FINAL** 

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APPENDIX A	PUBLIC NOTICE
APPENDIX B	PUBLIC MEETING HANDOUT
APPENDIX C	PUBLIC MEETING TRANSCRIPT

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# FINAL RESPONSIVENESS SUMMARY

# FOR THE DRAFT-FINAL (VERSION 4) PRAP FOR SITE 8

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

### 1.0 INTRODUCTION

The Air National Guard (ANG) has prepared a *Draft-Final (Version 4) Proposed Remedial Action Plan (PRAP) for Site 8*.

### 2.0 PUBLIC NOTICE

The ANG published a Public Notice in the western edition of the Southampton Press announcing the Public Meeting and the availability for Public Review of the *Draft-Final (Version 4) PRAP for Site 8*. The Public Notice was published once a week for two weeks on January 19 and February 16, 2012 prior to the Public Meeting. The notice included the expiration date of the Public Comment Period, the location of Administrative File, and contact information for any questions and for submitting comments. A copy of the Public Notice is provided in Appendix A.

### 2.1 SITE 8 DESCRIPTION

Site 8 is a composite of underground structures including cesspools, septic tanks, distribution boxes, oil/mud traps, and dry wells at numerous locations throughout the base. Most of the structures have been removed, while others have been abandoned in place. None of the septic system structures are still in use. Together, the individual structures (former and abandoned in place) make up the Old Base Septic Systems. Site 8 includes 21 subsites, designated as Subsites 8A through 8U, based on the individual structures and subsystems that were identified. Subsite 8Q was further subdivided into 8 additional subsites, referred to as 8QA through 8QH, all associated with Building 250. The subsites are grouped together in regions of the base called cells (e.g., Cells 1, 2, 3, 4, and 5).

### 3.0 PUBLIC MEETING

A Public Meeting was held for the general public on February 23, 2012 at the Westhampton Free Library, in Westhampton Beach, New York. The purpose of the meeting was to inform area residents of the status of Environmental Restoration Program Site 8.

The meeting consisted of a brief presentation followed by a short question and answer period. The Public Meeting was attended by representatives of the National Guard Bureau, the New York State Department of Environmental Conservation (NYSDEC), Gabreski ANG Base,

Suffolk County Health Services, and a local newspaper reporter. A copy of the presentation that was distributed to attendees at the Public Meeting is provided in Appendix B. A court reporter attended the Public Meeting, and prepared a verbatim transcript of the presentation and question and answer period. A copy of the meeting transcript is provided in Appendix C.

### 4.0 PUBLIC COMMENT PERIOD

The Public Comment Period continued for 45 days from January 19 to March 5, 2012. The Public Comment Period was provided to allow the public time to review and comment on the *Draft-Final (Version 4) PRAP for Site 8*.

### 4.1 ISSUES RAISED BY STAKEHOLDERS

No comments were received during the Public Comment Period.

### 4.2 SIGNIFICANT COMMENTS OR CRITICISIMS RECEIVED

No comments or criticisms were received during the Public Comment Period.

### 4.3 NEW RELEVANT INFORMATION PROVIDED

No new relevant information was provided during the Public Comment Period.

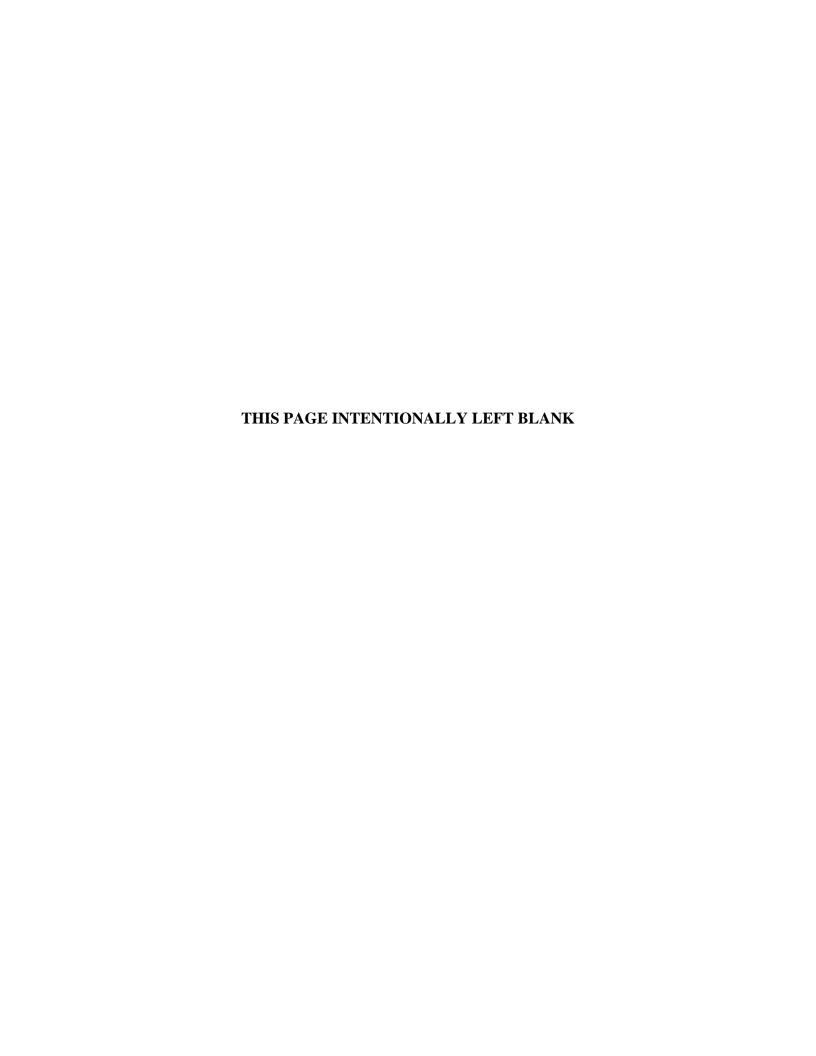
# 4.4 RESPONSES TO ISSSUES RAISED DURING THE PUBLIC COMMENT PERIOD

Because no comments were received during the Public Comment Period, no responses are required.

### 5.0 REFERENCES

PEER Consultants, P.C. (PEER), Draft-Final (Version 4) Proposed Remedial Action Plan for Site 8, 106<sup>th</sup> Rescue Wing, New York Air National Guard, January 2012.

# APPENDIX A PUBLIC NOTICE



# **PUBLIC NOTICE**

### AIR NATIONAL GUARD

The Air National Guard's Environmental Restoration Program (ERP) is carried out under the overall framework of the Superfund Amendments and Reauthorization Act and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The ERP is a nationwide effort to identify and cleanup environmental contamination that may have resulted from past practices, accidents or incidents at Air National Guard facilities to ensure that threats to public health are eliminated and to restore natural resources for future use. Under the ERP, the Air National Guard has investigated Site 8 located at:

### NEW YORK AIR NATIONAL GUARD 106<sup>TH</sup> RESCUE WING FRANCIS S. GABRESKI AIRPORT WESTHAMPTON BEACH, NEW YORK SUFFOLK COUNTY

The Air National Guard invites the public to review and comment on the *Proposed Remedial Action Plan (PRAP) for Site 8* prepared by PEER Consultants, P.C. The PRAP identifies the Preferred Alternative of additional groundwater sampling for copper-impacted groundwater at Site 8 to be followed by No Further Action. The *PRAP* was submitted by the Air National Guard to the New York State Department of Environmental Conservation (NYSDEC) for review and approval.

A copy of the *PRAP*, as well as other documents relating to Site 8, are maintained in the Administrative Record and the Information Repository which is located at the:

### WESTHAMPTON FREE LIBRARY REFERENCE SECTION 7 LIBRARY AVENUE WESTHAMPTON BEACH, NY 11978

A Public Meeting for information purposes will be held on Thursday, February 23, 2012 at the Westhampton Free Library Program Room from 6:30 to 8:00 p.m. local time. You may address any comments or questions regarding Site 8 or the *PRAP* during the Public Meeting or in writing by March 5, 2012 to any of the following:

Jody Murata National Guard Bureau/A7OR Conaway Hall 3500 Fetchet Avenue Andrews Air Force Base, MD 20762 Phone: (240) 612-8120

Email: <u>Jody.Murata@ang.af.mil</u>

Ms. Heather Bishop NYSDEC, Division of Environmental Remediation 625 Broadway, 11<sup>th</sup> Floor Albany, NY 12233-7015 Phone (518) 402-9692

Email: hlbishop@gw.dec.state.ny.us

Lt. Shaun Denton 106<sup>th</sup> Rescue Wing Francis S. Gabreski Airport 150 Riverhead Road Westhampton Beach, NY 11978-1201

Phone: (631) 723-7349

Email. Shaun.Denton@ang.af.mil

Once the Public Comment Period expires on March 5, 2012, the *PRAP* will be finalized and any relevant public comments will be incorporated.

# Business

### **Keeping Tots Safe** Aim Of Local Trio

selling the Whoopsiec on lanuary 30, and if all goes according to the trois plans, playgrounds and row other local moms put of 2010, her mother, Amanda, and row other local moms put to come up with a way to spart her the typical bumps and bruises of balyhood.

Their brainchild was the Whoopsiec, a padded soft hem to the shape of a mushroom cap that is intended to protein ago that is intended to protein ago that is intended to protein ago that is intended to protein a path of the shape of a mushroom cap that is intended to protein a path of the shape of a mushroom cap that is intended to protein a path of the shape of a mushroom cap that is intended to protein a path of the shape of a mushroom cap that is intended to protein a path of the shape of th



Karen Krzenski and Amanda Krzenski, two of the local creators of the "Whoopsie," in Agawam Park is Southampton.

Karen Krzenski. Amanda Krzenski. two of the local creators of the Whoopsie. In Agawam Park is Southampton.

Karen's mom. Sue Adabody, a compared to the Whoopsie was southern the Amanda Krzenski. A land by August 25 the first withospiese ravied in the male a lilac-colored hat topped with a flower.

The was perfect. Karen gushed. A Whoopsie-eveatring. Kime hewen my three children of cotton and polyselser flittlength, Karens said. Not only that, ther hat began to turn beads in the play ground, with other parents wundering where the Krzenskis ali, Karens said. Not only that, ther hat began to turn beads in the play ground, with other parents wundering where the Krzenskis ali, Karenski a kindenger. Armanda Krzenski a kind

### PALACE: Dean's Meat Market Now Under New Management

sell, the younger Mr. Dean said it was his hope to pass on his family business to a like-ninded proprietor.

"I didn't want to just sell it to someone off the street," Bryan Dean said, Intested, the husband and famisted, the explained that he wanted to find a family man like himself, someone who shares similar values and, just as important, would keep his father's vision allive.

portant, would keep his father's vision alive.

And Mr. Dean helieves he found the perfect matchin Tino Masotto, to whom he sold the business on November 1.

"I was looking for a person who could carry on what my dad had starred." said Mr. Dean three children—kelly, 18, Kevin, 17, and Patrick, 15, "I found the right save."

three children—Kelly, 18, Kevin, 17, and Patrick, 15, 17 found the right gay."

Mr. Masotto, who owns a string of butcher shops called (ow Palace, and Mr. Dean thad actually care and the clean thad children shop wereas, both of whom operated; family businesses started by feet family businesses started by feet family businesses started by feet family suited a similar meant purveor for years, get along so well han Mr. working for Mr. Masson, who lives in Patchegue, after selling the businesses.

Mr. Dean now works for Cow Palace, though he is primarily based in the store's flagslip location in Rocky Point. Cow Palace, though he is primarily based in the store's flagslip location in Rocky Point.

Mr. Dean now works by Cow Palace, though he is primarily based in the store's flagslip location in Rocky Point.

Mr. Dean in live the store of the

er Place, Middle Island and Patchogue, and stand by its slo-gan. Top Shelf Means, Bottom Shelf Prices, Mr. Manoton sald. M. Manoton sald. 1376 when his father, levry Masotto, now retired, opened the Middle Island shop.

"A lot of people art on more of a fixed income now." he said. "They're not dining out as much. They'can cook a weeks worth of food for the same price as they would spend on a med out."

Mc. Dean agreed: "ropole are."

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### PUBLIC NOTICE AIR NATIONAL GUARD

Air National Guard's Environmental Restoration Program [ERP] is carried out under the overall framework he Superfund Amendments and Reauthorization Act and the Comprehensive Environmental Resposse, spensation and liability Act of 1980 [CERCIA.] The ERP] is a nationsivel effort to identify and cleavup roomental contamination that may have resulted from past practices, accidents or incidents at Air National of facilities to ensure that threats to public health are eliminated and to restore natural resources for future sse. er the ERP, the Air National Guard has investigated Site 8 located at:

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7 LIBRARY AVENUE
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Jody Murata

Ms. Heather 8ishop NYSDEC, Division of

Lt. Shaun Denton Joay Murata
Ms. Heather aisnop
M

Once the Public Comment Period expires on March 5, 2012, the PRAP will be finalized and any relevant public comments will be incorporated.



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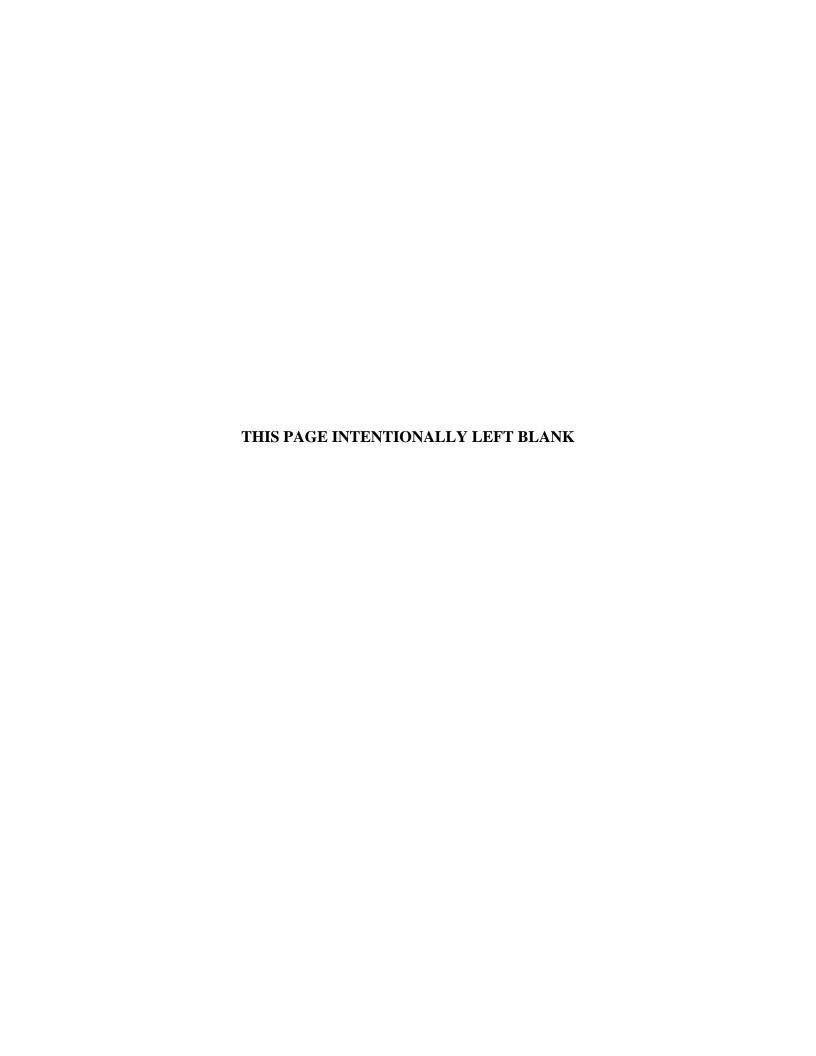
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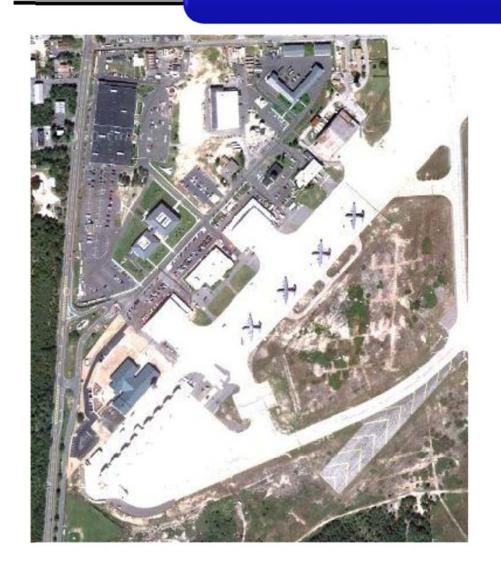
# APPENDIX B HANDOUT FOR THE PUBLIC MEETING PRESENTATION





# **Air National Guard**





# Public Meeting Presentation for Site 8

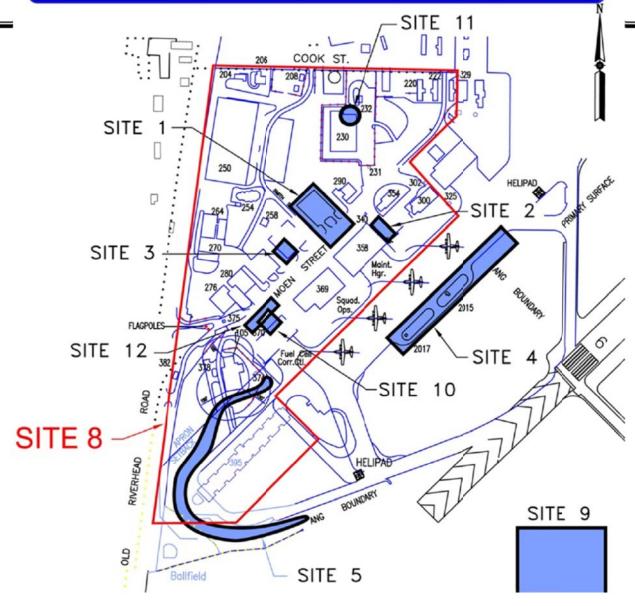
Gabreski Air National Guard Base 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

February 23, 2012



# Site 8 Location



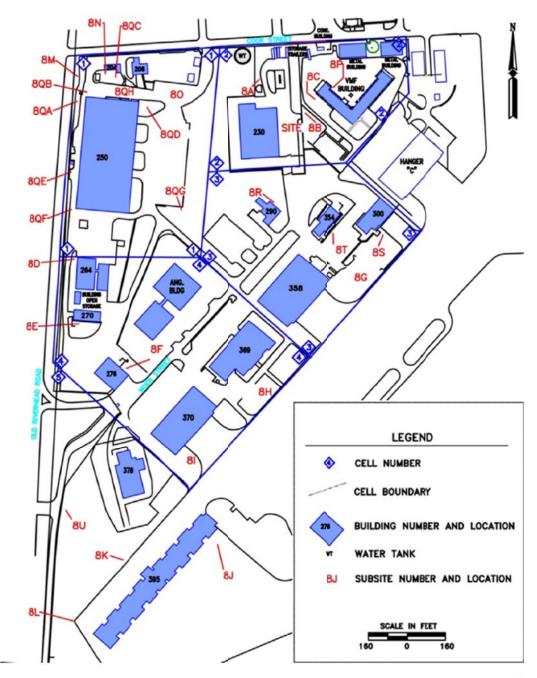


# Site 8 Description

Former Base Septic System divided into cells and subsites.

Included cesspools, septic tanks, distribution boxes, and oil/mud traps.

Most structures removed or abandoned in place.







# Investigation History for Site 8:

• 1994 Source Characterization. Consisted of sampling septic system contents (sludge and liquid). Primary Contaminants of Concern (COCs) detected consisted of volatile organic compounds (VOCs) and the metal chromium.





# Investigation History for Site 8 (continued):

• 1994 Site Investigation. Consisted of soil and groundwater sampling. Detected two VOCs (benzene and xylenes), one SVOC (naphthalene), and one metal (silver) that exceed current action levels in soil mostly from DP-60. In groundwater, detected four VOCs (benzene, ethylbenzene, tetrachloroethene, and trichloroethene), four SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene and naphthalene) and one metal (arsenic) that exceed current action levels mostly from well SDW-005. These COCs were not confirmed during subsequent investigations.

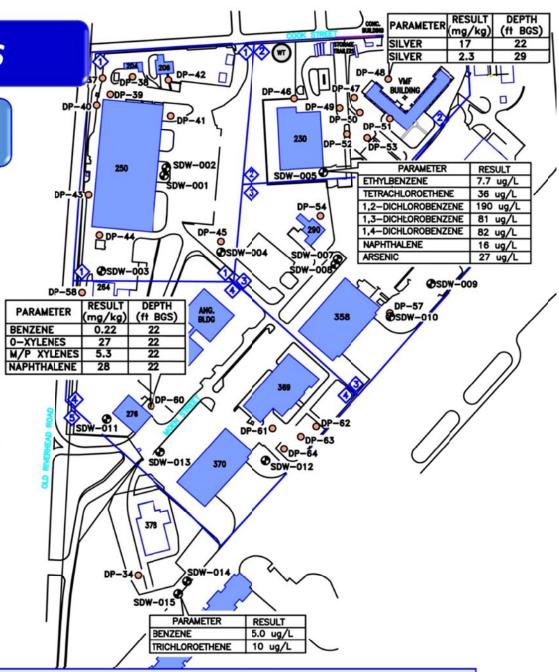
# 1994 SI Results

# **Groundwater COCs**

- Benzene at 5.0 μg/L (> 0.7 μg/L\*)
- Ethylbenzene 7.7  $\mu$ g/L (> 5  $\mu$ g/L\*)
- TCE at 10 μg/L (> 5 μg/L\*)
- PCE at 36 μg/L (> 5 μg/L\*)
- Naphthalene 16 μg/L (> 10 μg/L\*)
- 1.2-DCB at 190 μg/L (> 5 μg/L\*)
- 1.4-DCB at 82 μg/L (> 5 μg/L\*)
- 1.3-DCB at 81 μg/L (> 5 μg/L\*)
- Arsenic at 27 μg/L (> 25 μg/L\*)

## Soil COCs

- Benzene at 0.22 mg/kg (> 0.06 mg/kg\*)
- Xylenes at 27 mg/kg (> 0.26 mg/kg\*)
- Naphthalene at 28 mg/kg (> 12 mg/kg\*)
- Silver at 17 mg/kg (> 2 mg/kg\*)



\*Action Levels - Part 375 Soil Cleanup Objectives and New York State Class GA Groundwater Standards.





# Investigation History for Site 8 (continued):

• 1998 Remedial Investigation. Consisted of soil and groundwater sampling. One soil COC, benzo(a)anthracene (equal to current action level). Groundwater COCs dectected at concentrations exceeding current action levels included ethylbenzene, xylenes, phenol and naphthalene and 4-methylphenol.

# 1998 RI Results

# **Groundwater COCs**

- Ethylbenzene at 76  $\mu$ g/L (> 5.0  $\mu$ g/L\*)
- Xylenes at 180 μg/L (> 5 μg/L\*)
- 4-Methylphenol at 5  $\mu$ g/L (> 1  $\mu$ g/L\*)
- Naphthalene 44 μg/L (> 10 μg/L\*)

### Soil COCs

 Benzo(k)fluroanthene at 800 mg/kg (= 800 mg/kg\*)

PARAMETER RESULT ETHYLBENZENE 29 ug/L TOTAL XYLENES 71 ug/L RESULT (ug/kg) DEPTH NAPHTHALENE 15 ug/L **PARAMETER** BENZO(K)FLUORANTHENE 0-3 IN. 08/2SB-13 08/2SB-11 8/2SB-12 PARAMETER ETHYLBENZENE 76 ug/L SDW-002 SDW-001 8/2SB-060 TOTAL XYLENES 180 ug/L NAPHTHALENE 44 ug/L OSDW-004 SDW-007 SDW-008 SDW-003 8/3SB-02 SDW-010 8/3SB-03 08/45SB-06 8/45SB-01 PARAMETER 4-METHYLPHENOL 5 ug/l NAPHTHALENE 14 ug/L 8

\*Action Levels - Part 375 Soil Cleanup Objectives and New York State Class GA Groundwater Standards.





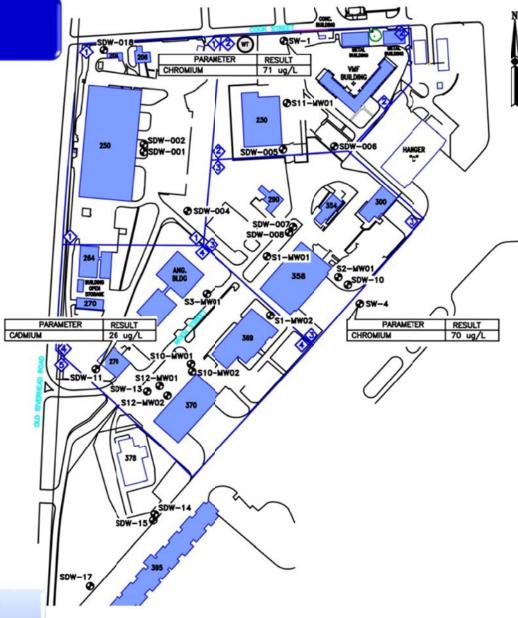
# Investigation History for Site 8 (continued):

• 2001 Remedial Investigation. Consisted of groundwater sampling. Two metals (cadmium and chromium) exceed the current action levels. Neither metal detected in downgradient wells. Report recommended removal of contents in septic system structures.

# 2001 RI Results

# **Groundwater COCs**

- Cadmium at 26 μg/L (> 5.0 μg/L\*)
- Chromium at 71  $\mu$ g/L (> 50  $\mu$ g/L\*)



\*Action Levels – New York State Class GA Groundwater Standards. No soil samples were collected during the 2001 RI.





# Investigation History for Site 8 (continued):

- 2002 Septic System Remediation. Septic systems structures were remediated. Approximately 44,000-gallons of water, 158 yd<sup>3</sup> of sludge and 840 yd<sup>3</sup> of construction debris were removed and disposed of.
- 2005 Remedial Investigation. Conducted in response to state and county's requests to determine if soil or groundwater contamination existed at six of the subsites. Acetone and silver exceeded current action level in soil. Copper exceed action level in well (MW-009).

# 2005 RI Results

# **Groundwater COCs**

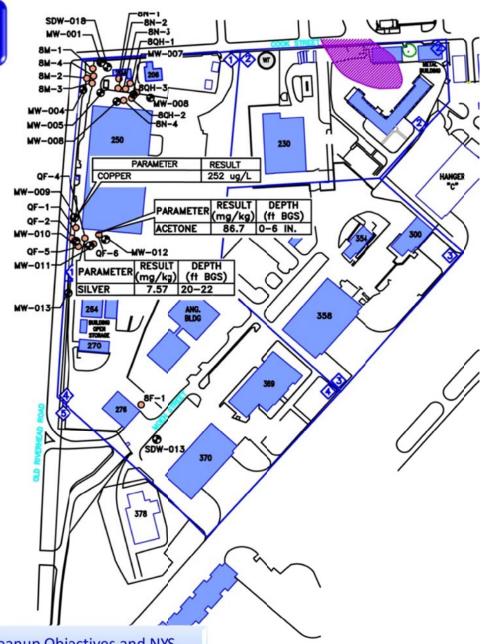
Copper at 252μg/L (> 200 μg/L\*)

# Soil COCs

- Acetone at 86.7 mg/kg (> 50 mg/kg\*)
- Silver at 7.57 mg/kg (>2 mg/kg\*)

# **Additional Info**

- Presence of Bauman Bus Plume confirmed within base boundary.
- Plume originates on County-Owned property.



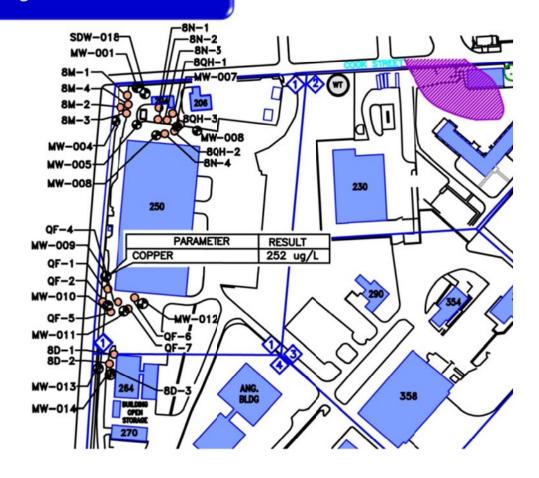
\*Action Levels - Part 375 Soil Cleanup Objectives and NYS Class GA Groundwater Standards.

# Site 8 Contaminant of Concern

Detected in Groundwater during the 2005 RI:

Copper at 252 mg/kg (> 200 mg/kg\*)

Risks to Human Health and the Environment due to COC deemed negligible. The result did not exceed Federal Maximum Contaminant Level.



<sup>\*</sup>Action Level - New York State Class GA Groundwater Standard.





# Proposed Remedial Action for Site 8:

- No Further Action with monitoring to confirm that groundwater at monitoring well MW-009 is not aversely impacted.
- The NYSDEC has concurred with the proposed alternative of No Further Action at Site 8.





# **Upcoming Activities:**

- Prepare Public Meeting Minutes.
- Prepare a Responsiveness Summary.
- Finalize the Site 8 Proposed Remedial Action Plan.





# For Information and Updates:

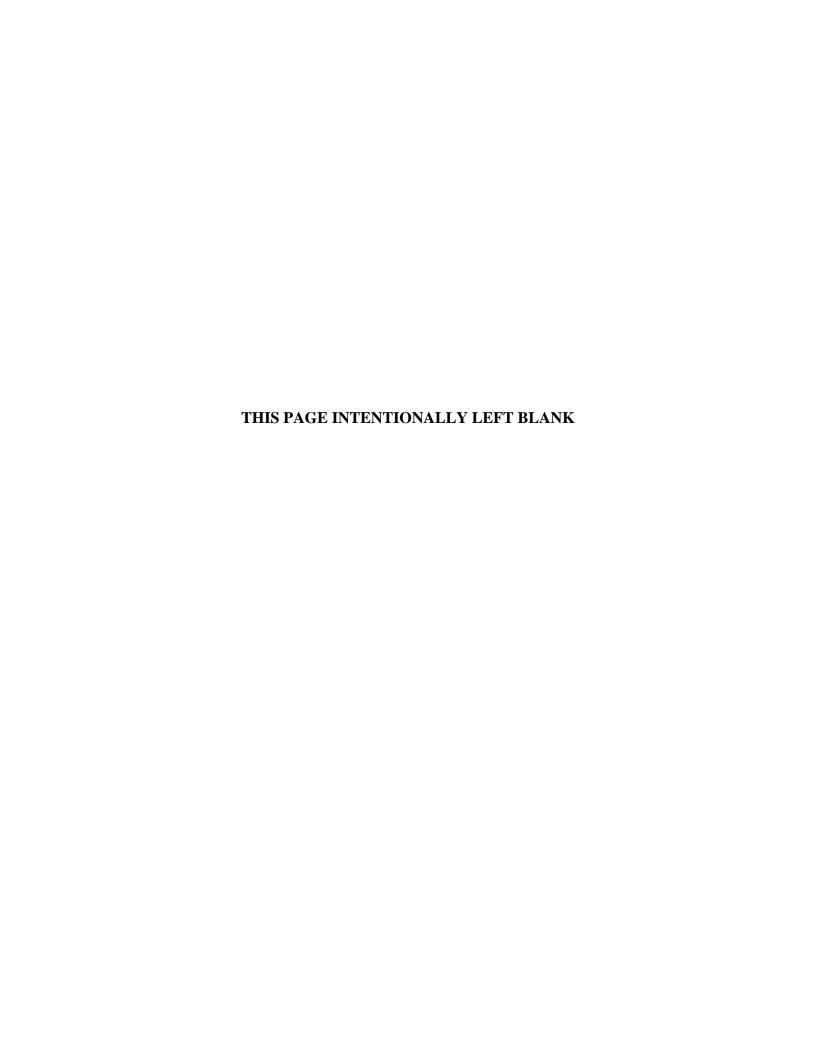
Jody Murata
ANG Program Manager
(240) 612-8120
Jody.murata@ang.af.mil

Heather Bishop NYSDEC Project Manager (518) 402-9692 hlbishop@gw.dec.state.ny.us Lt. Shaun Denton
Base Environmental Manager
(631) 723-7349
Shaun.denton@ang.af.mil

# Administrative Record File Located At:

Westhampton Beach Free Library 7 Library Avenue Westhampton Beach, NY 11978-2697 (631) 288-3335

# APPENDIX C PUBLIC MEETING TRANSCRIPT



```
Site8ANG
1
2
3
4
5 AIR NATIONAL GUARD
6 PUBLIC MEETING PRESENTATION
7 FOR SITE 8
9
10
11
12
13
14
15 Westhampton Beach Free Library
16 February 23, 2012 6:30 P.M.
17
18 Presentation By: Richard Stout
19
20
21
22
23
24
25
1
2
1 MR. STOUT: Thank you very much for
2 coming. I am Richard Stout. I am an
Page 1
Site8ANG
3 environmental contractor with the Air National
4 Guard. This meeting is a public meeting for
5 Site 8. Basically, it's to discuss the
6 Proposed Remedial Action Plan for that site.
7 It's being reviewed by the public right now,
8 and the expiration for that public review is
9 actually March 5th. So just in a few days, we
10 will be finished with the public review, and
11 hopefully we will be ready to move on. I want
12 to also introduce you to some of the people in
13 the audience. We have Jody Murata. She's in
14 the back row. She is the actual Program
15 Manager for the Air National Guard for this
16 base and several other bases around the
17 country. We also have Heather Bishop and John
18 Swartwout. They're from the Department of
19 Environmental Conservation for the State of
20 Tennessee.
21 MS. BISHOP: New York.
22 MR. VASELL: You said the State of
23 Tennessee.
24 MR. STOUT: Did I? I'm sorry,
25 that's actually where I am from. I meant New
3
```

```
1 York. Tennessee has nothing to do with this.
2 I am the only part of Tennessee that is up
3 here. This right here is actually a map of
4 the site. I put this in here just to show you
5 the extent of the site. It's fairly large.
6 That red boundary is the actual boundary of
7 Site 8. Those other sites are our Site B
Page 2
Site8ANG
8 sites. They just happened to be in this site,
9 which makes things a little more complicated
10 than some of the other ones I have worked on.
11 The reason that this site is so large, is that
12 it's the former septic system. That is what
13 encompasses that site. This base septic
14 system was actually divided into subsites and
15 cells. I guess to make it easier to describe
16 and to discuss the different things that were
17 going on, if you look at those little red
18 designations with the arrows, each one of
19 those would represent a certain part of the
20 septic system, and that would be a cesspool,
21 septic tank, distrubution boxes and oil/mud
22 traps, whatever. And also just to tell you
23 right now, that most of those structures are
24 abandoned or removed at this time. That
25 happened around some time in 2002. Those blue
4
1 boundaries, those are actually the cell
2 boundaries. Those diamonds actually have the
3 cell designation in there. So when you're
4 looking through the Proposed Remedial Action
5 Plan, you will see records for different cells
6 or different subsites, and that is actually
7 what's being discussed there. We will start
8 out with the investigation history of Site 8.
9 Actually, there was some investigation done
10 there before 1994, and in 1991, the base took
11 samples of some sludge and some liquid, and
Page 3
Site8ANG
12 some components of the cesspools or the septic
13 tank system. And what they found is they had
14 volatile and semi-volatile organics in those
15 samples. Now, volatile organics are carbon and
16 hydrogen constituents. They're very volatile.
17 They evaporate easily. Semi-volatile
18 compounds are simpler. They don't evaporate
19 quite as soon. Also, they detected the metal
20 chromium, which -- actually, that is not yet.
21 In 1991, it was just semi-volatile organics
22 and volatile organics. So based on what
23 happened in 1991, in 1994, they did what is called
24 a Source Characterization, where they did some
25 extensive sampling. I don't know if they
5
```

```
1 sampled every single cesspool, or all the
2 sludge. They sampled quite a bit of it, and
3 they found more volatile organics, and they
4 found the metal chromium. They did not detect
5 semi-volatile organics at that time. But at
6 this time in the investigation history of the site.
7 volatile organics were contaminants of
8 concern. Now, contaminants of concern, are
9 contaminants that exceed action levels. And
10 to give you an idea on what an action
11 level is, an action level is a compound
12 concentration that exceeds a state, locally or
13 Federally mandated concentration, if that
14 concentration is exceeded by a constituent, then
15 some type of action is usually taken, a
16 clean-up, further sampling. Something like
Page 4
Site8ANG
17 that has to be done when an action level is
18 exceeded. Based on the results that they
19 obtained here in the 1994 Investigation, they also
20 did a Site Investigation. Now, that was a
21 pretty extensive investigation. The
22 difference between this investigation and the
23 one before is actually they went outside the
24 cesspools and outside the components of the
25 septic systems. And they were actually taking
6
1 samples of the soils and groundwater. And
2 what you have here are all the sample
3 locations that were investigated here in the 1994
4 Site Investigation. You can see those little
5 circles with the hourglass like, those are
6 monitoring wells. The peach areas with the
7 little dark circles around them, those are
8 actually soil borings. So that's some of the
9 sampling that they did. And what they found
10 when they did actually did some of the
11 sampling, if you look at our list here, you
12 can also see where some of the samples were
13 collected -- I mean, where those
14 concentrations were actually contained. On
15 the map, they found several VOC's, included
16 benzene and ethylbenzene. They also found
17 some TCE or PCE. They found naphthalene, some
18 DCB, which is dichlorobenzenes. They also
19 found some arsenic in the groundwater. Now
20 the benzene and the ethylbenzene and the TCE
Page 5
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21 and PCE, those are all volatile organics.
22 Remember, we said that they tend to evaporate
23 guite easily, and also they degrade easily
24 because they evaporate easily. In sunlight,
25 they will degrade a lot faster. Now, if you
7
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1 look up there you will see that those two, and we
2 were not at surprised. The benzene and
3 ethylbenzene, we expected volatile organics to
4 be in the soil somewhere because we found it
5 in the septic system. And what happens is a
6 septic system, well the septic system actually
7 infiltrates into the soil groundwater. And
8 that is how they work. So we weren't
9 surprised of those two constituents in there,
10 because we did find them in the septic system.
11 But, we weren't entirely surprised about the
12 TCE or PCE either, because we think about what
13 happens at a base, they do maintenance
14 activities there for aircraft, different
15 vehicles. They may need to use some type of
16 parts cleaner, degreaser, and that's what
17 those are. The arsenic, that really wasn't a
18 surprise either, because that is naturally
19 occurring. I think that it being over the
20 action level, that is probably something that
21 was not expected. And then I guess the
22 question arises, Why is all that stuff in the
23 septic system the first place? And you have
24 to think about things like this, we really
25 don't know how it ends up in the septic
Page 6
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8
1 system, but if you can imagine that you work
2 at a base and the fuels that you are working
3 with, degreasers, and there are drains
4 everywhere, and you're washing your hands, and
5 maybe you spilled something and you use a rag.
6 you put that down the drain. During those
7 times, I don't think anybody was really
8 educated that those types of things should
9 really not go into a drain. I think we are
10 better educated about that stuff now, but that
11 may be an explanation on why that stuff was
12 found in the septic system in the first place.
13 Then when we move to soil, the soil VOC's, we
14 actually had some benzene. We had some
15 xylene, we had some Naphthalene and some
16 silver. Now of course, the benzene and
17 xylenes, those are volatile organics like we
18 have been discussing before. But we also
19 found some naphthalene, now it's somewhere
20 between being a volatile organic and
21 semi-volatile organics, and then we had
22 silver, which wasn't a surprise as it's
23 naturally occurring but it was funny that it
24 was there at that concentration. Now, what
25 you see at the very bottom is the action
9
1 levels. Those are the actual action levels
2 that are in effect today. You have your
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3 Part 375 Soil Cleanup Objectives, that's for
4 soil, and then you have your New York State
5 Class GA Groundwater Standards. And what we
6 did with all these investigations that were
7 conducted, as a part of the Proposed Remedial
8 Action Plan, is we looked at all the past data
9 and it took quite a while to look at all of it
10 and we entered it and compared it to today's
11 action levels, because we wanted to get an
12 idea how would this data compares to action
13 levels today. Now, in the past when action
14 levels were determined, sometimes they were
15 arbitrary. Nobody really knew what a good
16 level was or what a bad level would be, but
17 they picked something based on the extent of
18 knowledge that they had at the time and over
19 the years, those action levels have changed.
20 Sometimes the knowledge has grown. Sometimes
21 the action levels go up. Sometimes the action
22 levels go down. Most of the time in our
23 experience, they have gone down. But we just
24 thought that it would be important to check
25 and make sure that we weren't going to miss
10
1 any type of contaminant or any type of
2 something that was there in the past, that
3 probably people did not consider a risk back
4 then, that may be now. But we also looked at
5 the contaminants and we tried to determine.
6 will they still be at the site today.
7 Actually, those were detected in 1994, so
Page 8
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8 18 years from now or 18 years later, are
9 they still going to be at the site, and all
10 we determined is, we probably don't expect to
11 have any of the volatile organics there. We
12 probably don't expect to see any of the
13 semi-volatile organics because remember, they
14 degrade over time and also, the volatile
15 organics are even faster than that. Now, the
16 metals, the arsenic and the silver, those
17 don't generally degrade over time. You may
18 actually see those again when you do some
19 sampling. But what we actually found in the
20 later investigations was, these detections
21 were not confirmed. In other words, when we
22 sampled in the same general area, we never
23 found those contaminants again. So, if we go
24 based on what happened in 1994 and the
25 results of that investigation, that was just a
11
1 basic investigation, they went ahead and
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2 determined that they better do something

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3 more extensive. So they did a 1998 Remedial
4 Investigation. It was the same type of
5 sampling. Soil and groundwater. One thing
6 that was different about this investigation, I
7 guess it was like a -- not a newer technology
8 but maybe people hadn't thought about it at
9 the time, is that they actually collected
10 sampling from soil boring, groundwater
11 sampling from soil borings. Now, when they
Page 9
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12 install a monitoring well at the site, they
13 drill down into the soil. Sometimes bed rock,
14 but not at this site, because we had mostly
15 sandy soils, and we install a well. What
16 happens is when we do that, you mix up all
17 kinds of sediments in the water. The water is
18 pretty muddy, so you have to clean the well
19 up. We call it monitoring well development.
20 You want to get that water as clean and as
21 clear as possible. At the time when they
22 sampled those soil borings, there may have
23 been some sediment in those soil borings. So
24 when they actually got the results from those
25 samples, you know, we can look back at it now,
12
1 and say you know, those results may be biased
2 in some way and those soil borings, because we
3 know that you know, they are probably going to
4 have some sediment in there, and that is going
5 to get mixed up in the sample. And that can
6 make you get something that is called a "false
7 positive." That is when you analyze for
8 something and you think it's there at a
9 certain concentration, and it's really not.
10 It's a nice little concentration more than you
11 thought, but because of the presence of the
12 sediment in the sample, it's actually
13 elevated. It's higher then you know, what
14 normally would be considered. If we look
15 here, we can see the actual sample locations
16 of the 1998 RI. You can see the results there
Page 10
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17 also, but one thing I wanted to note to you
18 is, we go back to '94, and you look at that
19 map, and you come back here, you will see some
20 of the groundwater. In fact, most of the
21 groundwater wells that they sampled there are
22 the same ones here. I think there is some new
23 ones. If you see SW4, I don't think that was
24 sampled there in the '94. It may have been
25 newly installed at that time. I can't
13
1 remember which wells were installed at which
2 point. That's probably that is something that
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3 I should have looked up before this meeting.
4 But it doesn't really matter, once you see they
5 have been sampling those wells consistently
6 over the years and the types of concentrations
7 that they find, and if you will notice, they
8 did find some more volatiles and they found
9 some more semi-volatiles. Those things like
10 ethylbenzene, Xylene. I noticed they didn't
11 find any benzene here. I wouldn't expect them
12 to find benzene here because by this point, I
13 would suspect that, you know, people are
14 educated at the base. They're probably not
15 pouring things down the drain at this time.
16 They probably know that they're not supposed
17 to. There are probably rules. In fact, the
18 drains have probably been filled with concrete
19 and stuff like that, which I actually know
20 things like that happened at bases to prevent
Page 11
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21 that from occurring. So you would not expect
22 to see a lot of volatiles at that time. They
23 probably all degraded, and that's what we
24 believe happened and the sampling bears that
25 out where they did detect volatiles at some
14
1 places, but they didn't detect them later.
2 You can see again, the little hourglasses with
3 the circles are wells. You can see the areas
4 -- you can tell -- I guess I should have told
5 you this from the beginning, but if it says
6 microgram per liter, that liter indicates that
7 it's water. If it says kilogram or some other
8 type of weight, that indicates that it's soil.
9 So this drawing is a little bit different. If
10 you look you can see that they did take some
11 groundwater samples from the soil borings.
12 Those might be biased results but it doesn't
13 really matter. We're not really worried about
14 that now. It's something that we have to deal
15 with. What we did find is one thing that
16 didn't surprise us out of everything that we
17 found was the benzo(k)fluroanthene. That's a
18 PAH, poly aromatic hydrocarbon. It's a by
19 product of incomplete fuel combustion. So
20 what you would expect to find around an
21 airport where people are flying aircraft all
22 day, they're driving cars, you're going to
23 find PAH's. And you're probably going to find
24 them in a lot of places. So I wasn't
25 surprised about this, as was exactly a place
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1
15
1 where you would find them, in the first few
2 inches of soil, 0 to 3 inches. The reason
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3 for that is, these types of contaminants,
4 semi-volatiles, especially PAH's, tend to
5 adhere to soil particles, and they tend to
6 become immobilized. So they're going to stay
7 right there in that location. And when we
8 look at these constituents that were detected.
9 and we tried to determine the type of risk
10 that might occur, due to that contaminant, we
11 try and think, how could a person actually be
12 exposed to this? Can they touch it? Can they
13 breathe it? Can they swallow it? Drink it.
14 And that benzo(k)fluroanthene is probably
15 under asphalt. I can't say for sure but that
16 is what I believe, and so it's not something
17 that people can actually contact. Again,
18 just like in the 1998 Investigation, we
19 weren't able to detect these concentrations
20 or these volatile organics again. Again, this
21 investigation, we compared it to today's
22 current action levels. Based on the 1998 RI. a
23 2001 Remedial investigation was conducted at
24 the site. Basically all we did at that time
25 was sample groundwater. As you can see, it's
1
16
1 the same wells, I don't think we sampled as
2 many wells. As you can see SW4 was still
Page 13
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3 included. I think there weren't guite as many
4 as we usually deal with. There are no soil
5 borings on that page. What was detected at
6 our 2001 RI were two metals, Cadmium and
7 Chromium. One thing you will notice is the
8 absence of volatile organics or semi-volatile
9 organics that are not there. We have been
10 predicting for the last two investigations
11 that some day we are not going to find them
12 anymore because they degrade quickly, and
13 actually that is what we found here at this
14 investigation. We looked at the data. We
15 looked at the sampling information that was
16 conducted during the sampling. And what they
17 do, before they collect the groundwater
18 samples, they take all kinds of readings to
19 characterize the groundwater.
20 Temperature, PH, that sort of thing. Another
21 reading that they take is something called the
22 turbidity. That gives you an idea about the
23 cloudiness of the water. The sedimentation of
24 the water. And that will show you whether you
25 might have a sample that could possibly be a
17
1 false positive, and we call that false
2 positive due to the entrained sediments.
3 That's where there are lots of sediments in
4 the groundwater. And those metals or those
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5 containments, they stick on those sediments.
6 And when you send those samples to the
7 laboratory, ideally what you want to do is
Page 14
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8 send a clear sample. You want them to analyze
9 nothing but the water. That's all you want is
10 what's in that water. When you're moving
11 through the pores of the sand, you are going
12 to get an elevated reading at some times.
13 It's going to be higher than what is actually
14 there. And based on the concentrations of the
15 sediments in the water, we were able to
16 determine that the Cadmium, that was probably
17 due to the emtrained sediments and the report for
18 the 2001 RI also said that they had determined
19 that that result was a false positive due to
20 high turbidity. Now, the Chromium
21 concentrations, in the northern portion of the
22 site and down here on the right. I looked at
23 those data, and I saw that there was some
24 elevated level of turbidity there. But it
25 was inconclusive. I couldn't say that was
1
18
1 definitely due to entrained sentiments. But I
2 believe it probably was. But one thing that
3 they said in the RI Report, based on the
4 information that they had then they were able
5 to determine, is they think the chromium was
6 naturally occurring there, here at this site.
7 It's just high in this region, area, for
8 whatever reason. And so that's actually what
9 they said about that, those results. So based
10 on the results that occurred in the 2001 RI --
11 well, what's the results of the 2001 RI, but
Page 15
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12 it was information that was based on, and actually
13 reviewed here in the 2001 RI. Our guys
14 actually took a look at the past
15 investigations and said, look, we're going to
16 recommend that you guys get rid of that septic
17 system. Get all the sludge. Take that all
18 out. Take the liquid out of those tanks. Get
19 rid of them, you know, and stop doing that
20 because you know, obviously it's a potential
21 source for contamination in the future. So
22 in 2002, that actually occurred. They removed
23 approximately 44,000 gallons of water. A
24 148 cubic yards of sludge. And 148 cubic
25 yards of concentration debris. Now, a cubic
19
1 yard is 3 feet this way,
2 3 feet this way, and 3 foot by this way,
3 it's like a 3x3x3 cube. If you could
4 imagine, that's quite a bit of sludge,
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5 concrete and debris, and that would be the
6 debris from the actual system. Where it was
7 dug up and removed. Now, the majority of it
8 was removed. There are a few locations that
9 were abandoned in place, and that was done
10 according to the State regulations and
11 guidance and all of that. After the source of
12 any contamination was removed, I think the
13 State took a look at the past investigations,
14 and there were some areas that they did have
15 questions about. Maybe they felt that they
16 were not really investigated thoroughly as
Page 16
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17 some of the other investigations. So they
18 recommended the 2005 Remedial Investigation,
19 basically. To please do some extra work at
20 this area and this area. If you look at the
21 areas that we investigated in 2005, you can
22 see there are tons of sampling areas in that
23 location, but if you go back in the past and
24 you look at some of these old maps, there is
25 not a lot of sampling that went on in that
1
20
1 northwestern portion of the Base. So
2 actually, it does make sense that we would go
3 back and thoroughly investigate that. And
4 what we found there is that we had copper at
5 252 mg/L and it exceeded the action level --
6 the State mandated action level of 200
7 micrograms per liter. But what I wanted to
8 say about this is, it did not exceed the
9 Federal MCL. The Federal MCL is around 1300,
10 and so the State, what they are allowed to do,
11 they either abide by the Federal MCL's or
12 they can set their own levels. Their own
13 action levels, but it has to be equal to or
14 more stringent than what the Federal
15 government. And the State of New York has
16 chosen 200 micrograms for copper. So we
17 weren't really too worried about that
18 for concentration. We looked at the human
19 health risk assessment and could this be a
20 risk to human health or the environment? We
Page 17
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21 were able to say that the risk was negligible.
22 Copper after all, is human nutrient. And it
23 does naturally occur like most of the other
24 metals in the environment, but one thing we
25 couldn't do, is we couldn't look at it and
1
21
1 conclusively say, it's due to entrained sediments.
2 We thought, you know it might be. We looked
3 at the samples. We did take a total metal
4 sample. We did not take a dissolved metal
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5 sample. So we didn't have something
6 conclusive to really go on. I looked at the
7 turbidity, it was slightly elevated but we
8 took a duplicate sample there. And also got a
9 very similar result. But we thought, you
10 know, we think there are some entrained sediments
11 but we just have a feeling about it but we
12 just have to retain that it is a contaminant
13 of concern. It just worked out that way, it
14 exceeds the action level. It's actually in
15 the groundwater. If something is in the soil
16 depending upon the depth of the soil, we don't
17 really concern ourselves with it too much in a
18 lot of ways. When you look at this and you
19 see that silver concentration that was at
20 20-22 feet below the ground surface. Now,
21 that sample, that concentration, it does
22 exceed the action level but it wouldn't be
23 something that we would be concerned with from
24 a risk standpoint because No. 1, it's so far
25 down in the ground. People aren't probably
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1
22
1 going to come in contact with it. That's not
2 really going to happen, but then you have to
3 think about it. Well, there can be another way
4 it can actually be in contact with it. That
5 would be through groundwater. Is that likely?
6 No, it's not likely. But it doesn't matter at
7 this point. We have to say could that
8 possibly occur? Well, the downgradient
9 samples, did not contain silver in
10 concentrations that exceeded action levels.
11 Now, what we do when we go to a site, is we
12 try and determine the direction of groundwater
13 flow. Basically here at this base, it's
14 south, southerly. So it's from the northern
15 portion of the base to the southern portion of
16 the base. And so, when we detected the silver
17 here, we looked at data and these wells down
18 below it to see, if hey, is it moving in the
19 groundwater table, and we are actually able to
20 say, no, it's not. So based on a risk
21 standpoint and the information that we had
22 about the groundwater, we were able to say we
23 don't think there is any risk associated with
24 this and we were able to say this does not
25 need to be retained as a contaminant of
23
1 concern. And then the other thing that was
2 kind of surprising is, we found acetone. It
Page 19
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3 was right there at the ground surface. Zero
4 to six inches. That was a surprise. It is
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5 not something that you're going to usually
6 find. We were able to say that, it did exceed
7 the action levels but it's actually a
8 laboratory contaminant. The EPA has certain
9 rules and guidelines for determining what's a
10 laboratory contaminant and what's not.
11 They're pretty stringent and it's pretty
12 obvious what is a laboratory contaminant. We
13 knew that was nothing from the field.
14 Sometimes when you're sampling and you use
15 alcohol to wash your sampling equipment, it
16 depends on the alcohol, the isopropyl alcohol.
17 You can actually get acetone. If it's a real
18 sunny day, isopropyl alcohol can get turn, can
19 degrade, can turn into for lack of a better
20 way of saying, acetone. We use methanol. So we
21 knew it wasn't that and the laboratory didn't
22 have a problem with acetone at that time. So
23 we were able to say that that was not a
24 contaminant of concern for the site. Acetone
25 evaporates very quickly. That is one reason
1
24
1 why it's a common laboratory contaminant. And
2 that was also a place under asphalt. So it
3 just made it very unlikely that it was
4 something representative of the site or caused
5 by the septic system or anything that could go
6 on at the site. So what we ended up with is
7 copper. That's our only contaminant of
Page 20
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8 concern at this site. And one other thing
9 that I wanted to talk to you about, if you
10 look and see that purple area there, that's
11 actually a groundwater plume. It's called the
12 Bauman Bus Plume Site. It's something that we
13 did here in the 2005 investigation. We tried
14 to determine, does the base receive any other
15 groundwater plume. There is another
16 groundwater plume just north of the base. Is
17 it actually on the base, and are we able to
18 confirm that it was on the base. That's not
19 the actual -- we don't know what the plume
20 looks like exactly. That's an estimate based
21 on what we detected there. So based on the
22 2005 results and the results that we have had
23 in the past, we came up with our final
24 contaminant of concern, which is copper. We
25 were able to determine the risk to human
25
1 health and the environment were deemed
2 negligible, and the result did not exceed the
3 maximum contaminant level. So what we propose
4 to do in the Proposed Remedial Action Plan for
5 Site 8 is we're going to propose no further
6 action with monitoring to confirm that the
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7 groundwater monitoring well, MW-009 is not
8 aversely impacted. So what we will probably
9 end up doing is going out and collecting
10 samples. We will collect what is called a Total
11 Metal Sample, and a Dissolved Metal Sample.
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12 The Total Metals Sample will be the sample as
13 is, what's collected in the water. The
14 Dissolved Metals Sample is filtered. They
15 filter out all the sediment. You send both
16 the samples to the laboratory. We get them
17 analyzed and the result will get you a real
18 clear indication as to whether or not
19 sediments are actually affecting, you know,
20 the sample result. Just to let you know, the
21 State has concurred with that proposed
22 alternative of no further action and the
23 additional monitoring of Site 8. I talk
24 pretty fast. I hope I didn't miss anything.
25 I know there were a lot of details. Does
26
1 anybody have any questions?
2 THE REPORTER: So far Sites 2, 5, 3
3 and now 8, have had plans?
4 MR. STOUT: Yes, Ma'am.
5 THE REPORTER: Are there other sites
6 that are approved to be investigated?
7 MR. STOUT: Not by me. Jody do you
8 have --
9 MS. MURATA: We have Sites 7 and
109 --
11 THE REPORTER: Thank you.
12 MR. STOUT: Okay. Let's look at
13 some things to come. I will prepare public
14 meeting minutes for the meeting that we had
15 here tonight. I will also prepare a
16 Responsiveness Summary. That summary will
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17 include any questions or comments about the
18 proposed Remedial Action Plan that we have
19 received from the public. Also, what I will
20 go ahead and finalize the Site 8 Proposed
21 Remedial Action Plan at the end of once the
22 period of review expires, which is March 5th.
23 So sometime around the middle of March or
24 before. You should actually be getting copies
25 of the final document. Will that work out
27
1 for you guys, I know you have a specific
2 date?
3 MR. SWARTWOUT: That would be like a
4 draft record of decision?
5 MR. STOUT: Yes, you will get both,
6 a draft final decision document and you will get
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7 the final Proposed Remedial Action Plan. That
8 is what you're scheduled to receive.
9 MR. SWARTWOUT: The timing of that
10 is good for us. We would like to have it
11 reviewed and hopefully signed off on by the
12 end of March.
13 MR. STOUT: That sounds wonderful.
14 I am all for that. For information and
15 updates, you can contact Jody Murata. You can
16 contact Heather Bishop. You can contact Lt.
17 Shaun Denton at the base. Also, you are
18 welcome to come here any time you would like
19 and review any of the documents about the
20 base. Any of the sites you were talking
Page 23
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21 about, Lauren, should be in the administrative
22 records file. Anyway, that concludes our
23 meeting tonight, but if anyone has any
24 guestions that they would like to ask, feel
25 free to ask me at any time.
28
1 MR. SWARTWOUT: How did you
2 determine the extent of the Bauman Bus Plume?
3 MR. STOUT: What we did was, we took
4 past documents that people had done and kind
5 of looked at that. We installed monitoring
6 wells, they kind of bordered the site. What
7 we did is, we said, there is a
8 concentration here where this plume kind of
9 extends, and we based that on that there was
10 actually a well there at that time. And they
11 did have a reading with some fuel related
12 compounds. If you see that building that
13 looks like the "V," that's brand new and all
14 that has been redone. So it's an estimate and
15 I don't know how good of an estimate that is.
16 But we do know that the plume does cross the
17 boundary.
18 MR. SWARTWOUT: Are there any plans to
19 actually confirm that?
20 MR. STOUT: Well, we confirmed that
21 it's actually there, but to confirm the
22 extent, not at this time. Not that I know of.
23 I believe the Air National Guard is working
24 with the County, and I have read documents
25 where they're in the process of remediation
Page 24
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29
1 there. So that is where that is now. So
2 Jody. Tony or Lt. Shaun Denton may have some
3 more information, but that is the extent of my
4 information about that.
5 MR. SWARTWOUT: Do you have anything
6 to add on that more, Heather?
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7 MS. BISHOP: Yes. I think they did
8 do it, the Bauman Bus. I think they're done.
9 MR. STOUT: That's good.
10 MS. BISHOP: The County did them.
11 MR. PARISH: Yes, sir. They are
12 also going to be checking one of the wells
13 that we have.
14 MS. BISHOP: To downgrade it?
15 MR. PARISH: Correct. And they just
16 made contact with us in the last couple of
17 weeks.
18 MR. STOUT: Perfect timing.
19 MR. PAULSEN: Can you explain why
20 the wells are clustered up in that area there?
21 There is probably more wells up there then
22 throughout the site.
23 MR. STOUT: Well, you know, I can't
24 -- unfortunately I don't remember why in
25 particular. I know there were a lot of
30
1 septic -- what I am saying, I don't know
2 what contaminant they were concerned about.
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3 What I do know of the septic system
4 components that were up there, in the front, I
5 wish I had my pointer. There is -- you see
6 those two little blue. Those are actually
7 buildings. They're fairly large and in front
8 of them, and between these two, there were
9 several of the septic system components
10 there. And I think the State felt that they
11 had not been investigated properly or I don't
12 want to say properly, but extensive enough.
13 And also between those buildings, there is
14 also over to the west, in that upper drawing,
15 those borings were all around the septic
16 system there. Now, it may be based on the
17 Source Characterization Study. They may have
18 gotten some high concentrations of metals. I
19 know chromium was a real problem in some of the
20 samples that they collected, and that might be
21 the reasoning, but at this point I can't
22 remember specifically what the contaminant
23 was, but I do know they wanted those
24 investigated and I suspect -- my memory is
25 not that bad, but I do suspect because of
31
1 some of the concentrations of contaminants
2 in the septic systems.
3 MR. VASELL: During our meetings
4 with the DEC, one event, there was a question
5 about chromium being in soil. What was the
6 soil background, chromium. And unfortunately
7 our contractors ANG, were not able to go off
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8 of our property. So there was talk about
9 going up into the Pine Barrens. I think that
10 was the further that we can go, the north.
11 And as you said earlier, the flow that is the
12 northwest portion of the base. I know that
13 was an issue. As far as activity occurring
14 around those buildings, you know SWM, there
15 was a bank there. You know, back in the air
16 force days. This was all air force
17 property.
18 MR. PAULSEN: I was just curious.
19 MR. STOUT: It looks a lot worse
20 than it was. If you were actually on the
21 ground, you would say one is over there. That
22 is actually a large area. It's the entire
23 base that we're looking at. There was also an
24 underground, a storm sewer that cuts in
25 between the two, 250. I think they were
32
1 concerned about contamination of the septic
2 system.
3 MR. PAULSEN: Right.
4 MR. STOUT: A cutout from the sewer
5 line and spreading. So we had borings around
6 there and wells around there too, to look for
7 something like that, but we were able to show
8 that nothing like that actually occurred.
9 Groundwater is pretty far down there.
10 I can't remember the exact number but it's
11 greater than 40 feet. It would take quite a
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12 whole lot for something to infiltrate into the
13 groundwater there. You can see that it looks
14 like it did in some of those earlier
15 investigations.
16 Any other questions?
17 (No Response.)
18 MR. STOUT: With that, that will
19 conclude the meeting. Thank you for coming.
20 Thank you to the State for coming. Thank you
21 Tony and Lt. Denton for coming and for your
22 support.
23
24 (Whereupon, the hearing concluded.)
25
1
33
2 CERTIFICATION
4 I, Jessica DiLallo, a Notary Public for and
5 within the State of New York, do hereby certify:
6 THAT, the witness(es) whose testimony is herein
7 before set forth, was duly sworn by me, and
8 THAT the within transcript is a true record of the
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9 testimony given by said witness(es).
10 I further certify that I am not related either by
11 blood or marriage to any of the parties to this action;
12 and that I am in no way interested in the outcome of
13 this matter.
14 IN WITNESS WHEREOF, I have hereunto set my hand this
15 day, March 4, 2012.
16
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18 (Jessica DiLallo)
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