### 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**



### Public Comment Period – January 19 to March 5, 2012

### Submit Written Comments

The ANG and NYSDEC will accept written comments on this Proposed Remedial Action Plan during the 45-day Public Comment Period. Contact information is provided on Pages 5 and 27 of this document.

#### Location of Information Repository

For more information about Site 8, you may review the Administrative Record by contacting Lt. Shaun Denton at the following Location:

106<sup>th</sup> Rescue Wing New York Air National Guard 150 Riverhead Road Westhampton Beach, NY 11978-1204 (631) 723-7349

Or Contact Mr. Jay Janoski at:

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

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### **1.0 INTRODUCTION**



This Proposed Remedial Action Plan (PRAP) identifies the Preferred Alternative for Site 8 – Old Base Septic Systems at the 106<sup>th</sup> Rescue Wing (RQW), Francis S.

Gabreski Airport, Westhampton Beach, New York. The location of Site 8 in relation to the base is shown on Figure 1.1. The proposed action is *No Further Action* with monitoring to confirm that *groundwater* at *monitoring well* MW-009 is not adversely impacted. Please note that italicized terms are defined in the Glossary at the end of this plan.

The Air National Guard (ANG) has met and consulted with the New York State Department of Environmental Conservation (NYSDEC) during the investigative and *remedial action* processes at Site 8. In addition, the ANG has worked closely with the NYSDEC to determine the *Preferred Alternative*. and the NYSDEC has concurred with the recommendations made in this PRAP (Attachment A). The community will have the opportunity to comment on this PRAP during a 45-day public comment period which begins on January 19 and ends on March 5, 2012. The ANG will review comments submitted during the 45-day public comment period and will consult with the NYSDEC to determine whether or not to modify the Preferred Alternative presented in this PRAP.

A Public Meeting was held on February 23, 2012 and no comments were received from the public during the meeting or the Public Comment Period. A Responsiveness Summary is presented in Attachment B.

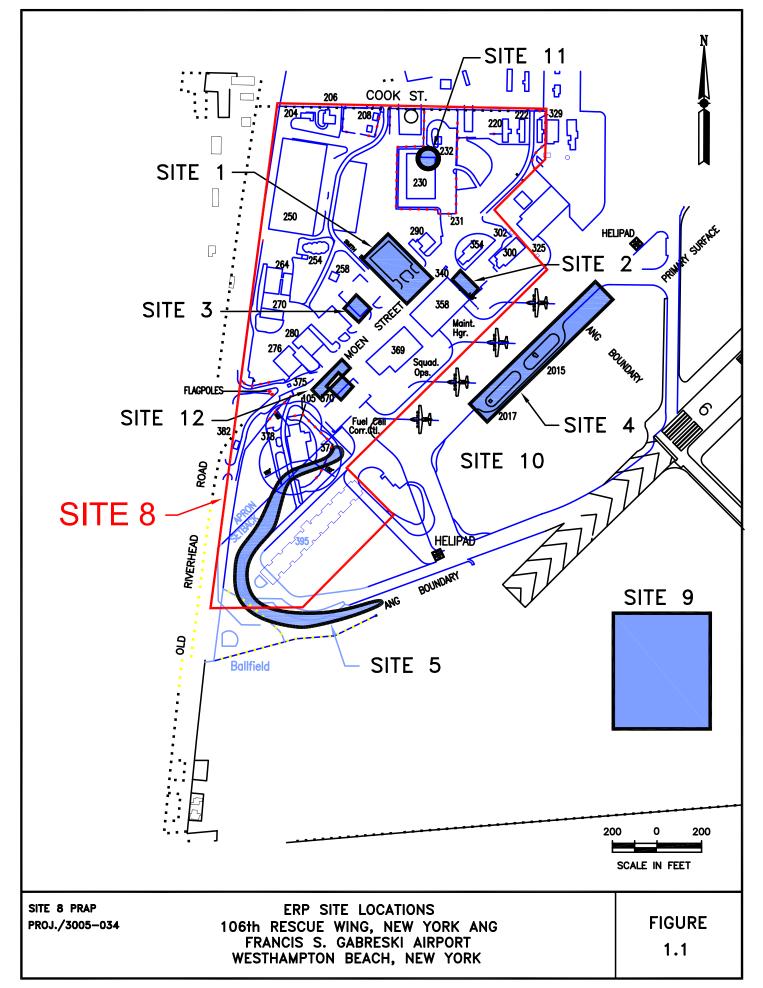
The remainder of this PRAP describes:

- Site conditions and the types of *contaminants* identified at Site 8;
- Current and future risks to human health and the environment due to Site 8:
- The Preferred Alternative for Site 8;
- How to participate in the selection or modification of the Preferred Alternative for Site 8; and
- Where to get more information.

This PRAP and all documents found in the Administrative Record were created under the authorities of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended 42 United States Code (USC) Section 9601, and the following: The National Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Part 300; New York's Environmental Conservation Law (ECL); and Title 6 of the Official Compilation of New York Codes, Rules and Regulations Part 375 (6 NYCRR Part 375). This PRAP is accomplished under the authority of 6 NYCRR Part 375 and will also fulfill the NCP requirements for a Proposed Plan (PP) (40 CFR Section 300.430). This PRAP was prepared under ANG Project No. WKVB20087136, Delivery Order No. 034.

### 2.0 SITE BACKGROUND

The 106<sup>th</sup> ROW of the New York ANG is located at the Francis S. Gabreski Airport in Suffolk County, New York, on the eastern end of Long Island, approximately 80 miles east of New York City. Francis S. Gabreski Airport, formerly known as Suffolk County Airport, is located on Old Riverhead Road approximately 2 miles north of the Atlantic Ocean shoreline in Westhampton Beach. The 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, 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). 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 106th RQW is the parent organization of the oldest ANG unit in the country, the 102nd Rescue Squadron, which traces its roots back to the 1st Aero Company which was formed in 1908 in New York. The peacetime mission of the 106th RQW is twofold. 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> ROW 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 106th RQW is also tasked by the New Hampshire Fish and Wildlife Service with conducting extensive mountain search support. Secondly, the 106th RQW provides pararescuemen on board HC-130s for deployment in the event of an emergency. In addition, pararescuemen from the unit are occasionally deployed to overseas locations to provide support to the Air Force (PEER 2006).



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 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 site groundwater has not been adversely impacted by past conditions; and to
- select No Further Action for the site as the final alternative.

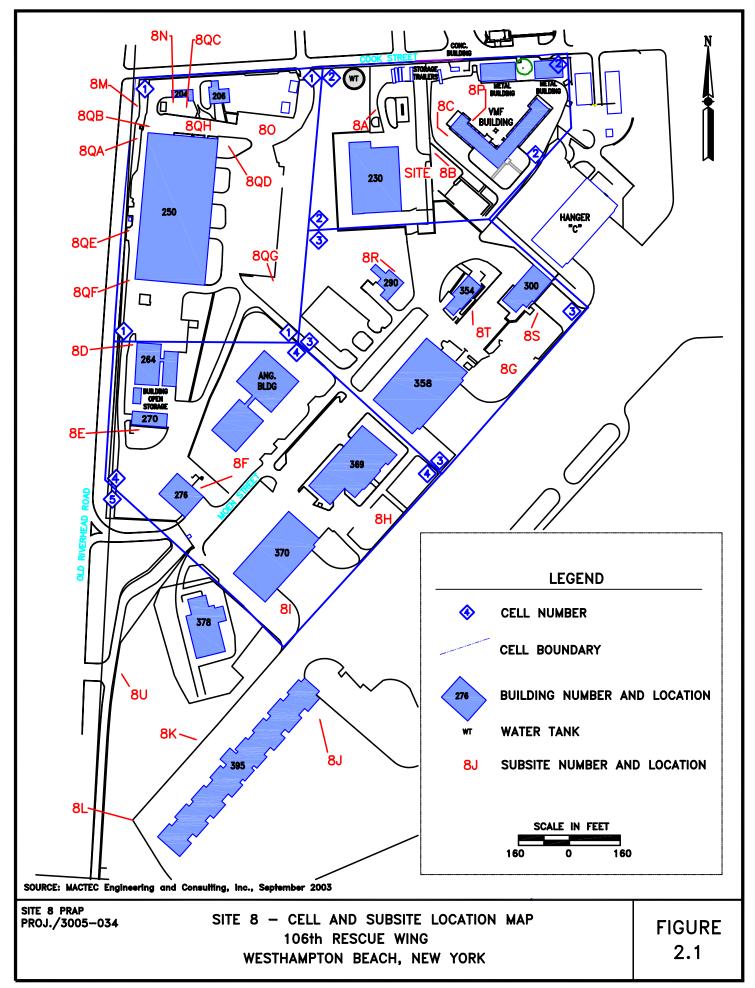
Site 8 is described in the following paragraphs and is the subject of this *PRAP*.

### 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 (Figure 2.1). 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 80 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 2.1.

### **3.0 SITE CHARACTERISTICS**

This section briefly discusses the previous investigations and the remedial action conducted at Site 8, and summarizes any environmental impacts that have been identified. Additional details concerning the investigations or the remedial action can be obtained from the documents in the Administrative Record File available at the local library or through the Base Environmental Manager (EM) Lt. Shaun Denton at the 106<sup>th</sup> RQW.



Library Contact Information: Jay Janoski (Head of Reference) Westhampton Free Library 7 Library Avenue Westhampton Beach, NY 11978-2697

**Telephone:** (631) 288-3335

**Base Contact Information:** 

Lt. Shaun Denton 106<sup>th</sup> RQW/EM New York ANG 150 Riverhead Road Westhampton Beach, NY 11978-1204

**Telephone:** (631) 723-7349

Email: shaun.denton@ang.af.mil

### **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

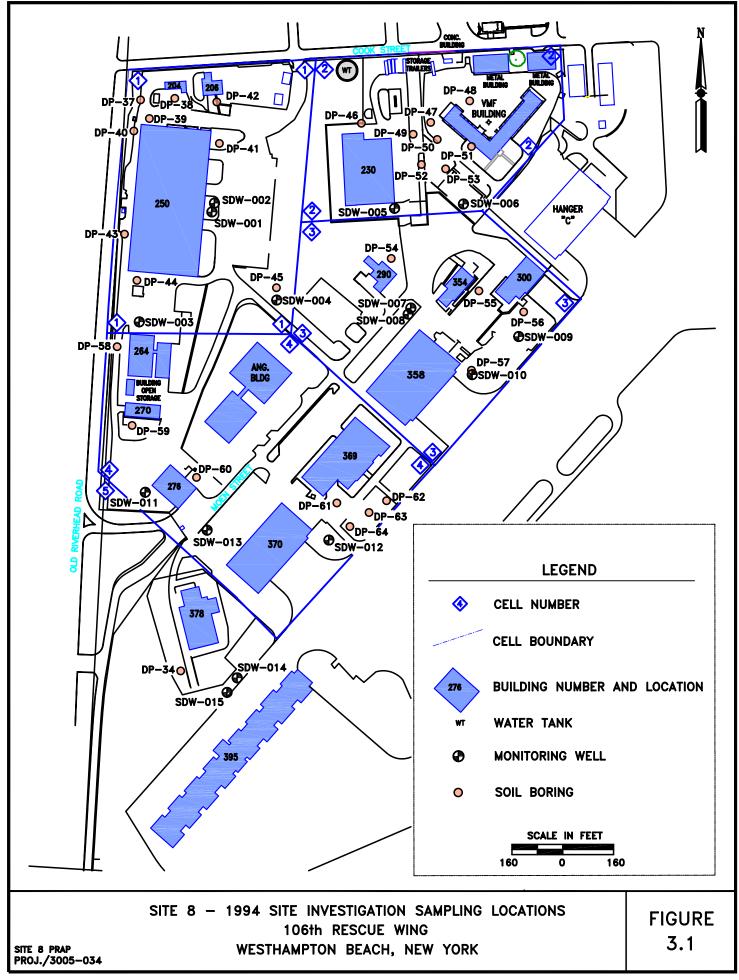
the vicinity of Cells 1, 2, 3, 4, and 5 (ABB-ES 1997). Samples were analyzed for VOCs, SVOCs and metals. Sampling locations are shown on Figure 3.1.

Two VOCs (benzene and xylenes) one SVOC (naphthalene) and four metals (arsenic, chromium, lead and sliver) were detected in subsurface soil samples above the NYSDEC Action Levels in effect at the time of the investigation (Table 3.1). The majority of the soil contaminants were detected in a single soil boring (DP-60). In groundwater, four VOCs (benzene, ethylbenzene, tetrachloroethene, and trichloroethene), four SVOCs (1,2dichlorobenzene, 1,3-dichlorobenzene, 1,4dichlorobenzene and naphthalene) and one metal (arsenic) were detected at concentrations exceeding the NYSDEC Action Levels in effect at the time of the investigation (Table 3.2). These groundwater contaminants were detected in wells SDW-005 and SDW-015, but were not confirmed during subsequent investigations (ABB-ES 1997).

### **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. Sampling locations are shown on Figure 3.2.

Four SVOCs (benzo(a)anthracene, chrysene, bezno(a)pyrene and dibenz(a,h)anthracene) were detected in surface soil at concentrations exceeding the NYSDEC Action Levels in effect at the time of the investigation (Table 3.3). In groundwater, two VOCs (ethylbenzene and xylenes), two SVOCs (phenol and naphthalene) were detected at concentrations exceeding the NYSDEC Action Levels in effect at the time of the investigation (Table 3.4). No contaminants associated with the septic systems were identified during the 1998 RI, but the report recommended additional investigation (Stone & Webster 1999).



## Table 3.1 Soil Compounds Exceeding Current Action Levels - 1994 Site Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

Compound	Range of Detected			Current Action Level <sup>(2)</sup>	
	Concentrations	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Volatile Organic Compo	unds (mg/kg)				
Benzene	0.22 J	1/66	0.06	1/66	0.06
Chlorobenzene	0.044	0/66	1.7	0/66	1.1
Ethylbenzene	0.0016 J – 0.35 J	0/66	5.5	0/66	1
Tetrachloroethane	0.0057 - 0.031 E	0/66	1.4	N/A	N/A
Toluene	0.001 J – 0.017 J	0/66	1.5	0/66	0.7
1,1,1-Trichloroethane	0.0025 J – 0.016	0/66	0.76	0/66	0.68
Trichloroethene	0.038 – 0.079 E	0/66	0.7	0/66	0.47
Xylenes	0.0054 - 27	2/66	1.2	4/66	0.26
Semivolatile Organic Co	mpounds (mg/kg)				
1,2-Dichlorobenzene	0.031 E	0/66	7.9	0/66	1.1
2-Methynaphthalene	1.1	0/66	36.4	N/A	N/A
Naphthalene	0.0011 J – 28 E	1/66	13	1/66	12
Metals (mg/kg)	•		•		
Arsenic	0.22 - 0.56 M	4/66	0.2	0/66	13
Chromium	0.23 M – 4.5 M	11/66	0.84	0/66	30
Lead	0.20 M - 2.4 M	16/66	0.65	0/66	63
Silver	0.22 - 17	8/66	0.20	2/66	2

Notes:

Shading indicates that a constituent exceeds the current action level.

Е	Estimated due to interference.	J	Estimated.
М	Sample and duplicate results outside of limits.	N/A	Not applicable. No published value available.

(1) Soil action levels at the time of the 1994 Site Investigation were in accordance with Technical and Administrative Guidance Memorandum (TAGM) Soil Cleanup Objectives (SCOs).

(2) Current soil action levels are in accordance with New York Codes, Rules and Regulations (NYCCR) Part 375 SCOs.

## Table 3.2 Groundwater Compounds Exceeding Current Action Levels - 1994 Site Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

Compound	Range of Detected				Current Action Level <sup>(2)</sup>	
	Concentrations	Frequency of Detection above or Equal to Action Level	Action Level	Frequency of Detection above Action Level	Action Level	
Volatile Organic Compound	ds (µg/L)					
Benzene	5	1/34	5	1/34	0.7	
Ethylbenzene	7.7	1/34	5	1/34	5	
Tetrachloroethene	3.2 J - 36	2/34	5	2/34	5	
Trichloroethene	1.5 J – 10 J	3/34	5	3/34	5	
1,1-dichloroethane	3.8 J - 4.1 J	0/34	7	0/34	5	
cis-1,2-Dichloroethene	1.2 J - 1.4 J	0/34	5	0/34	5	
1,1,1 -Trichloroethane	1.2 J – 4.7 J	0/34	5	0/34	5	
Xylene	4.2 J	0/34	5	0/34	5	
Semivolatile Organic Comp	ounds (µg/L)					
Bis(2ethylhexyl)phthalate	36 J	0/34	50	0/34	50	
1,2-Dichlorobenzene	190 E	1/34	5	1/34	5	
1,3-Dichlorobenzene	18 - 81	2/34	5	2/34	5	
1,4-Dichlorobenzene	13 - 82	2/34	5	2/34	5	
Naphthalene	1.2 J - 16	2/34	10	2/34	10	
Metals (µg/L)						
Arsenic	12 - 27	1/34	25	1/34	25	
Chromium	11 - 42	0/34	50	0/34	50	

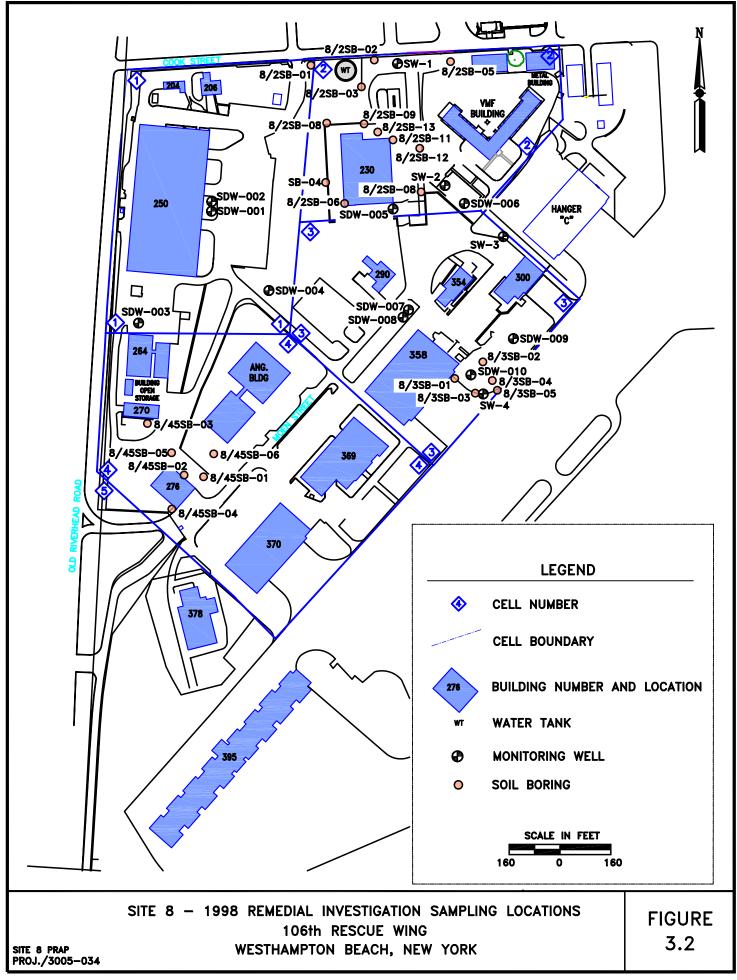
Notes:

Shading indicates that a constituent exceeds the current action level.

E Estimated due to interference. J Estimated.

(1) Groundwater action levels at the time of the 1994 Site Investigation were in accordance with New York State (NYS) Class GA Standards. If the Class GA Standards were less than the laboratory reporting limits, then the reporting limits were used as action levels. For benzene, the federal Maximum Contaminant Level (MCL) was used as the action level.

(2) Current action levels (including that for benzene) are in accordance with NYS Class GA Standards. If the Class GA Standards are less than the laboratory reporting limits, then the reporting limits are used as action level.



### Table 3.3 Soil Compounds Exceeding Current Action Levels - 1998 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, NY

Compound	Range of Detected	Action Level Dur Remedial Inve		Current Acti	on Level <sup>(2)</sup>
	Concentrations	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Semivolatile Organic Comp		l 2 – Shallow Surfac		in.)	
n-Nitroso-Di-n-Propylamine	410 J	0/5	50,000	0/5	N/A
Acenaphthene	87 J	0/5	50,000	0/5	20,000
Fluorene	76 J	0/5	50,000	0/5	30,000
Phenanthrene	54 J - 1,100 J	0/5	50,000	0/5	100,000
Anthracene	240 J	0/5	50,000	0/5	100,000
Carbazole	180 J	0/5	50,000	0/5	N/A
Fluoranthene	120 J – 1,600	0/5	50,000	0/5	100,000
Pyrene	130 J – 1,300	0/5	50,000	0/5	100,000
Benzo(a)anthracene	37 J - 800	1/5	224	0/5	1000
Chrysene	37 J – 980	1/5	400	0/5	1000
bis(2Ethylhexyl)phthalate	54 J – 270 J	0/5	50,000	0/5	N/A
Benzo(b)fluoranthene	59 J - 960	0/5	1,100	0/5	1000
Benzo(k)fluoranthene	56 J - 800	0/5	1,100	1/5 <sup>(3)</sup>	800
Benzo(a)pyrene	43 J - 750	3/5	61	0/5	1000
Indeno(1,2,3-cd)pyrene	40 J – 360 J	0/5	3,200	0/5	500
Dibenz(a,h)anthracene	140 J	1/5	14	0/5	330
Benzo(g,h,i)perylene	46 J – 100 J	0/5	50,000	0/5	100,000
Volatile Organic Compound			/		
Methylene Chloride	4 J	0/10	100	0/5	50
Toluene	1 J - 2 J	0/10	1,500	0/5	700
Semivolatile Organic Comp				0,0	,
Phenanthrene	39 J – 100 J	0/10	50,000	0/5	100,000
Fluoranthene	43 J – 150 J	0/10	50,000	0/5	100,000
Pyrene	41 J – 190 J	0/10	50,000	0/5	100,000
Benzo(a)anthracene	35 J - 91 J	0/10	224	0/5	330
Chrysene	35 J - 120 J	0/10	400	0/5	1000
bis(2-Ethylhexyl)phthalate	42 J - 140 J	0/10	50,000	0/5	N/A
Benzo(b)fluoranthene	47 J - 97 J	0/10	1,100	0/5	1000
Benzo(k)fluoranthene	40 J - 85 J	0/10	1,100	0/5	800
Benzo(a)pyrene	39 J - 91 J	1/10	61	0/5	1000
Indeno(1,2,3-cd)pyrene	36 J - 72 J	0/10	3,200	0/5	500
Benzo(g,h,i)perylene	$\frac{36J = 72J}{46J}$	0/10	50,000	0/5	100,000
Semivolatile Organic Comp				0/5	100,000
Fluoranthene	45 J	0/23	50,000	0/5	100,000
Pyrene	43 J	0/23	50,000	0/5	100,000
bis(2Ethylhexyl)phthalate	$\frac{42 J}{38 J - 320 J}$	0/23	50,000	0/5	N/A
<i>Dis(2Einyinexyi)pninaiaie</i>	JOJ = J20J	0/23	50,000	0/3	IV/A

Notes:

Shading indicates that a constituent exceeds the current action level.

J Estimated concentration. N/A Not applicable. No published value available.

(1) Soil action levels at the time of the 1998 Remedial Investigation were in accordance with Technical and Administrative Guidance Memorandum (TAGM) 4046 Soil Cleanup Objectives (SCOs).

(2) Current soil action levels are in accordance with New York Codes, Rules and Regulations (NYCCR) Part 375 SCOs.

(3) Concentration is equal to current action level.

### Table 3.3(Continued) Soil Compounds Exceeding Current Action Levels - 1998 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, NY

Compound	Range of Detected	Action Level Dur Remedial Inve		Current Acti	on Level <sup>(2)</sup>
	Concentrations	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Metals (mg/kg) - Cell 3 - Su	bsurface Soils			-	
Lead	0.39 J - 1.1	0/9	200	0/9	63
Volatile Organic Compound	ls (µg/kg) - Cells 4 a	ind 5 – Shallow Sur	face Soils (0 to	<b>3-in.</b> )	
Methylene chloride	1 J	0/3	100	0/3	50
Semivolatile Organic Comp		ls 4 and 5 – Shallow	<b>Surface Soils</b>	(0 to 3-in.)	
Phenanthrene	52 J - 120	0/3	50,000	0/3	100,000
Di-n-butylphthalate	40 J	0/3	8,100	0/3	N/A
Fluoranthene	71 J - 250 J	0/3	50,000	0/3	100,000
Pyrene	70 J – 210 J	0/3	50,000	0/3	100,000
Benzo(a)anthracene	38 J – 130 J	0/3	224	0/3	1000
Chrysene	59 J – 200 J	0/3	400	0/3	1000
Bis(2-ethylhexyl)phthalate	52 J – 200 J	0/3	50,000	0/3	N/A
Benzo(b)fluoranthene	58 J - 270 J	0/3	1,100	0/3	1000
Benzo(k)fluoranthene	46 J - 160 J	0/3	1,100	0/3	800
Benzo(a)pyrene	38 J - 160 J	0/3	61	0/3	1000
Indeno(1,2,3-cd)pyrene	55 J – 160 J	0/3	3,200	0/3	500
Benzo(g,h,i)perylene	42 J – 120 J	0/3	50,000	0/3	100,000
Volatile Organic Compound	ls (ug/kg) - Cells 4 a	nd 5 – Surface Soil	s (3 to 24-in.)		
Toluene	6J	0/5	1,500	0/5	700
Chlorobenzene	2 J	0/5	1,700	0/5	1,100
Ethylbenzene	2 J	0/5	5,500	0/5	1000
Styrene	3 J	0/5	N/A	0/5	N/A
Semivolatile Organic Comp	ounds (ug/kg) - Cel	ls 4 and 5 – Surface			
Fluoranthene	40 J – 75 J	0/6	50,000	0/6	100,000
Pyrene	42 J – 71 J	0/6	100	0/6	100,000
Benzo(a)anthracene	38 J	0/6	224	0/6	1000
Chrysene	39 J – 57 J	0/6	400	0/6	1000
Bis(2-Ethylhexyl)phthalate	41 J - 54 J	0/6	50,000	0/6	N/A
Benzo(b)fluoranthene	38 J – 68 J	0/6	1,100	0/6	1000
Benzo(k)fluoranthene	57 J	0/6	1,100	0/6	800
Benzo(a)pyrene	38 J	0/6	61	0/6	1000
Indeno(1,2,3-cd)pyrene	53 J - 56 J	0/6	3,200	0/6	500
Benzo(g,h,i)perylene	43 J - 47 J	0/6	50,000	0/6	100,000
Volatile Organic Compound			,		
2-Butanone	16	0/19	300	0/19	120
Trichloroethene	5	0/19	700	0/19	470
Semivolatile Organic Comp				5,17	
bis(2-Ethylhexyl)phthalate	46 J - 58 J	0/18	50,000	0/18	N/A

Notes:

Shading indicates that a constituent exceeds the current action level.

J Estimated concentration. N/A Not applicable. No published value available.

(1) Soil action levels at the time of the 1998 Remedial Investigation were in accordance with Technical and Administrative Guidance Memorandum (TAGM) 4046 Soil Cleanup Objectives (SCOs). The action level for lead was the background level.

(2) Current soil action levels are in accordance with New York Codes, Rules and Regulations (NYCCR) Part 375 SCOs.

# Table 3.4 Groundwater Compounds Exceeding Current Action Levels - 1998 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, NY

Compound	Range of Detected	Action Level Dur Remedial Inves		Current Action Level <sup>(2)</sup>	
	Concentrations	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Volatile Organic Compound	ls (µg/L) - Cell 2 – C	Groundwater Geopi	obe		
Acetone	1 J - 2 J	0/26	50	0/26	50
2-Butanone	2 J	0/26	50	0/26	50
Toluene	4 J	0/26	5	0/26	5
Ethylbenzene	29 - 76	2/26	5	2/26	5
Total Xylenes	1 J - 180 J	2/26	5	2/26	5
Semivolatile Organic Comp	ounds (µg/kg) - Cel	2 – Groundwater (	Geoprobe		
Phenol	2 J	1/26	1	1/26	1
Naphthalene	15 - 44	2/26	10	2/26	10
2-Methylnaphthalene	2 J - 22	0/26	50	0/26	50
Bis(2-Ethylhexyl)phthalate	4	0/26	50	0/26	5
Volatile Organic Compound	ls (µg/L) - Cells 4 ai	nd 5 – Groundwater	r Geoprobe		
Acetone	4 J - 6 J	0/12	50	0/12	50
1,1,1-Trichloroethane	1 J - 3 J	0/12	5	0/12	5
Trichloroethene	2 J - 3 J	0/12	5	0/12	5
Tetracholoethylene	1 J	0/12	5	0/12	5
Semivolatile Organic Comp	ounds (µg/kg) - Cel	ls 4 and 5 – Ground	water Geopro	be	
4-Methylphenol	5 J	0/12	50	1/12	1
Naphthalene	14	1/12	10	1/12	10
2-Methylnaphthalene	4 J	0/12	50	0/12	50
Diethylphthalate	2 J	0/12	50	0/12	50
Bis(2-ethylhexyl)phthalate	2 J	0/12	50	0/12	5

Notes:

Shading indicates that a constituent exceeds the current action level.

J Estimated.

(1) Groundwater action levels at the time of the 1998 Remedial Investigation (RI) were in accordance with New York State (NYS) Class GA Standards.

(2) Current action levels are the same as those during the 1998 RI (NYS Class GA Standards).

### Additional Remedial Investigation-2001

An additional RI was conducted at the base from 2000 to 2001 and included Site 8. The 2001 RI activities at Site 8 consisted of groundwater sampling, groundwater monitoring well installation and sampling, and basewide groundwater sampling. Samples were analyzed for VOCs, SVOCs and metals. Sampling locations are shown on Figure 3.3.

Three metals (cadmium, chromium and lead) were detected in groundwater at concentrations exceeding the NYSDEC Action Levels in effect at the time of the investigation (Table 3.5).

The 2001 RI recommended the following for Site 8:

- Remove the remaining sludge from septic system structures and abandon the structures in-place to eliminate them as sources of future contamination;
- Conduct no further investigation of surface soils, subsurface soils, or groundwater; and
- Prepare No Further Response Action Planned Decision Documents (NFRAP DDs) for Cells 1, 2, 3, 4, and 5 (pending completion of abandonment of the septic system structures).

### 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**

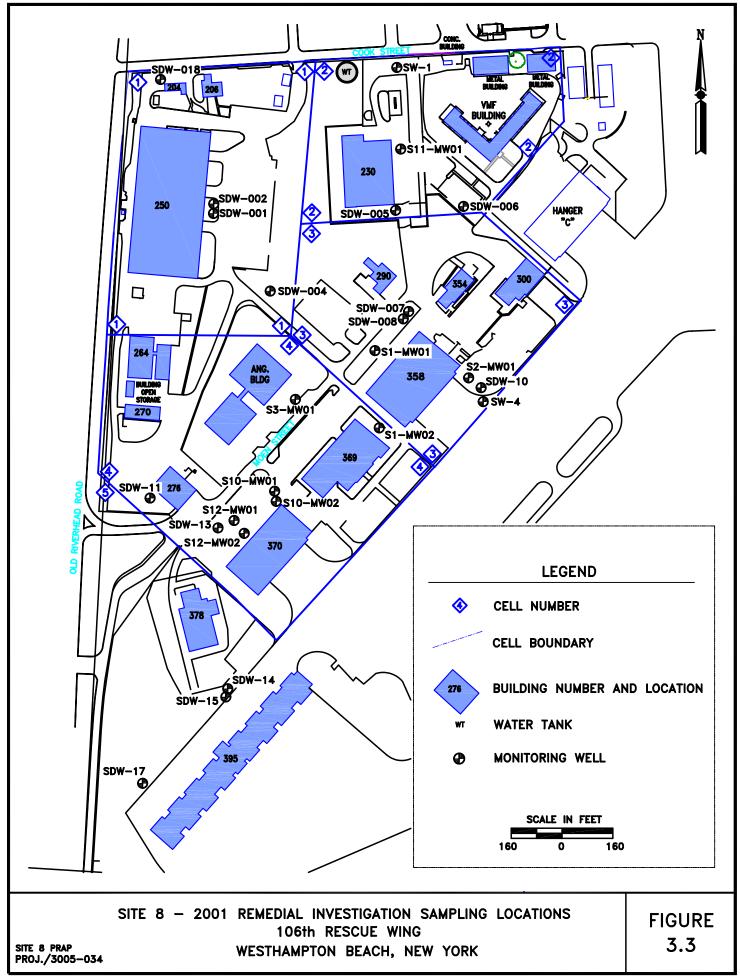


The 2005 RI was conducted in response to the state and county's requests made after the TCRA. Based on their concerns, the RI objectives included

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. Samples were analyzed for VOCs, SVOCs and metals. Sampling locations are shown on Figure 3.4. 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 3.4. Additional information concerning the plume can be found in the report for the 2005 RI (PEER 2006).

No contaminants were identified in soil or groundwater at Subsites 8M, 8N, 8QH, or 8F. Therefore, these subsites were determined to pose no risk to human health or the environment, and No Further Action was recommended (PEER 2006).

Three metals (Table 3.6) including lead (Subsite 8D) and chromium and silver (Subsite 80F) were detected in subsurface soils at concentrations exceeding the action levels in effect at the time of the investigation. 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 8OF 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 No Further Action was recommended (PEER 2006). At Site 8QF (Figure 2.1), one metal (copper) was initially identified as a groundwater COC (Table 3.7) because it was detected above the NYSDEC Action Level in a total metals (unfiltered) sample from one



## Table 3.5 Groundwater Compounds Exceeding Current Action Levels - 2001 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

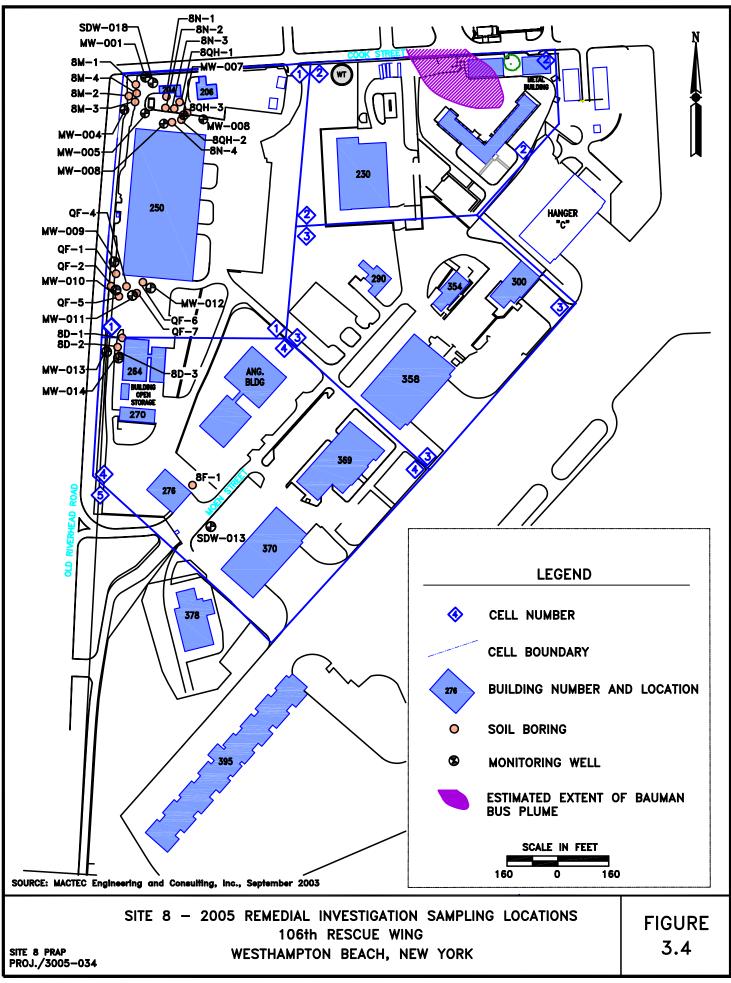
Compound	Range of Detected	Action Level During the 2001 Remedial Investigation <sup>(1)</sup>		Current Action Level <sup>(2)</sup>	
	<b>Concentrations</b>	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Volatile Organic Compo	unds (µg/L)				
Carbon disulfide	0.2 J - 14	0/42	50	0/42	50
Chloroform	0.2 J - 5	0/42	7	0/42	7
1,2-Dichloroethene	2.0	0/42	5	0/42	5
Ethylbenzene	0.2 J - 3.0	0/42	5	0/42	5
Tetrachloroethene	0.2 J - 2.0	0/42	5	0/42	5
Toluene	0.2 J - 0.7	0/51	5	0/51	5
1,1,1-Trichloroethane	0.5 J – 1.0	0/42	5	0/42	5
Trichloroethene	0.2 J - 0.6 J	0/42	5	0/42	5
Total Xylenes	0.2 J – 1.0 J	0/42	5	0/42	5
Semivolatile Organic Co	mpounds (µg/L)				
1,2-Dichlorobenzene	0.5 J	0/42	5	0/42	5
Diethyl Phthalate	2.0 J	0/42	50	0/42	50
Metals (µg/L)					
Arsenic	7.6 - 14	0/42	25	0/42	25
Cadmium	1.0 - 26	1/42	10	1/42	5
Chromium	2.3 - 71	2/42	50	2/42	50
Lead	17	1/42	15 (MCL)	0/42	25

Notes:

No soil samples were collected at Site 8 during the 2001 Remedial Investigation (RI).

Shading indicates that a constituent exceeds the current action level.

- (1) Groundwater action levels during the 2001 RI were in accordance with New York State (NYS) Class GA Standards except for lead. The maximum contaminant level (MCL) of 15 µg/L was used for lead.
- (2) Current action levels are the same as those during the 2001 RI (NYS Class GA Standards) except for lead which is now  $25 \mu g/L$  and cadmium which is now  $5 \mu g/L$ .



# Table 3.6 Soil Compounds Exceeding Current Action Levels – 2005 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

Compound	Range of Detected	Action Level During the 2005 Remedial Investigation <sup>(1)</sup>		Current Action Level <sup>(2)</sup>	
	Concentrations	Frequency of Detection above Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Volatile Organic Compou	unds (µg/kg) – Cell 1-	Subsurface Soil			
Acetone	13.9 J – 86.7	0/14	200	1/14	50
Chloroform	0.9 J - 2.0	0/14	300	0/14	370
Methylene Chloride	2.1 J - 8.5	0/14	100	0/14	50
Metals (mg/kg) - Cell 1-	Subsurface Soil				
Arsenic	1.66	0/40	5.5	0/40	13
Chromium	0.97 – 6.57	1/40	6.1	0/40	30
Copper	0.97 – 1.39	0/40	25	0/40	30
Lead	1.03 – 3.34	0/40	4.4	0/40	63
Nickel	2.19	0/40	13	0/40	30
Silver	7.57	1/40	0.6	1/40	2
Volatile Organic Compou	unds (µg/kg) – Cell 4-	Subsurface Soil			
Acetone	12.5 – 17.2	0/7	200	0/7	50
Chloroform	1.0 J – 1.3 J	0/7	300	0/7	370
Methylene Chloride	1.6 J – 6.2 J	0/7	100	0/7	50
1,2,3-Trichlorobenzene	14.3	0/7	3,400	0/7	N/A
1,2,4-Trichlorobenzene	14.3	0/7	3,400	0/7	N/A
Trichloroethene	0.8 J	0/7	700	0/7	470
Metals (mg/kg) – Cell 4- Subsurface Soil					
Arsenic	1.23	0/7	5.5	0/7	13
Chromium	1.30 – 4.26	0/7	6.1	0/7	30
Lead	1.30 – 5.39	1/7	4.4	0/7	63

Notes:

Shading indicates that a constituent exceeds the current action level.

J Estimated.

N/A Not applicable. No published value available.

(1) Soil action levels at the time of the 2005 Remedial Investigation were in accordance with Technical and Administrative Guidance Memorandum (TAGM) Soil Cleanup Objectives (SCOs).

(2) Current soil action levels are in accordance with New York Codes, Rules and Regulations (NYCCR) Part 375 SCOs.

# Table 3.7 Groundwater Compounds Exceeding Current Action Levels – 2005 Remedial Investigation 106<sup>th</sup> Rescue Wing Westhampton Beach, New York

Compound	Range of Detected	Action Level at the Remedial Inve		Current Action Level <sup>(2)</sup>	
	Concentrations	Frequency of Detection above or Equal to Action Level	Action Level	Frequency of Detection above Action Level	Action Level
Volatile Organic Compour	nds (µg/L) – Cell 1				
1,1,1-Trichloroethane	0.60 J – 0.90 J	0/30	5	0/30	5
Semivolatile Organic Com	pounds (µg/L) ) – (	Cell 1 and Cell 4			
Bis(2ethylhexyl)phthalate	1.80 J	0/30	50	0/30	50
Dimethylphthalatle	1.60 J	0/30	50	0/30	50
2-Methylnaphthalene	1.50 J	0/30	50	0/30	50
Metals (µg/L) ) – Cell 1 an	d Cell 4				
Arsenic	3.7 J – 5.0 J	0/30	25	0/30	25
Cadmium	0.6 J – 1.0 J	0/30	10	0/30	10
Chromium	1.30 J – 40.0	0/30	50	0/30	50
Copper	6.8 J - 252	2/30	200	2/30	200
Lead	1.30 J - 10	0/30	25	0/30	25
Nickel	2.1 J – 14.0	0/30	100	0/30	100

Notes:

Shading indicates that a constituent exceeds the current action level.

J Estimated.

(1) Groundwater action levels at the time of the 2005 Remedial Investigation (RI) were in accordance with New York State (NYS) Class GA Standards.

(2) Current action levels are the same as those during the 2005 RI (NYS Class GA Standards).

upgradient groundwater monitoring well (MW-009). The results for copper did not exceed the Federal Drinking Water Standard *Maximum Contaminant Level (MCL)*. The exposure pathway evaluation conducted for copper indicated that the probability for exposure due to *migration* of copper in groundwater was low. This was supported by data which showed that copper did not exist in downgradient monitoring wells at concentrations exceeding NYSDEC Action Levels (PEER 2006).

The elevated concentrations of copper in groundwater at Subsite 8QF may have been due to entrained sediments in the well. 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). 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.

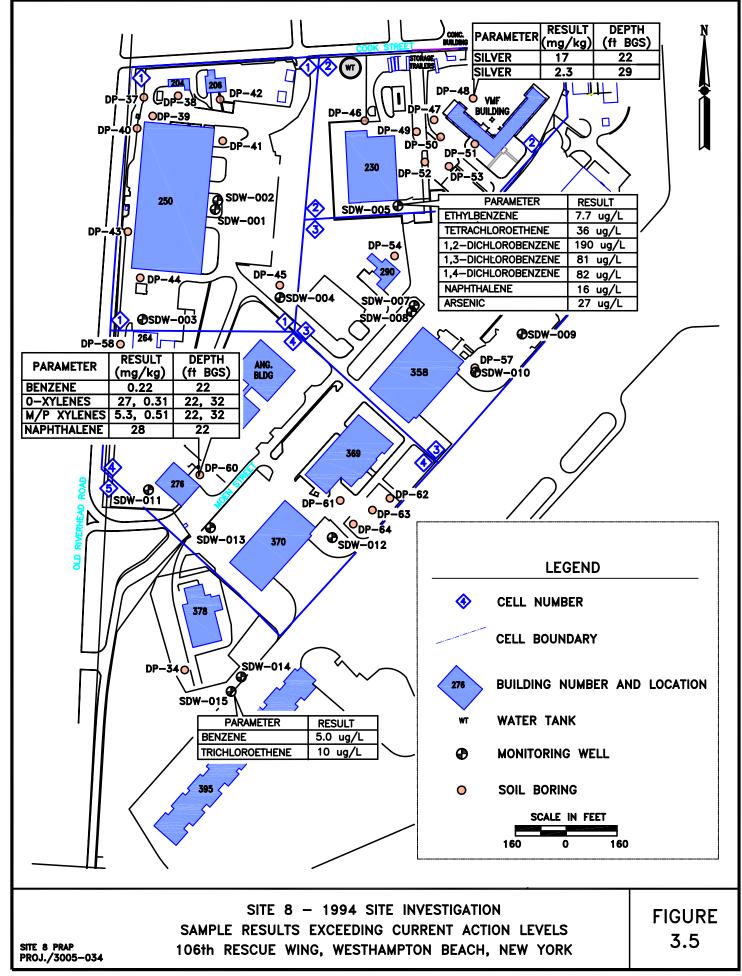
### **Summary of Previous Investigations**

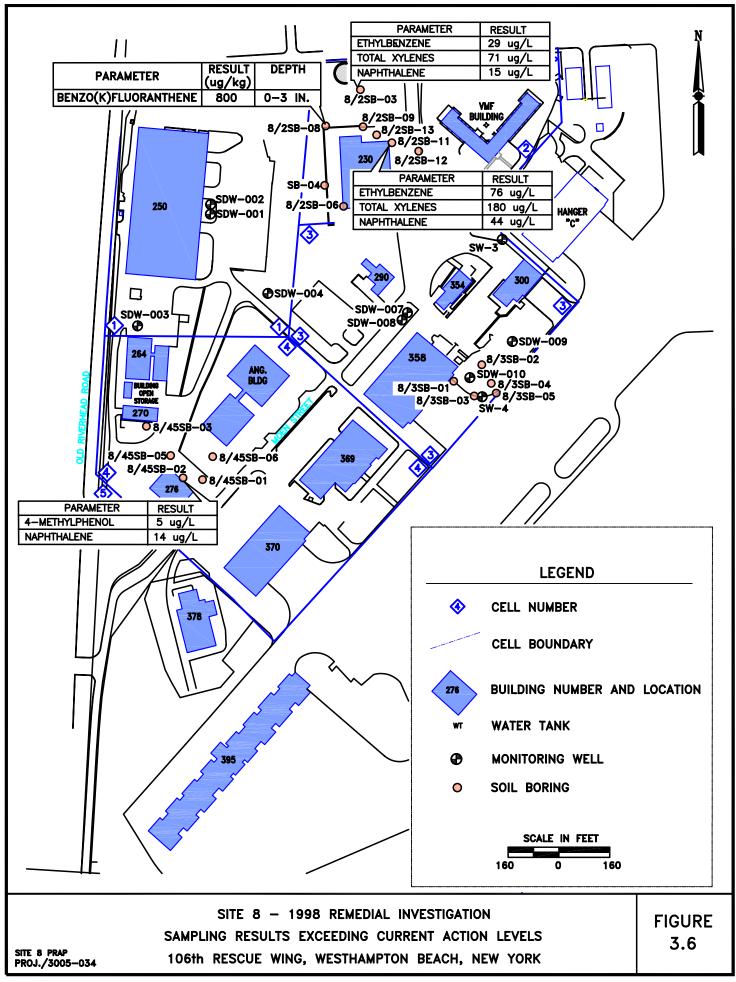
Data tables for the previous investigations conducted at Site 8 were previously presented in Section 3.0 (Tables 3.1 through 3.7). These data tables list the chemicals detected during the previous investigations, and show the frequency of detection of each constituent. Additionally, the tables compare the chemical concentrations with respect to the action levels in effect at the time of the previous investigations and the current state action levels. Current action levels for groundwater are the New York State (NYS) Class GA Groundwater Standards, and those for soil are in accordance with the Soil Cleanup Objectives (SCOs) in NYCRR Part 375 for unrestricted usage.

*1994 Site Investigation Summary:* The following compounds from the 1994 Site Investigation exceed

current soil action levels (Part 375 SCOs): benzene, xylenes, naphthalene and silver as previously shown on Table 3.1. 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 (Table 3.2). The majority of these contaminants were detected in one well (SDW-005). Figure 3.5 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.

**1998 Remedial Investigation Summary:** One SVOC [benzo(k)fluoroanthene] from the 1998 RI was detected at a concentration equal to the current action level in site soils as previously shown on Table 3.3. Several VOCs and SVOCs exceed the current groundwater action levels including ethylbenzene, total xylenes, phenol, naphthalene and 4-methylphenol (Table 3.4). 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 3.6 shows the locations of the contaminants detected during the 1998 RI that exceed the current action levels. No metals were detected at concentrations exceeding the current action levels in soil or groundwater during the 1998 RI.





2001 Remedial Investigation Summary: No soil samples were collected during the 2001 RI. Two metals (cadmium and chromium) exceed the current action levels for groundwater. Figure 3.7 shows the locations of the cadmium and chromium detected during the 2001 RI that exceed the current action levels. These metals detections were likely due to entrained sediments in the wells, especially the detections of chromium and 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.

2005 Remedial Investigation Summary: Based on the NYSDEC's request, Subsites 8D, 8F, 8M, 8N, 8QF and 8QH were investigated during the 2005 RI. Acetone and silver exceeded the current action levels in site soils. Acetone is usually associated with laboratory contamination and appears to be unrelated to the site. Silver would tend to be immobilized in the soil by adsorption, and migration of silver to groundwater is not likely. This is supported by the fact that silver was not detected in site groundwater which indicates that silver did not migrate from soil to groundwater. Copper detected in one monitoring well exceeded the current action level for groundwater and was likely due to entrained sediments in the well. Figure 3.8 shows the locations of the contaminants detected during the 2005 RI that exceed the current action levels. Copper was not detected in downgradient monitoring wells indicating that migration of the cooper did not occur at the site. The report for the 2005 RI recommended No Further Action for the site based on the detection of copper in a single well (MW-009). The NYSDEC requested additional

sampling in well MW-009 to confirm that groundwater had not been adversely impacted.

### 4.0 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 human health, welfare, or the environment. Unacceptable exposures to hazardous substances from the site will not occur. The source of site contaminants (the base septic system) was either removed or abandoned as a part of the remedial action conducted during the 2002 TCRA (MACTEC 2003). The 2002 TCRA left one metal (silver) in-place at two locations at concentrations exceeding the Part 375 SCOs (Figures 3.5 and 3.8). The remainder of the contaminants have either degraded over time and are no longer present at the site (VOCs and SVOCs), or were likely attributed to entrained sediments in the groundwater (metals).

The action chosen in this PRAP for Site 8 combines collecting an additional round of groundwater samples from one groundwater monitoring well (MW-009), to be followed by a recommendation for No Further Action. The analytical data obtained from the additional sampling at MW-009 will be used to provide evidence that the elevated concentrations of copper were due to entrained sediments in the groundwater.

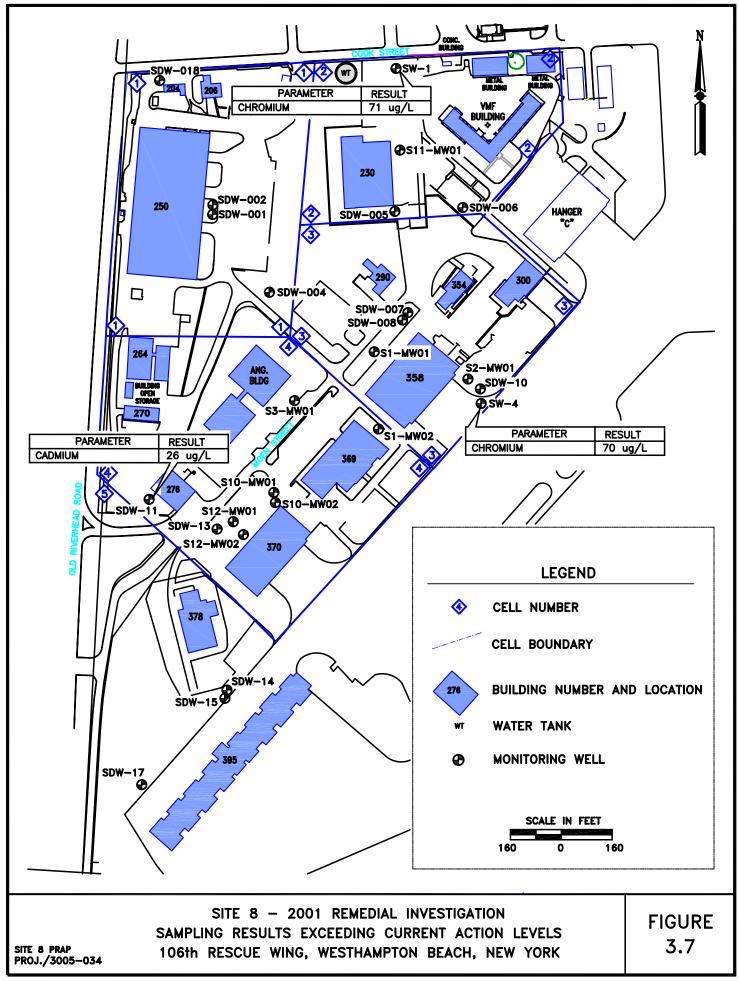
### 5.0 SUMMARY OF SITE RISKS

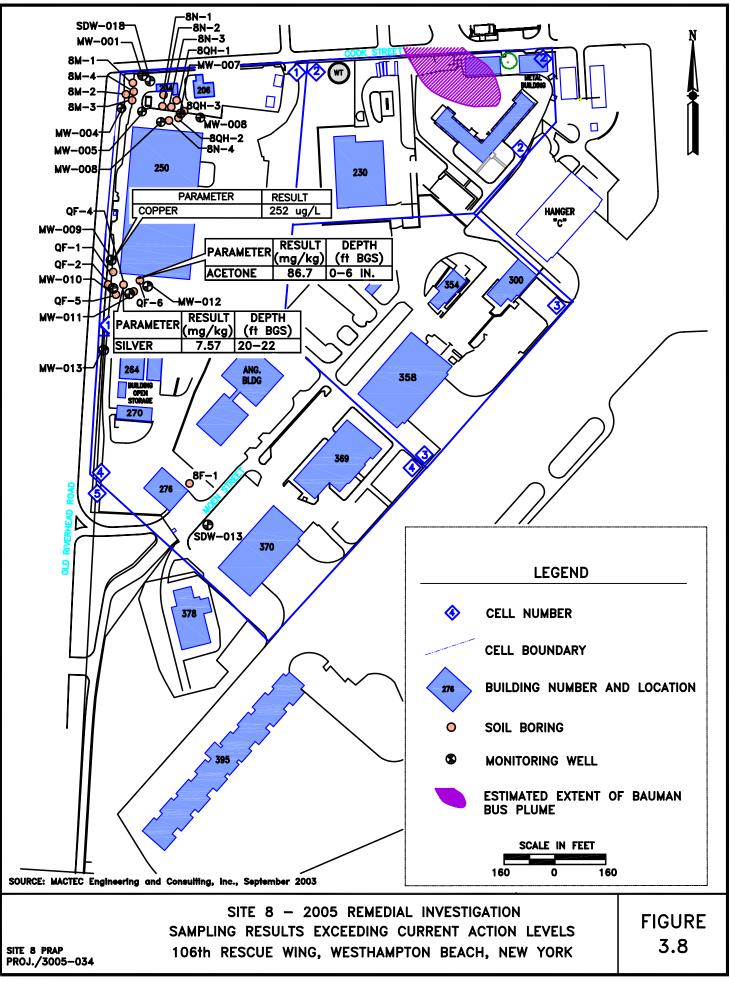


As a part of the 2001 RI and the 2005 RI, the ANG evaluated potential risks associated with the contaminants detected at Site 8. Additional information on the potential

risk to human health and the environment is presented in the reports for the 2001 RI (PEER 2004) and the 2005 RI (PEER 2006).

Migration pathways define the route and method by which a chemical moves from the source to a location where people could potentially be exposed.





Generally, people may be exposed to contaminants through direct contact (e.g, 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. Based on the current action levels, contaminants in subsurface soil consist of benzene, xylenes and naphthalene and were detected between 22 and 32 ft bgs. Acetone, benzo(k)fluoranthene and silver were detected in surface soils at concentrations exceeding current action levels.. The contaminants detected in groundwater consist of four VOCs (benzene, ethylbenzene, tetrachloroethene, and trichloroethene), six SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, naphthalene, phenol, and 4-methylnapthalene), and four metals (arsenic, cadmium, chromium and copper).

The VOC and SVOC contaminants detected at Site 8 in 1994 and 1998 (Figures 3.5 and 3.6) would likely tend to degrade over time and were not confirmed during subsequent investigations. Therefore, they likely no longer exist at the site. The majority of the metals contaminants detected in groundwater at the site (Figures 3.5, 3.7 and 3.8) have been attributed to entrained sediments. The metals arsenic and cadmium were attributed to the presence of entrained sediments in the groundwater samples and were not site related. Chromium was determined to be naturally occurring at the site. The elevated concentrations of copper are also likely due to entrained sediments and will be further investigated during the planned sampling at the site as part of the proposed plan.

Metals have a low tendency to migrate due to adsorption. Adsorption is a process where chemicals adhere to soil particles and remain immobile in soils. This process especially takes place with metals in the presence of silty or clayey soils. Soils at the base consist mostly of silty sands. Therefore, migration of metals contaminants from the site is not likely. This is supported by the fact that groundwater testing at the site indicates that the contaminants have not migrated beyond Site 8.

Based on natural degradation of VOCs and SVOCs, and the metals contaminants attributed to entrained

sediments in groundwater, the contaminants that presently exist at the site likely only include silver in subsurface soils and copper in site groundwater.

The human health risk assessments conducted as a part of the 2001 and 2005 RIs indicate that exposures to site contaminants are not likely because most of the contaminants were detected in either groundwater or subsurface soils, and had not migrated. Therefore, potential risks to human health or the environment due to the contaminants at the site are negligible.

### 6.0 PREFERRED ALTERNATIVE

The Preferred Alternative chosen for Site 8 is No Further Action with monitoring to confirm that groundwater at monitoring well MW-009 is not adversely impacted. The NCP requires that the selected alternative be evaluated against nine evaluation criteria as listed below:

- 1) Overall protection of human health and the environment;
- 2) Compliance with applicable or relevant and appropriate requirements (ARARs);
- 3) Long-term effectiveness and permanence;
- 4) Reduction of toxicity and mobility, or volume through treatment;
- 5) Short-term effectiveness;
- 6) Implementability;
- 7) Cost;
- 8) State acceptance; and
- 9) Community acceptance.

The first two criteria (overall protection of human health and the environment, and compliance with ARARs) are termed threshold criteria in that the selected alternative must achieve both criteria in order to meet the statutory requirements. Circumstances may justify a waiver for selection of an alternative that does not meet a particular ARAR. The five primary balancing criteria are long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. Assessment of the final two criteria (state and community acceptance) is usually completed following the Public Comment period. The relative performance of the Preferred Alternative with respect to the evaluation criteria is presented in the following paragraphs.

### Overall Protection of Human Health and the Environment

The No Further Action alternative (combined with additional sampling) is protective of human health and the\_environment. The site poses no unacceptable risks to human health or the environment and previous sampling results have shown that contaminants have not migrated to downgradient monitoring wells.

### Compliance with ARARs

As previously discussed, the contaminants that presently exist at the site due to natural degradation processes and entrained sediments in groundwater likely only include silver in subsurface soils and copper in site groundwater. The proposed alternative combined with additional sampling at MW-009 to show no adverse impacts to groundwater would maintain compliance with ARARs.

### Long-Term Effectiveness and Permanence

The No Further Action alternative (combined with additional sampling) would maintain reliable protection of human health and the environment over time. There are no realistic exposure routes to the elevated copper in groundwater or the silver in subsurface soils and the site poses no unacceptable risks to human health or the environment.

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

The selected alternative would not reduce the toxicity, mobility or volume of copper in site groundwater or silver in subsurface soils. The elevated concentrations of copper were limited to only a single monitoring well, and previous

analytical results show that the elevated copper is not migrating to downgradient monitoring wells at the site. Silver is expected to be immobilized in subsurface soils at the site and was not detected at elevated concentrations in groundwater.

### Short Term Effectiveness

The No Further Action alternative (combined with additional sampling) would maintain reliable protection of human health and the environment over the short term. There are no realistic exposure routes to the elevated copper in groundwater or silver in subsurface soils, and the site poses no unacceptable risks to human health or the environment.

### Implementability

The selected alternative would be easily implemented. Initially, it would require additional groundwater sampling at the site followed by no further activities.

### Cost

The cost associated with the preferred alternative would be minimal due to the limited quantity of work to be conducted.

### State and Community Acceptance

These final evaluation criteria will be evaluated upon completion of the Public Comment period (see Section 7.0).

Based on the information provided in this PRAP, the ANG and NYSDEC believe that the selected Preferred Alternative is sufficient to allow for proper closure of the site. After implementing the Preferred Alternative, no further investigation of Site 8 should be warranted. The Preferred Alternative chosen for this site is in accordance with CERCLA and the NCP, and adequately provides for the protection of human health and the environment.

### 7.0 COMMUNITY PARTICIPATION

The ANG encourages the public to review this document and other relevant documents in the Administrative Record File to gain an understanding of Site 8, and the rationale for the No Further Action recommendation. No Further Action is the designation used for a site that has been determined to need no further investigation or cleanup activities. A copy of this PRAP, as well as the entire Administrative Record, is located at the Westhampton Free Library on 7 Library Avenue, Westhampton Beach, New York, or at the 106<sup>th</sup> RQW, New York Air National Guard on 150 Riverhead Road in Westhampton Beach, New York. The Administrative Record may be accessed by contacting either Jay Janoski the library Head of Reference at telephone number (631) 288-3335, or the Base EM, Lt. Shaun Denton at telephone number (631) 723-7349.

A 45-day public comment period, which allows the public time to review the documents and submit written comments, will be provided. The public comment period begins on January 19 and ends on March 5, 2012. Contact information is provided to the right. The ANG will document, evaluate and respond to the comments. The ANG will also prepare a *Record of Decision (ROD)* for Site 8. Comments provided by the public are valuable in helping the ANG and NYSDEC provide alternatives that are protective of human health and the environment. The Preferred Alternative as described in this PRAP may be modified in response to public comment or new information.

The ANG will conduct a *Public Meeting* to discuss Site 8, and to address any questions or concerns of the public. The Public Meeting will be held on the evening of Thursday, February 23, 2012 between 6:30 and 8:00 pm at the Westhampton Free Library to allow any interested parties to attend. The Public Meeting will be announced in the western edition of the Southampton Press newspaper giving the date, time and place. Public Comment Period: January 19 – March 5, 2012

### Would you like to submit written comments on the PRAP?

### If so, please contact either of the representatives listed below:

New York State Department of Environmental Conservation HEATHER BISHOP, Project Manager Division of Environmental Remediation Remedial Bureau A 625 Broadway, 11<sup>th</sup> Floor Albany, NY 12233-7015

> Telephone: (518) 402-9692 Fax: (518) 402-9022 E-Mail: <u>hlbishop@gw.dec.state.ny.us</u>

Air National Guard Environmental Division JODY MURATA, Program Manager 3500 Fetchet Avenue Andrews AFB, MD 20762

> Telephone: (240) 612-8120 Fax: (240) 612-7427 E-Mail: <u>Jody.Murata@ang.af.mil</u>

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ABB-ES, <u>Installation and Restoration Program</u>, <u>Management Action Plan, Francis S. Gabreski Airport</u>, <u>Westhampton Beach, New York</u>, prepared for the New York Air National Guard, submitted to HAZWRAP Support Contractor Office, Oak Ridge, Tennessee, 1992.

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PEER, <u>Final Remedial Investigation Report for Sites 1, 2,</u> 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 2004.

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

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

#### LIST OF ACRONYMS

ARAR	Applicable or relevant and appropriate
	requirements
ANG	Air National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental
CERCERT	Response, Compensation and Liability
	Act
CFR	Code of Federal Regulations
COC	contaminant of concern
ECL	Environmental Conservation Law
EM	Environmental Manager
ERP	Environmental Restoration Program
MCL	Maximum Contaminant Level
NCP	National Contingency Plan
NFRAP DD	No Further Response Action Planned
	Decision Document
NYCRR	New York Codes, Rules and
NT CIX	Regulations
NYSDEC	New York State Department of
NIBDLC	Environmental Conservation
PEER	PEER Consultants, P.C.
PP	Proposed Plan
PRAP	Proposed Remedial Action Plan
RI	Remedial Investigation
ROD	Record of Decision
RQW	Rescue Wing
SARA	Superfund Amendments and
	Reauthorization Act
SCDHS	Suffolk County Department of Health
	Services
SCO	Soil Cleanup Objective
SI	Site Investigation
SVOC	semivolatile organic compound
TCE	Trichloroethylene
TCRA	Time Critical Removal Action
USC	United States Code
VOC	volatile organic compound

### GLOSSARY

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

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

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

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

*Code of Federal Regulations (CFR):* The regulations published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to federal regulation. Most federal environmental regulations are found in Title 40 of the CFR.

#### Comprehensive, Environmental Response,

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

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

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

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

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

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

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

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

*Maximum Contaminant Level (MCL):* The highest amount of a contaminant that the Environmental Protection Agency allows in drinking water. MCLs ensure that drinking water does not pose either a shortterm or long-term health risk.

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

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

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

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

**Proposed Remedial Action Plan (PRAP):** The PRAP is a document used to facilitate public involvement in the remedy selection process. The document presents the lead agency's preliminary recommendation concerning how best to address any contamination at a site, presents alternatives that were evaluated for the site, and explains the reasons the lead agency recommends the *Preferred Alternative*.

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

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

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

*Remedial Action:* An action taken to cleanup contaminated sites.

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

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

*Time Critical Removal Action (TCRA)*: An expedited removal action undertaken to prevent, minimize, or mitigate damage to the public health or environment which may otherwise result from a release or threatened release of hazardous substances, pollutants, or *contaminants*.

*Risk Assessment:* A qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence of *contaminants*.

*Semivolatile Organic Compounds (SVOCs):* Substances consisting of mostly carbon and hydrogen. SVOCs have a slight tendency to evaporate (volatilize) at room temperature. SVOCs are found in fuels.

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

Superfund Amendments and Reauthorization Act

(SARA): SARA amended CERCLA in 1986. SARA's changes stressed the importance of state and federal environmental laws and regulations; increased state involvement; increased the focus on human health; and encouraged greater citizen participation in making decisions on how sites should be cleaned up.

*Volatile Organic Compounds (VOCs):* Substances containing mostly carbon and different portions of other elements such as hydrogen, oxygen, fluorine, chlorine, or nitrogen. VOCs have a strong tendency to evaporate (volatilize) at room temperature, and have strong odors. VOCs are found in an extensive range of home and industrial solvents and fuels.

ATTACHMENT A NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CONCURRENCE LETTER THIS PAGE INTENTIONALLY LEFT BLANK

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.nv.gov



Ms. Jody Ann Murata (<u>iody.murata@ang.af.mil</u>) Program Manager NGB/A7OR Shepperd Hall 3501 Fetchet Ave. Joint Base Andrews MD 20762-5157

> Re: Suffolk County Air National Guard Septic Systems Site 8 Site No. 152148 Proposed Remedial Action Plan Submitted October 2011

December 29, 2011

Dear Ms. Murata:

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed the September 2011 Draft-Final Version 3 Proposed Remedial Action Plan for Site 8 of the 106th Rescue Wing, Air National Guard base at the Francis S. Gabreski Airport located in the village of Westhampton in Suffolk County. Based on our review, we understand that Time Critical Removal Actions have removed source contamination from the site.

The State concurs with the proposed alternative which combines collecting additional 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,

Dust

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

ec: Richard Stout, PEER (<u>stoutr@peercpc.com</u>) Charlotte Bethoney, NYSDOH Steve Karpinski, NYSDOH Jim Harrington John Swartwout Walter Parish Heather Bishop



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### ATTACHMENT B 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 THIS PAGE INTENTIONALLY LEFT BLANK

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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

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# **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: Jody.Murata@ang.af.mil

Ms. Heather Bishop NYSDEC, Division of Environmental Remediation 625 Broadway, 11<sup>th</sup> Floor Albany, NY 12233-7015 Phone (518) 402-9692 Email: <u>hlbishop@gw.dec.state.ny.us</u> 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. <u>Shaun.Denton@ang.af.mil</u>

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

FEBRUARY 16, 2012 | THE SOUTHAMPTON PRESS

# BUSINESS

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

BY COLLEEN REYNOLDS



AOCCAL TITIO Selling the Whoopsile can lami-tify 30, and if all gees accrition to the trio's plans, plagyounds and playooms across the East and a beyond will soom be tiled with the purity polica-do-ted east with the self sources with the self sources and the source self sources are sources and sources and the source self sources and sources and the source sources and sources and the sources and s

the shift wild are increases go Armanda Krzenski, a kindergar-ten teacher, wrote in an email. Of course, it's not intended to take the place of parental super-vision, but it does provide you with peace of mind as your baby starts sitting up on their own, pulling themselves up or taking those first steps? Ms. Barke O'Brien, a good friend of the Krzenskis, support



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

"Whoopsie," in Agawan Park in Southampton. DAMARK Karen's mom, Sue Adabody, a former designer living in Hor-al liac-colored hat topped with a manufactured in New Hamp-ging. Karen Krenski said. They spear to turn he Kzenski said tot style sells for 544.99, while spear hourn he Kzenski said. They ananda Kzenski, a kindegaw

### **PALACE:** Dean's Meat Market

Now Under New Management FROM PAGE A1

FROM PAGE A1 sell, the younger Mr. Deans aid it was his hope to pass on his family business to a like-minded proprietor. Instead, the hest neet. Bryan Deans aid. Instead, the husband and fa-ther of three explained that his of the explained with the there of these explained with the there of the explained with the the explained with the there of the explained with the the explained with the explained business on November I. "I was looking for a person which has with this wife kathy, basis with his wife kathy, basis with his wife kathy, basis of the explained with the explained with the transition of the explained with the state of the explained with the the transition of the explained with the the explained with the transition of the explained with the the transition of the explained with the the transition of the explained with the the explained with the transition of the explained with the the explained with the transition of the explained with the the explained with the transition of the explained with the the explained with the transition of the explained with the explained with the explained with the transition of the explained with the explained with the explained with the transition of the explained with the explained with the explained with the transition of the explained with the explained

three childrem--kelly, 19, Kevin, 17, and Patrick, 15, 11 found the generations of customers grow when the state of the presence of the presence of them presonally. If comers of the presence of the presence of the presence of them presonally. If comers there are the state of the presence of the presence of them presonally. If comers there are the state of the presence of the presence of them presonally. If the presence of them presonally is the presence of them presonally. If the presence of them presonally is the presence of them presonally is the presence of the pre

able for purchase only at whoop-siec.com. "There are so many nights when you go to bed being like, I can't believe that we made it through another day of not being in the emergency room," so if did. "It just takes a beford being in the emergency room," so if did. "It just takes a beford being in the emergency room," so if did. "It just takes a beford being in the emergency room, " so if did. "It just takes a beford all the bit of protec-tion, then it's worth it."

b) Management
are place, Middle Island and Parchogue and stands by its Sheet Prices? Mr. Masotto said, the business first opened in biotropic place and the place of the place of

"The U.S. needs a product that is comfortable and practical— and adorable," Karen Krzenski recalled realizing. The Krzenskis reached out to The Law Offices of Richard T. Haefeli ESTATE PLANNING & ADMINISTRATION

WILLS • TRUSTS • ELDER LAW BUSINESS FORMATION REAL ESTATE • LAND USE

40 years practicing law on eastern Long Island

48F Main Street, Westhampton Beach, NY 11978 (631) 288-4300





### 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 (CERCIA). The ERP is a nationwide effort to identify and eleanup 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 NEW YORK AIR NATIONAL GUAD 106TH 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.

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Jody Murata National Guard Bureau/A7OR 
 National Guaro BureauX/VK
 NYSDEC, Division of Environmental Remediation 3500 Fetcher Avenue

 3500 Fetcher Avenue
 625 Broadway, 11th Floor Albany, NY 12233-7015

 Phone: [240] 612-8120
 Phone [518] 402-9692

 Email: Iody Muratazia ang almul
 Email: Ibdy Muratazia ang almul

Ms. Heather Bishop NYSDEC, Division of

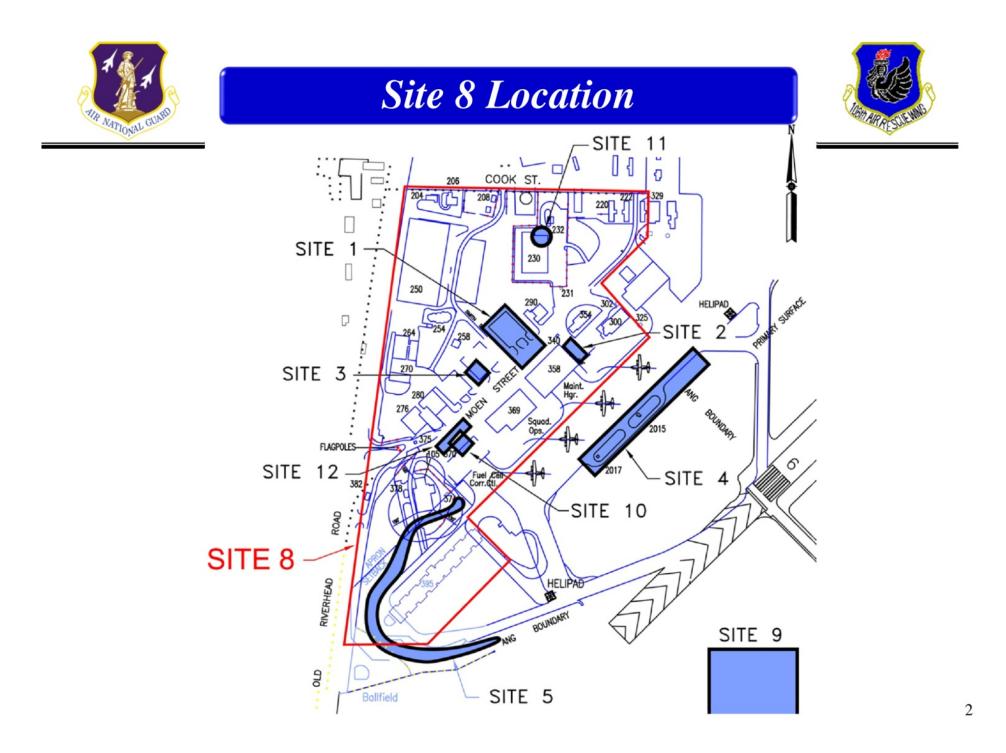
Lt. Shaun Denton 106th Rescue Wing Francis S. Gabreski Airport 150 Riverhead Road Westhampton Beach, NY 11978-1201 Phone: (631) 723-7349 Email: Shaun.Denton@ang.af.mil

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

WESTERN EDITION A11

APPENDIX B HANDOUT FOR THE PUBLIC MEETING PRESENTATION THIS PAGE INTENTIONALLY LEFT BLANK



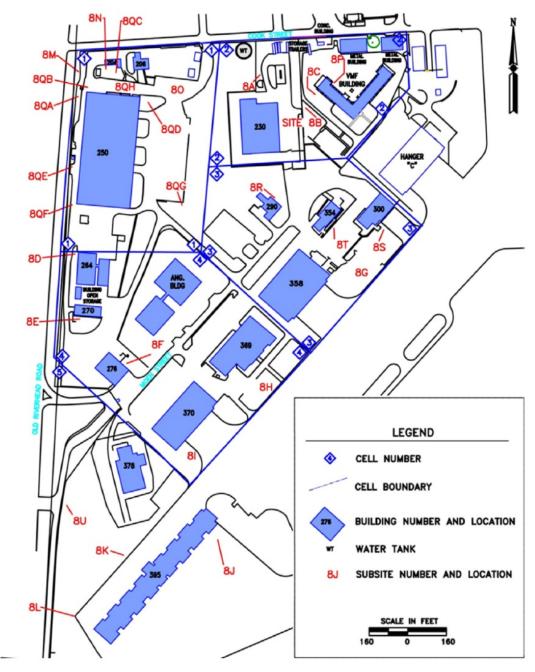


## Site 8 Description

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 :**

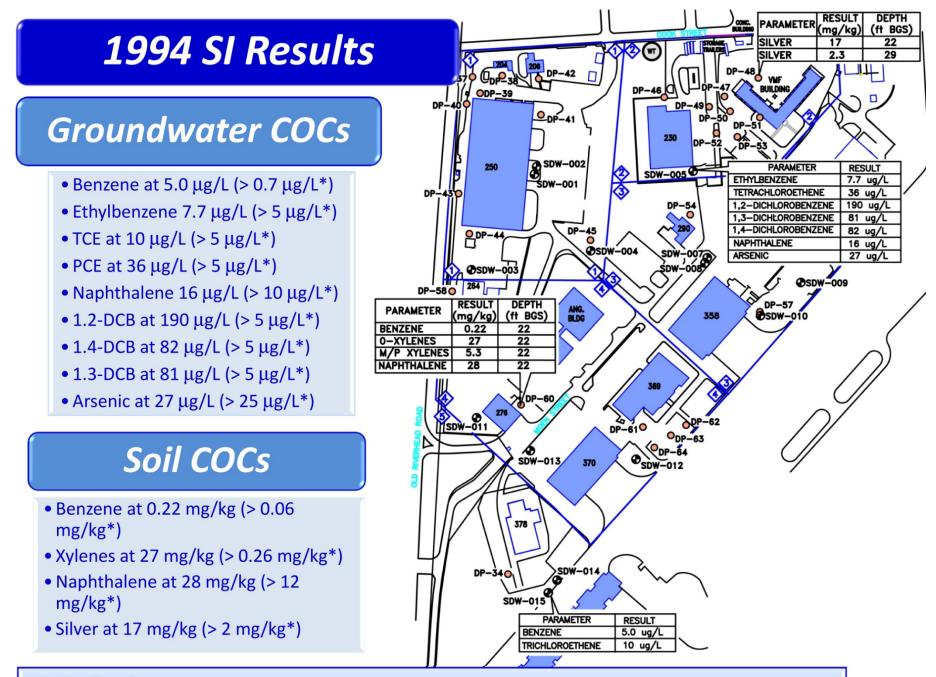
• <u>1994 Source Characterization</u>. Consisted of sampling septic system contents (sludge and liquid). Primary Contaminants of Concern (COCs) detected consisted of volatile organic compounds (VOCs) and the metal chromium.





# **Investigation History for Site 8 (continued):**

• <u>1994 Site Investigation</u>. 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.



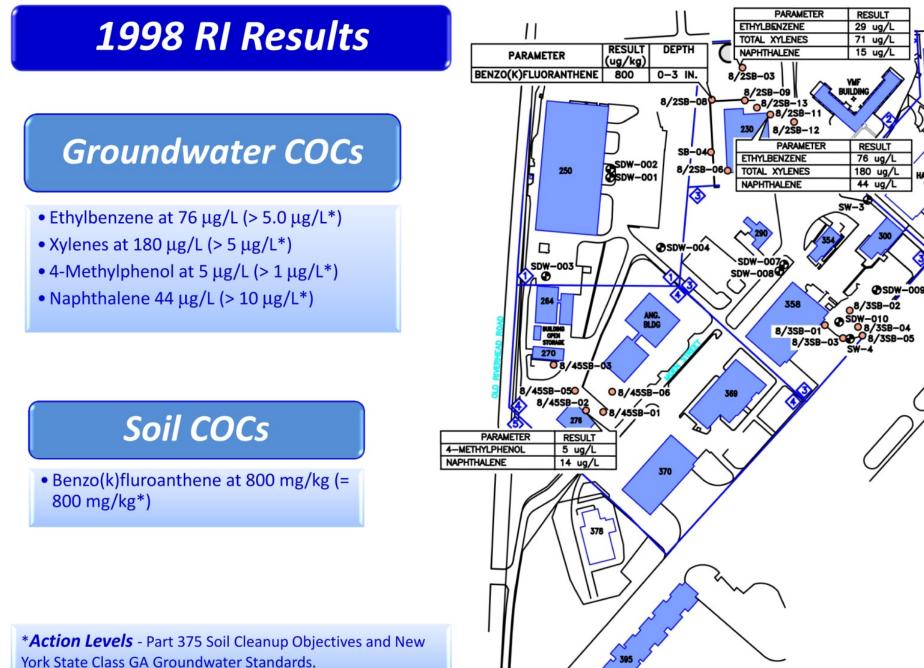
\*Action Levels - Part 375 Soil Cleanup Objectives and New York State Class GA Groundwater Standards.





# **Investigation History for Site 8 (continued):**

• <u>1998 Remedial Investigation</u>. 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 4methylphenol.



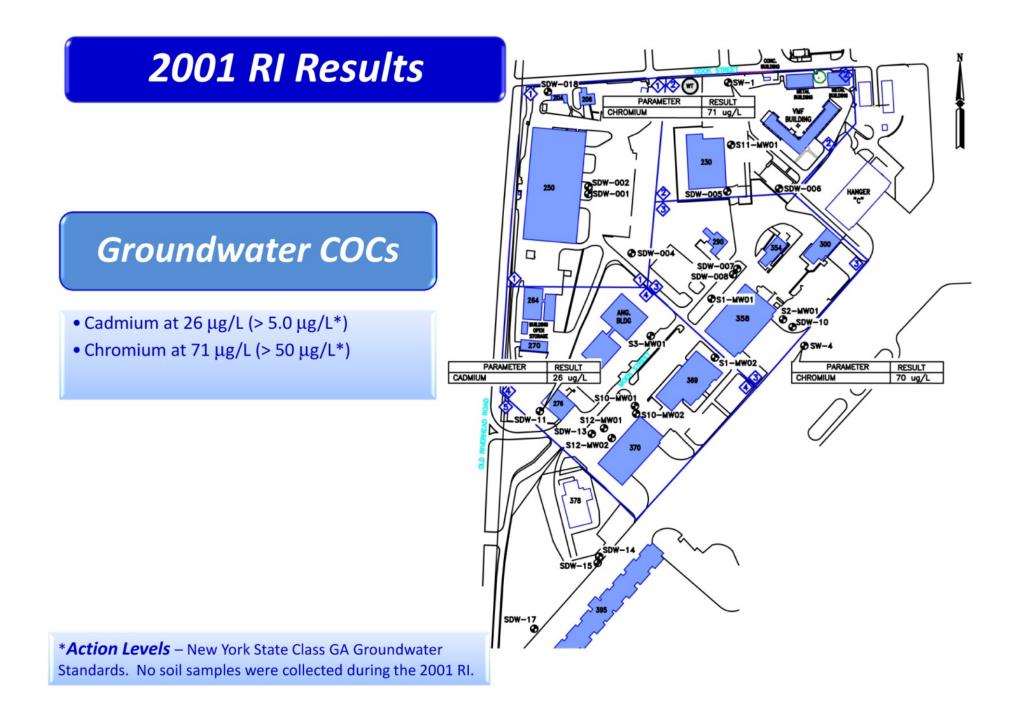
HANK





# Investigation History for Site 8 (continued):

• <u>2001 Remedial Investigation</u>. 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.

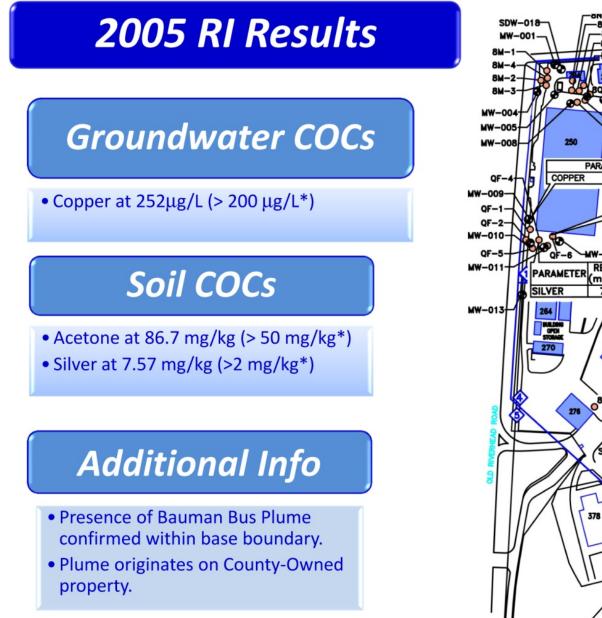


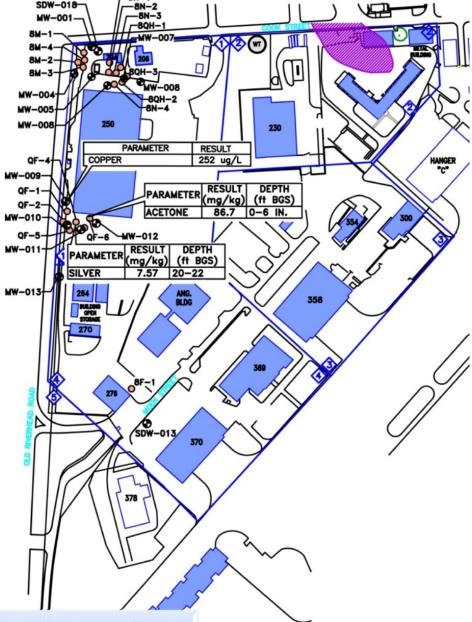




# **Investigation History for Site 8 (continued):**

- <u>2002 Septic System Remediation</u>. Septic systems structures were remediated. Approximately 44,000gallons of water, 158 yd<sup>3</sup> of sludge and 840 yd<sup>3</sup> of construction debris were removed and disposed of.
- <u>2005 Remedial Investigation.</u> 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).





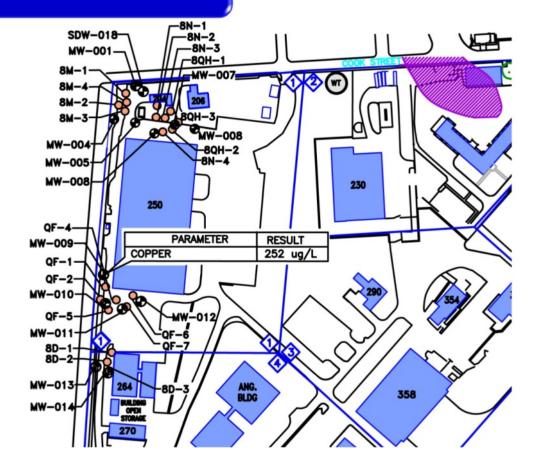
\*Action Levels - Part 375 Soil Cleanup Objectives and NYS Class GA Groundwater Standards.

# 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.



\*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 <u>hlbishop@gw.dec.state.ny.us</u> Lt. Shaun Denton Base Environmental Manager (631) 723-7349 <u>Shaun.denton@ang.af.mil</u>

# **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

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Site8ANG 1 1 2 3 4 **5 AIR NATIONAL GUARD 6 PUBLIC MEETING PRESENTATION** 7 FOR SITE 8 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 1 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 1

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 1

- 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 1

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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 Site8ANG 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 1
- 7

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 quess 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 Site8ANG 1 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 1 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 1

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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 1

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1 basic investigation, they went ahead and 2 determined that they better do something 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, 1

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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

#### Site8ANG

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

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1 remember which wells were installed at which 2 point. That's probably that is something that 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

#### Site8ANG

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

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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 Page 12 Site8ANG

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1 where you would find them, in the first few 2 inches of soil, 0 to 3 inches. The reason

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

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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 quite 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

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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

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 Site8ANG

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

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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 1 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,

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

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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

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conclusively say, it's due to entrained sediments.
 We thought, you know it might be. We looked
 at the samples. We did take a total metal
 sample. We did not take a dissolved metal

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 Page 18 Site8ANG

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 1 23 1 concern. And then the other thing that was 2 kind of surprising is, we found acetone. It

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3 was right there at the ground surface. Zero 4 to six inches. That was a surprise. It is 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

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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 1

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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 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. Page 21

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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 1 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: \

9 MS. MURATA: We have Sites 7 and 10 9 --

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 Page 22

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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
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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

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 Site8ANG 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. 1 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 Site8ANG 1 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?

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 1 30 1 septic -- what I am saying, I don't know 2 what contaminant they were concerned about. Page 25 Site8ANG 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 1 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 Page 26

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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 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 guite a Page 27 Site8ANG 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. 24 (Whereupon, the hearing concluded.) 2 C E R T I F I C A T I O N 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

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 Page 28 Site8ANG 17 18 (Jessica DiLallo) 19 20 21 \* \* \* \* 22 23 24 25 Page 29

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