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**SITE SS-017  
BUILDING 2774  
SOIL OPERABLE UNIT**

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**PROPOSED PLAN**

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*Plattsburgh Air Force Base  
Installation Restoration Program*



**United States Department of The Air Force  
Plattsburgh Air Force Base  
Plattsburgh, New York**

**Final  
January 2002**

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## 1.0 INTRODUCTION

This Proposed Plan presents the remedial alternative for the Soil Operable Unit (OU) for Building 2774 (site SS-017) at the Plattsburgh Air Force Base (AFB) in Plattsburgh, New York (Figure 1). The United States Air Force (USAF), in conjunction with the United States Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYSDEC), has developed this plan to address previously contaminated site soil that was present as a result of past accidental spills. Two removal actions undertaken at the site have resulted in the successful remediation of the contaminated soil. The preferred remedial alternative for site SS-017, therefore, is No Further Action. This plan has been evaluated in detail as part of the Department of Defense's Installation Restoration Program (IRP) at the base.

The Proposed Plan is being published in accordance with Section 117(a) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Its purpose is to summarize information that can be found in greater detail in the removal action progress report and other related documents for this site. Additionally, it provides information for public review and comment on the alternative being considered. The USAF, in consultation with the USEPA and the NYSDEC, will consider public input on the alternative proposed in this plan. Therefore, the public is encouraged to review and comment on the alternative being considered. The **Administrative Record File** contains the information upon which the selection of the response action will be based. This information is available to the public at the **Information Repository**, which is located at the Feinberg Library on the campus of the State University of New York at Plattsburgh. The repository documents are on reserve (see the Special Collections Librarian). Photocopying equipment is available.

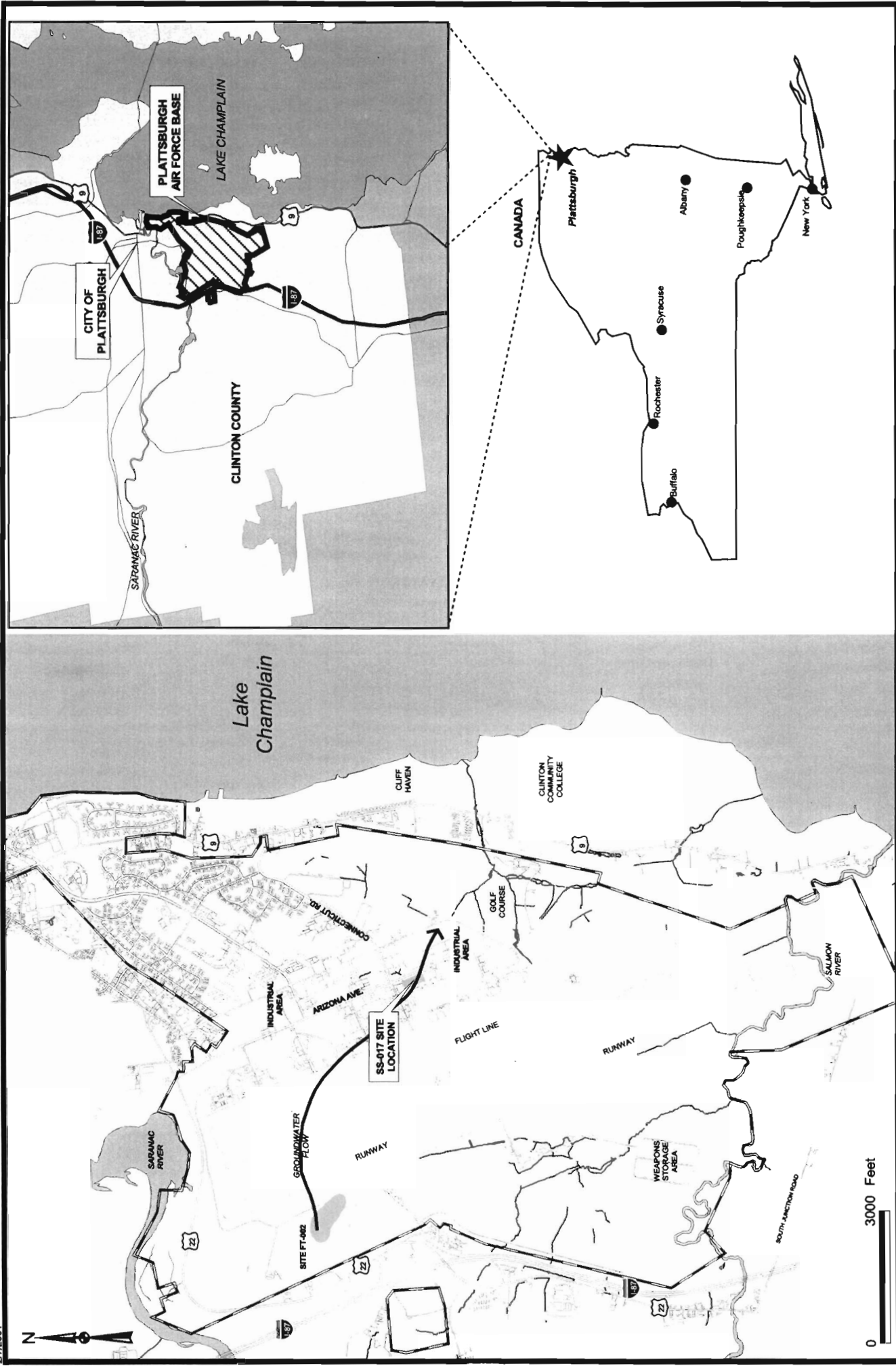
### Administrative Record File Location:

Feinberg Library  
SUNY at Plattsburgh  
Plattsburgh, NY 12901  
Special Collections Department  
(518) 564-5206

### Special Collection Hours

Monday	Not Open
Tuesday	4:00 p.m. to 7:00 p.m.
Wednesday	9:00 a.m. to 12:30 p.m. and 1:00 p.m. to 4:00 p.m.
Thursday	9:00 a.m. to 12:30 p.m. and 1:00 p.m. to 4:00 p.m.
Friday	10:00 a.m. to 12:30 p.m. and 1:00 p.m. to 4:00 p.m.
Saturday	1:00 p.m. to 5:00 p.m.
Sunday	Not Open

This plan addresses soil contamination that was found in the immediate vicinity of Buildings 2774 and 2753. Initial investigations at the site began in 1985; investigations were focused on a concrete pad, located near the southeast corner of Building 2774, which was used as a drum storage pad and waste accumulation area. High levels of dichlorobenzene isomers and fuel-related compounds were detected in the soil surrounding the pad. Investigations were expanded to the area between Building 2774 and Building 2753. Chlorinated hydrocarbons and fuel-related compounds were detected in this area, but at lower concentrations than the contamination found in the immediate vicinity of the concrete pad. Contamination also was detected in groundwater. An Interim Remedial Measure (IRM) was executed in 1992, during which the concrete pad and approximately 200 cubic yards of contaminated soil surrounding the pad were removed and disposed of. Subsequent investigations were implemented to evaluate the area surrounding both buildings. In February 1997, a second



BUILDING 2774 (SS-017)  
SITE LOCATION MAP

URS

FIGURE 1

removal action was initiated to address soil contamination remaining following the IRM. Systems installed and operated for the removal action included soil vapor extraction (SVE), bioventing, and biosparging. Progress sampling indicates that contamination has been reduced to a level below that which is of concern to human health and the environment.

Investigation and remediation at site SS-017 has been divided into two phases or operable units (OUs). This Proposed Plan addresses the Soil OU, which consists of soil contamination in the unsaturated zone (above the water table). Groundwater contamination is being evaluated separately under the Fire Training Area (FT-002)/Industrial Area Groundwater OU.

Based on an evaluation of health risk posed to hypothetical future residents, further remediation of contaminants in soil is not warranted. In addition, contaminant concentrations do not pose a potential threat to groundwater resources through the leaching of soil contaminants to the water table. Therefore, no further action is necessary to protect human health and the environment.

The USAF, in consultation with the USEPA and NYSDEC, may modify the proposed alternative presented in this plan based on new information or public comments. Therefore, the public is encouraged to review and comment on the alternative identified herein.

## **2.0 SITE BACKGROUND**

### **2.1 Site Description and Background**

Plattsburgh AFB, located in Clinton County in northeastern New York State, is bordered on the north by the City of Plattsburgh, the south by the Salmon River, on the west by Interstate 87, and on the east by Lake Champlain. The base is approximately 26 miles south of the

Canadian border and 167 miles north of Albany.

Plattsburgh AFB was closed on September 30, 1995 as part of the (third round of) base closures mandated under the Defense Base Closure and Realignment (BRAC) Act of 1993, and its reuse is being administered by the Plattsburgh Airbase Redevelopment Corporation (PARC). PARC is responsible for maintaining base property, marketing and controlling base reuse, leasing and managing property, and developing base facilities, as necessary, to promote advantageous reuse. According to land use plans (PARC 1995), the planned use of SS-017 and its surrounding area is industrial/aviation support. The base land use plans developed by PARC were incorporated into the Environmental Impact Statement (Tetra Tech 1995). As part of the USAF's Installation Restoration Program (IRP), Plattsburgh AFB has initiated activities to identify, evaluate, and restore identified hazardous material disposal areas. The IRP at Plattsburgh AFB is being implemented according to a Federal Facilities Agreement (Docket No.: II-CERCLA-FFA-10201) signed between the USAF, USEPA, and NYSDEC on July 10, 1991. Plattsburgh AFB was placed on the National Priorities List on November 21, 1989. Cleanup is being funded by the USAF.

The USAF has kept the community informed regarding progress at site SS-017 and other base IRP sites during quarterly Restoration Advisory Board (RAB) meetings open to the public. This board consists of the BRAC Cleanup Team (BCT) members (key representatives from the USAF, USEPA, and NYSDEC) and several representatives from municipalities, community organizations, and associations including community members with environmental/engineering expertise. The RAB, which was chartered in 1995, serves as a forum for the community to become familiar with the restoration activities ongoing at Plattsburgh AFB and to provide input to the BCT.

Site SS-017 (Building 2774) is located in the industrial area of the base, east of the flightline ramp, west of Arizona Avenue, and south of Connecticut Road (Figure 1). The site, which includes the immediate areas surrounding Building 2774 and 2753, is paved except for a few grassy medians (Figure 2). Potential sources of contamination at the site are accidental spills, especially those potentially associated with transfer of drums and waste material to and from the former drum pad (which served as a waste accumulation area) situated near the southeast corner of Building 2774. Carbon remover solvent, PD-680 cleaning solvent (mineral spirits), engine oil, and hydraulic fluid were accumulated at the pad, which supported the aircraft engine maintenance activities ongoing in Building 2774 from 1956 to base closure. Building 2753 served as an aircraft maintenance machine shop during that period. These two buildings are currently being leased, and are being utilized for aircraft research and commerce.

Groundwater at the site, which lies about 4 to 8 feet below the ground surface within an unconfined sand aquifer, flows to the southeast toward the Golf Course drainage system (Figure 1). A silty clay confining layer forms the base of the aquifer in the vicinity of site SS-017 at about 25 feet below the ground surface. The site lies on a flow path from the upgradient FT-002 site (Figure 1).

## **2.2 Summary of Investigation and Removal Activities**

Based on site history, the contaminants of concern at SS-017 are related to cleaning solvents and petroleum products. Accidental spills of these materials reportedly occurred when raw materials were being transferred to buckets and when waste drums were being filled. Initial investigations were centered near the 15 foot by 15 foot concrete drum pad at Building 2774, but later investigations were implemented to evaluate the area around Buildings 2774 and 2753.

Investigations and activities at the site are summarized below.

### **2.2.1 Preliminary Investigations**

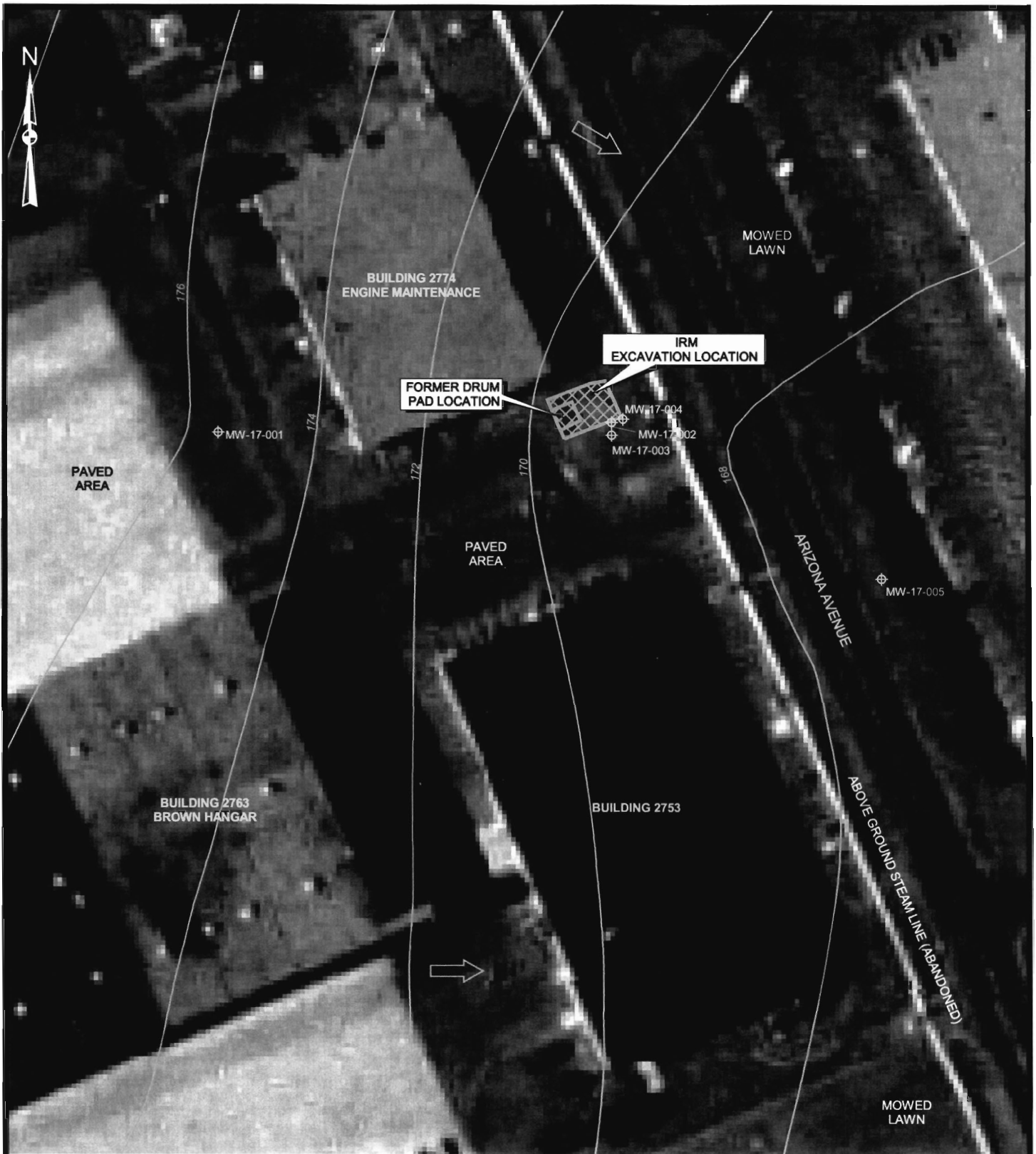
A basewide records search, completed in 1985, indicated that releases of contaminants had occurred at SS-017 (Radian 1985). To verify the findings, the NYSDEC and Plattsburgh AFB conducted preliminary investigations at the site. In April 1985, the NYSDEC collected two surface soil samples adjacent to the concrete pad (Parsons/OHM 1996). The agency reported that the samples contained elevated levels of volatile organic compounds (VOCs), most notably total dichlorobenzene (DCB) at a maximum concentration of 9,800,000 µg/kg. Based on these results, Plattsburgh AFB performed two additional soil sampling events near the pad—in October 1985 and November 1986. A total of 74 soil samples were collected at 35 locations to a depth of 3 feet below ground surface. DCB and fuel related hydrocarbons were detected in several of the samples.

### **2.2.2 Site Inspection**

In 1987, a Site Inspection was conducted at the site which included a soil gas survey, drilling and sampling of 4 soil borings, and installing and sampling 1 upgradient and 2 downgradient monitoring wells (E.C. Jordan 1989). Soil contaminants were detected to a depth of 4 feet below ground surface near the pad. Groundwater sampled from the two downgradient monitoring wells contained low levels of VOCs and semi-volatile organic compounds (SVOCs).

### **2.2.3 Interim Remedial Measure**

In June 1992, the USAF initiated an IRM to remediate the contaminated soil near the concrete pad. To delineate the extent of the contamination, soil samples were collected from a rectangular grid set up over the vicinity of the pad. In the fall of 1992,



**Legend**

- ⊕ Monitoring Well
- 170— Groundwater Elevation Contour (9/2/99)
- ➡ Groundwater Flow Direction



the pad was removed. Approximately 200 cubic yards of soil were also removed from around the pad in an area 45 feet long by 30 feet wide to a depth of 4 feet (Figure 2). The material was disposed of off base by incineration. No post excavation soil samples were taken.

#### **2.2.4 Remedial Investigation**

In December 1992, USAF installed two additional monitoring wells (MW-17-004 and MW-17-005) at the site (MPI 1996) as shown on Figure 2. The 5 wells at SS-017 were sampled in January/February 1993 and April 1993 as part of the Remedial Investigation (RI) performed by Malcolm Pirnie, Inc. The samples were analyzed for VOCs, SVOCs, pesticides/PCBs, and metals. The results indicated significant concentrations of VOCs and SVOCs in the samples from monitoring well MW-17-004. A number of Hydro-Punch™ groundwater screening samples were also collected at the site. No additional soil sampling was performed during the RI. The RI did, however, recommend further delineation of site contamination. An evaluation of risk posed to human health given industrial reuse conditions was also performed (see Section 4.0).

#### **2.2.5 Supplemental Delineation Investigation**

In 1996, Parsons Engineering Services and OHM Remediation Services conducted Supplemental Delineation Investigation (SDI) at SS-017 (OHM 1997) in response to the RI recommendations. The objective of the investigation was to obtain a more complete understanding of the nature and extent of soil contamination at the site. The extensive program of soil gas and subsurface soil sampling consisted of 159 soil gas sample locations screened for VOCs, O<sub>2</sub>, CO<sub>2</sub>, and CH<sub>4</sub>, 116 soil gas sample locations analyzed by field gas chromatograph for VOCs, and Geoprobe™ soil sampling and

analysis at 96 locations for VOCs and SVOCs. Soil sample locations are shown on Figure 3. Seven (7) areas of soil contamination were identified when the results were compared to NYSDEC soil cleanup objectives (NYSDEC 1994).

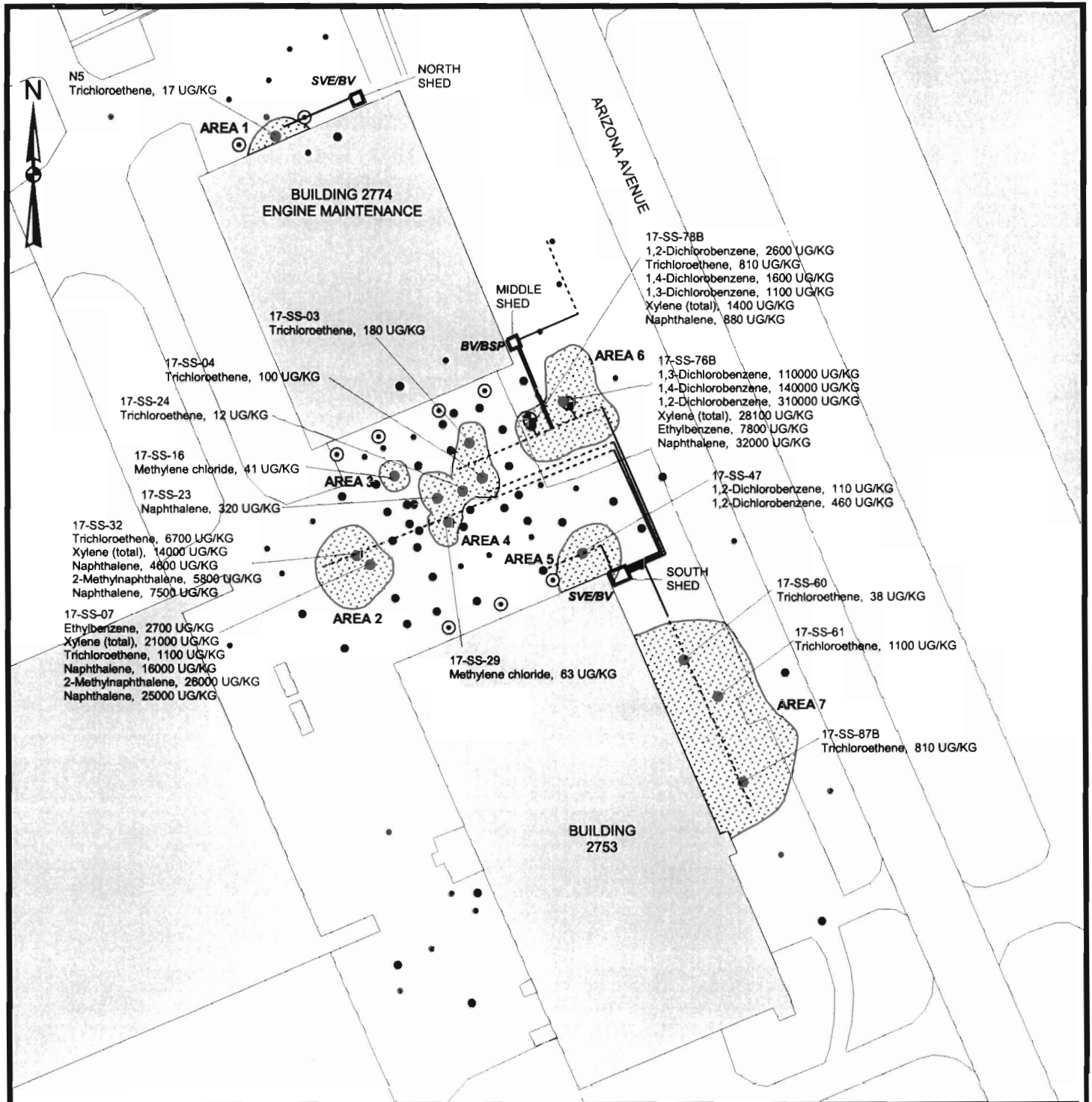
#### **2.2.6 Removal Action**

A second removal action was initiated in 1996 to address the 7 areas of soil contamination identified in the Supplemental Delineation Investigation. An Action Memorandum (Parsons/OHM 1996) was prepared that recommended the installation of SVE and bioventing/ biosparging systems to clean up the soil at the site. Soil cleanup criteria were established for 7 indicator parameters based on levels established by the NYSDEC for the protection of groundwater quality (NYSDEC 1994). The systems were installed as recommended in 1997; operation and monitoring of the systems are ongoing.

#### **2.2.7 Additional Groundwater Sampling**

The SS-017 monitoring wells were sampled on three occasions subsequent to the completion of the RI. The first round of sampling occurred in September 1996 as part of the *Fire Training Area (FT-002) and Industrial Area Groundwater Remedial Investigation/Feasibility Study* (URS 2000a). The second round of sampling occurred in July 1999 (about 18 months after the Removal Action was initiated) during an investigation of groundwater quality in the vicinity of Building 2612 (URS 2001a). The third round of sampling occurred in November 2000 in response to regulatory agency comments. The first and second round samples were only analyzed for VOCs. The third round samples were only analyzed for SVOCs. For the July 1999 sampling event, all of the VOC detections were less than their respective New York State groundwater standards. The only SVOC detected in November 2000 sampling was bis(2-Ethylhexyl)phthalate. Because the site





N5  
Trichloroethene, 17 UG/KG

AREA 1

BUILDING 2774  
ENGINE MAINTENANCE

NORTH  
SHED

ARIZONA AVENUE

17-SS-03  
Trichloroethene, 180 UG/KG

MIDDLE  
SHED

17-SS-78B  
1,2-Dichlorobenzene, 2600 UG/KG  
Trichloroethene, 810 UG/KG  
1,4-Dichlorobenzene, 1600 UG/KG  
1,3-Dichlorobenzene, 1100 UG/KG  
Xylene (total), 1400 UG/KG  
Naphthalene, 880 UG/KG

17-SS-04  
Trichloroethene, 100 UG/KG

BV/BSP

AREA 6

17-SS-76B  
1,3-Dichlorobenzene, 110000 UG/KG  
1,4-Dichlorobenzene, 140000 UG/KG  
1,2-Dichlorobenzene, 310000 UG/KG  
Xylene (total), 28100 UG/KG  
Ethylbenzene, 7800 UG/KG  
Naphthalene, 32000 UG/KG

17-SS-24  
Trichloroethene, 12 UG/KG

17-SS-16  
Methylene chloride, 41 UG/KG

17-SS-23  
Naphthalene, 320 UG/KG

AREA 3

17-SS-47  
1,2-Dichlorobenzene, 110 UG/KG  
1,2-Dichlorobenzene, 460 UG/KG

17-SS-32  
Trichloroethene, 6700 UG/KG  
Xylene (total), 14000 UG/KG  
Naphthalene, 4600 UG/KG  
2-Methylnaphthalene, 5800 UG/KG  
Naphthalene, 7500 UG/KG

AREA 4

SOUTH  
SHED

17-SS-07  
Ethylbenzene, 2700 UG/KG  
Xylene (total), 21000 UG/KG  
Trichloroethene, 1100 UG/KG  
Naphthalene, 16000 UG/KG  
2-Methylnaphthalene, 28000 UG/KG  
Naphthalene, 25000 UG/KG

AREA 2

17-SS-29  
Methylene chloride, 63 UG/KG

17-SS-60  
Trichloroethene, 38 UG/KG

17-SS-61  
Trichloroethene, 1100 UG/KG

AREA 2

AREA 5

17-SS-87B  
Trichloroethene, 810 UG/KG

BUILDING  
2753

**Legend**

- No Compounds Detected
- No Compounds Exceed ASCs
- At Least One Compound Exceeds ASCs
- ⊕ Biosparging Well
- ⊙ Passive Vent Well

- Underground Extraction Well/Solid Section
- - - - - Underground Extraction Well/Screened Section
- ▨ Estimated Extent of Soil Contamination

SVE - Soil Vapor Extraction  
BV - Bioventing  
BSP - Biosparging

Location ID      17-SS-07  
Compound Exceeding Criteria      Naphthalene, 16000 UG/KG  
Concentration      Units

100      0      100 Feet

J:\0100013\_10\gis\Applications\SS-017.apr (1996).COC EXCEEDING CRITERIA 12/13/2001



PLATTSBURGH AIR FORCE BASE - SS-017  
AREAS OF CONTAMINATION IDENTIFIED FROM  
1996 SUPPLEMENTAL DELINEATION

FIGURE 3

SS-017 lies downgradient from the FT-002 site in the industrial area, groundwater at SS-017 is included in the Fire Training Area (FT-002)/Industrial Area Groundwater Operable Unit (see Section 3.0).

### **2.2.8 Supplemental Evaluation and Feasibility Study**

In 2000-2001, the USAF prepared a Supplemental Evaluation/Feasibility Study (SE/FS) for site SS-017 (URS 2001b). This document consolidated the data collected under the various studies conducted at the site since 1986, reevaluated potential risks to human health given a residential exposure scenario, evaluated monitoring data from the ongoing removal action, established a remedial action objective, and evaluated several remedial alternatives for remediation of the remaining soil contamination at SS017. The SE/FS recommended an alternative that essentially suggested continuation of the ongoing removal action until remediation goals are met.

### **2.2.9 2001 Removal Action Progress Report**

Because 5 years of removal action operation had occurred since the last comprehensive soil-boring event at SS-017, the USAF, in consultation with the NYSDEC and USEPA, decided that a current evaluation of removal action progress was warranted prior to moving forward with the recommendation of the SE/FS. Fifteen soil borings were advanced at the site in August 2001. Borings and sample depths were selected to directly compare contaminant levels to pre-removal action conditions. The results, presented in a removal action progress report (URS 2001c), showed substantial reduction of contaminant levels compared to pre-removal action levels. The report concluded that, because levels of soil contamination at SS-017 do not appear to pose a risk to human health or to groundwater resources, no further remedial action is warranted at the site.

### **2.3 Summary of Site Soil Contamination**

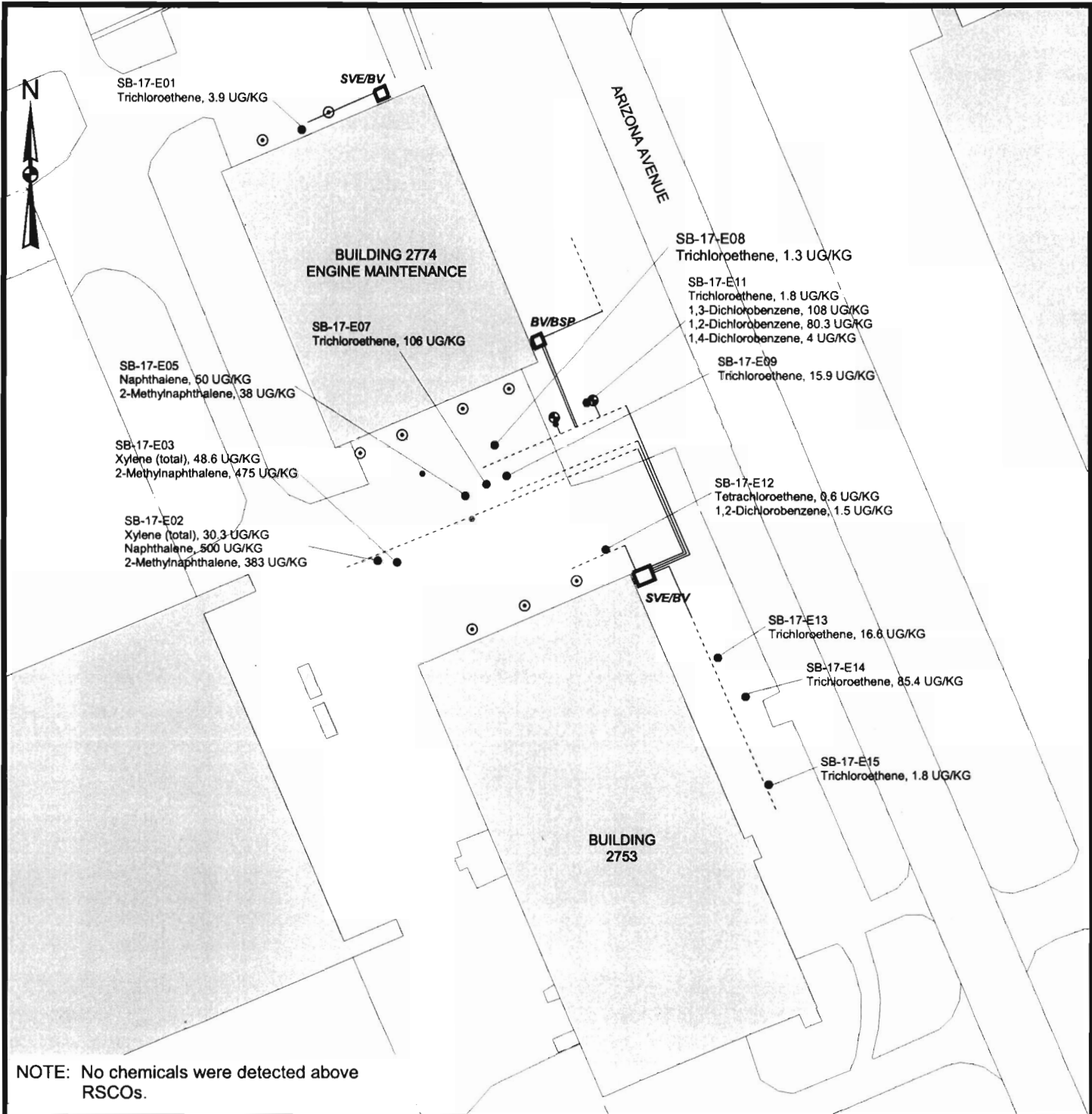
Soil contaminant concentrations detected in the 2001 Removal Action Soil Boring and Sampling Event (URS 2001c) were compared to NYSDEC recommended soil cleanup objectives (NYSDEC 1994). Detected contaminants of concern are shown on Figure 4. All chemicals were detected at levels at least 5 times less than the recommended cleanup objectives and only slightly above ASC screening levels. The number and concentration of chemicals of concern detected in soil at site SS-017 have been dramatically reduced by the IRM and removal action. The 1996 and 2001 soil contaminant levels are compared on Table 1. No site contaminants were detected above New York State groundwater ARARs in groundwater in the most recent sampling events at site SS-017.

### **3.0 SCOPE AND ROLE OF OPERABLE UNIT**

Site SS-017 is one of several sites (or operable units) administered under the Plattsburgh AFB IRP. Records of Decision have previously been signed for thirteen operable units at the base, and additional Records of Decision are planned for other sites. The SS-017 site has been divided into two OUs. The Soil OU is the subject of this Proposed Plan. The Soil OU includes contamination at the SS-017 site in soil in the unsaturated zone. It is intended that the proposed action presented in this plan be the final action for the SS-017 Soil OU. Two removal actions conducted at Site SS-017 resulted in the remediation of contaminated soil that constituted the principal threat waste at the site.

Site SS-017 lies downgradient from groundwater contamination originating from site FT-002 (see Figure 1).

Groundwater contamination in the vicinity of SS-017 is currently being



**Legend**

- No COCs Detected
- At Least One COC Detected
- ⊕ Biosparging Well
- ⊙ Passive Vent Well

— Underground Extraction Well/Solid Section  
 - - - - - Underground Extraction Well/Screened Section

SVE - Soil Vapor Extraction  
 BV - Bioventing  
 BSP - Biosparging

Location ID: SB-17-E02  
 Compound Exceeding Criteria: Naphthalene, 500 UG/KG  
 Concentration: 500 UG/KG  
 Units: UG/KG

100 0 100 Feet

J:\0100013\_10\gis\Applications\SS-017\_apr (2001) DETECTED COCs 12/13/2001



PLATTSBURGH AIR FORCE BASE - SS-017  
 CONTAMINANTS OF CONCERN DETECTED  
 ON SITE (2001)

FIGURE 4

**TABLE 1**  
**COMPARISON OF 1996 TO 2001 CONCENTRATIONS OF SOIL**  
**CONTAMINANTS OF CONCERN AT SITE SS-017**

Chemical	RSCO*	Maximum Concentration µg/kg	
		1996	2001
1,2-Dichlorobenzene	7,900	310,000	80.3
1,3-Dichlorobenzene	1,600	110,000	108
1,4-Dichlorobenzene	8,500	140,000	4
Ethylbenzene	5,500	7,800	ND
Methylene Chloride	100	41	ND
Trichloroethene	700	6,700	106
Xylenes (total)	1,200	28,100	48.6
2-Methylnaphthalene	36,400	26,000	475
Naphthalene	13,000	32,000	500

ND = Not Detected

\* Recommended Soil Cleanup Objectives from NYSDEC Technical Administrative Guidance Memorandum (TAGM) 4046, *Determination of Soil Cleanup Objectives and Cleanup Levels*, 1994.

For the protection of groundwater, soil cleanup objectives for contaminants of concern, as derived and detailed in NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046, are based on the theory of water/soil partitioning. This theory assumes that the contaminated soil and groundwater are in direct contact. However, TAGM Recommended Soil Cleanup Objectives (RSCO's) are developed for contaminated soil in the unsaturated zone, above the water table, and recognize that many mechanisms are at work that prevent all of the contamination that would leave the unsaturated zone soil from impacting groundwater. Nevertheless, the TAGM notes that caution should be exercised when using the RSCOs if the contaminated soil (though it may be in the unsaturated zone) is close to the groundwater table. Although groundwater at site SS-017 is relatively shallow, at 4 to 8 feet below grade, contaminant concentrations detected in the 2001 sampling of unsaturated zone soil are well below the RSCOs and are considered to be protective of groundwater.

evaluated together with other sites in the industrial area downgradient from site FT-002 as part of the Fire Training Area (FT-002)/Industrial Area Groundwater OU. A Record of Decision is expected to be signed for this OU sometime in 2002.

#### 4.0 HUMAN HEALTH RISK ASSESSMENT

A four-step process is utilized for assessing site-related human health risks for a reasonable maximum exposure scenario: *Hazard Identification* – identifies the contaminants of concern at the site based on several factors such as toxicity, frequency of occurrence, and concentration. *Exposure Assessment* – estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways (e.g., ingesting contaminated well water) by which humans are potentially exposed. *Toxicity Assessment* – determines the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure (dose) and severity of adverse effects (response). *Risk Characterization* – summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site-related risks.

The human health risk assessment (HRA) follows federal (USEPA) guidelines to estimate the potential carcinogenic (i.e., cancer-causing) and adverse non-carcinogenic health effects due to potential exposure to site contaminants of concern from assumed exposure scenarios and pathways. These guidelines consider an excess upper bound lifetime cancer risk to an individual to be acceptable if it is calculated to be less than one-in-one million ( $10^{-6}$ ). Risks in the range of one-in-ten thousand ( $10^{-4}$ ) to one-in-one million are evaluated on a case-by-case basis. The guidance also specifies a maximum health hazard index (which reflects noncarcinogenic effects for a human receptor) less than or equal to 1. The hazard index is a representation of risk, based

on a quotient or ratio of chronic daily intake to a reference (safe) dose. A hazard index greater than 1 indicates a potential for adverse noncarcinogenic health effects.

An HRA was performed during the RI that evaluated potential human exposure to soil contamination under an industrial development scenario (MPI 1996). This HRA showed that there was no significant human health risk given an industrial setting. As part of the SE/FS (URS 2001b), the risk assessment was updated to incorporate sampling results from the Supplemental Delineation Investigation (OHM 1997) and to evaluate human health risk under a residential (more conservative) scenario. Three exposure pathways were assessed in the updated HRA to evaluate potential risk. These were:

- Ingestion of contaminated soil by a residential user
- Dermal contact and adsorption of contamination from soil by a residential user
- Inhalation of volatilized contaminants from soil into indoor air by a residential user

Calculated cancer and noncancer risks are summarized on Table 2. The total exposure cancer risk is  $2 \times 10^{-5}$ . This risk falls within the range of cancer risks ( $10^{-4}$  to  $10^{-6}$ ) considered acceptable by USEPA on a case-by-case basis. The total exposure hazard index is 0.002, which is well below USEPA's target threshold hazard index of 1. These risks indicate that there is not a significant threat to human health resulting from contact with contaminated site soils at site SS-017. Also note that the risks were evaluated using pre-removal action levels of contamination. Since the levels of contamination have been substantially reduced by the removal action, the risks are less than calculated in the SE/FS.

**TABLE 2**  
**RISK CHARACTERIZATION SUMMARY**

<b>Receptor</b>	<b>Pathway</b>	<b>Cancer Risk</b>	<b>Hazard Index</b>
Adult Resident	Dermal Contact	1E-05	0.0006
Child Resident	Dermal Contact	6E-06	0.0005
Adult Resident	Ingestion	1E-06	0.00006
Child Resident	Ingestion	2E-06	0.0003
Adult Resident	Inhalation	7E-10	0.000007
Child Resident	Inhalation	8E-10	0.00003
<b>TOTAL ALL PATHWAYS AND RECEPTORS</b>		<b>2E-05</b>	<b>0.002</b>

## **5.0 DESCRIPTION OF PREFERRED ALTERNATIVE**

An IRM (conducted in 1992) and a removal action (undertaken from 1997 to the present) at site SS-017 have resulted in the remediation of contaminated soil that constituted the principal threat waste at the site. As a result, no other alternatives were evaluated to reduce contaminant levels in soil at the site. No Further Action is the single and preferred alternative. This alternative includes the following elements:

- 1) No further action will be undertaken for the Soil OU at site SS-017.
- 2) No restriction on land use will be imposed through institutional controls for the Soil OU.

The preferred alternative can be modified based on public comment or newly available information, if any.

## **6.0 COMMUNITY PARTICIPATION**

The following paragraphs explain how the public can become involved in the selection process after reviewing the Proposed Plan. Note that the preferred alternative can change in response to public comment or as a result of new information.

### **Public Comment Period**

Plattsburgh AFB will hold a 30-day public comment period from January 22, 2002 to February 20, 2002 to solicit public input. During this period, the public is invited to review the Proposed Plan, the SS-017 removal action progress report, and other project documents, and to comment on the recommended alternative. These documents are included in the Administrative Record of the site. The full-length reports are available at the Information Repository located at the Feinberg Library at the SUNY Plattsburgh

Campus (see page one of this Proposed Plan for the address and available hours).

### **Public Informational Meeting**

Plattsburgh AFB will hold a public meeting on February 4, 2002 at the old Court House, Second Floor Meeting Room, 133 Margaret Street. The actual date and time of the meeting will be published in the *Plattsburgh Press Republican*. The meeting will be divided into two segments. In the first segment, data gathered at the site, the preferred alternative, and the decision-making process will be discussed. The public is encouraged to attend this presentation and to ask questions. Immediately after the informational presentation, the USAF will accept comments about the alternative being considered for site SS-017. The meeting will provide the opportunity for people to comment officially on the plan. Public comments will be recorded and transcribed, and a copy of the transcript will be added to the Administrative Record and Information Repository.

### **Written Comments**

If you would like to submit written comments about Plattsburgh AFB's preferred alternative or other issues relevant to the site remediation, please deliver your comments to Plattsburgh AFB's IRP Coordinator at the Public Hearing or mail your written comments (to be received no later than February 20, 2002 to:

Mr. Michael D. Sorel  
BRAC Environmental Coordinator/  
Site Manager  
Air Force Base Conversion Agency  
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### **Plattsburgh AFB's Review of Public Comment**

Public comments are part of the process of reaching a final decision on a response action for site SS-017. Plattsburgh AFB's final choice of an alternative will be issued in a Record of Decision for the site and will be submitted to the USEPA for review, approval, and signature and to the NYSDEC for review and concurrence. A Responsiveness Summary of public comments and Plattsburgh AFB's responses to them will accompany the Record of Decision. Once the Record of Decision is signed, it becomes part of the Administrative Record.

### **Additional Public Information**

Because the Proposed Plan only summarizes the field investigations and the alternative for site SS-017, the public is encouraged to consult the Information Repository, which contains all supporting reports.



## REFERENCES

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- United States Environmental Protection Agency (USEPA). 1999. *A Guide to Preparing Superfund Proposal Plans, Records of Decision, and Other Remedy Selection Decision Documents*, EPA 540-R-98-031. July. Cincinnati, OH.

## GLOSSARY

*Administrative Record:* A file established and maintained in compliance with Section 113(K) of CERCLA, consisting of information upon which the lead agency bases its final decisions on the selection of remedial method(s) for a Superfund site. The Administrative Record is available to the public.

*Alternative:* Technology or action used to address contaminated media at a site.

*Applicable or Relevant and Appropriate Requirements (ARARs):* ARARs include any state or federal statute or regulation that pertains to protection of public health and the environmental in addressing certain site conditions or using a particular remedial technology at a Superfund site. A state law to preserve wetland areas is an example of an ARAR. USEPA must consider whether a remedial alternative meets ARARs as part of the process for selecting a remedial alternative for a Superfund site.

*Aquifer:* A water-bearing formation or group of formations.

*Biosparging:* A remedial technology in which air is pumped below the water table to promote volatilization and growth of contaminant consuming microorganisms.

*Bioventing:* A remedial technology in which air is pumped into the vadose zone to supply oxygen to contaminant consuming organisms. Oxygen is in demand for those organisms and providing a continuous supply aids their growth and accelerates the consumption/destruction of contaminants.

*Carcinogenic:* Chemicals, which when exposure occurs at a particular level, may product cancer.

*Chlorinated Hydrocarbons:* Organic compounds that contains chlorine such as trichloroethene (TCE) and dichloroethene (DCE). Also referred to as chlorinated compounds or chlorinated solvents.

*Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):* A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act requires federal agencies to investigate and remediate abandoned or uncontrolled hazardous waste sites.

*Feasibility Study (FS):* A study that screens technologies that may be applied to remediate contamination, combines them into alternatives that are targeted to achieve remedial action objectives, and compare the alternatives based on objective criteria.

*Groundwater:* Water found beneath the earth's surface that fills pores within materials such as sand, soil, gravel, and cracks in bedrock, and often serves as a source of drinking water if found in an adequate quantity.

*Installation Restoration Program (IRP):* The U.S. Air Force subcomponent of the Defense Environment Restoration Program (DERP) that specifically deals with investigating and remediating sites associated with suspected releases of toxic and hazardous materials from past activities. The DERP was established to cleanup hazardous waste disposal and spill sites at Department of Defense facilities nationwide.

*Interim Remedial Measure (IRM):* An IRM is an immediate action to eliminate or mitigate a release or threatened release of hazardous wastes. An IRM can be carried out without extensive investigation.

*Monitoring:* Ongoing collection of information about the environment that helps gauge the effectiveness of a cleanup action. Information gathering may include groundwater well sampling, surface water sampling, soil sampling, air sampling, and physical inspections.

*National Oil and Hazardous Substances Pollution Contingency Plan (NCP):* The NCP provides the organization, structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. The NCP is required under CERCLA and the Clean Water Act, and USEPA has been delegated the responsibility for preparing and implementing the NCP. The NCP is applicable to response actions taken pursuant to the authorities under CERCLA and the Clean Water Act.

*National Priorities List:* USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program.

*New York State Registry of Inactive Hazardous Waste Sites:* The state's compilation of all known hazardous waste sites, comprising nine volumes with site descriptions and locations. (Copies available for review in NYSDEC offices).

*Noncarcinogenic:* Chemicals that may produce adverse health effects that are not related to cancer.

*NYSDEC:* The New York State Department of Environmental Conservation.

*Operable Unit (OU):* A separate and distinct remedial project that is part of a large, complex hazardous waste site. Each OU has its own ROD, RI/FS, design and construction.

*Proposed Plan:* A public document that solicits public input on a recommended remedial alternative to be used at a National Priorities List (NPL) site. The Proposed Plan is based on information and technical analysis generated during the RI/FS. The recommended remedial action could be modified or changed based on public comments and community concerns.

*Site Inspection (SI):* An investigation that determines the nature and composition of contamination at a hazardous waste site. Not as in-depth as a remedial investigation. Similar to a Site Investigation.

*Record of Decision (ROD):* A public document that explains the remedial alternative to be used at a National Priorities List (NPL) site. The ROD is based on information and technical analysis generated during the Remedial Investigation, and on consideration of the public comments and community concerns received on the Proposed Plan. The ROD includes a Responsiveness Summary of public comments.

*Remedial Action:* An action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to human health or the environment.

*Remedial Alternatives:* Options evaluated to address the source and/or migration of contaminants to meet health-based or ecology-based remediation goals.

*Remedial Investigation (RI):* The Remedial Investigation determines the nature and extent and composition of contamination at a hazardous waste site, and is used to assess the types of remedial options that are developed in the Feasibility Study.

*SARA:* The Superfund Amendments and Reauthorization Act of 1986 amended the 1980 CERCLA environmental statutes. The amendments re-authorized the federal Superfund which had expired in 1985 and established the preference for remedies that permanently reduces toxicity, volume or mobility of hazardous constituents.

*Semivolatile Organic Compounds (SVOCs):* Organic constituents which are generally insoluble in water and are not readily transported in groundwater.

*Solvents:* Organic liquids used to dissolve grease and other oil-based materials. Many solvents are toxic at high concentrations.

*Source:* Area at a hazardous waste site from which contamination originates.

*SVE:* Soil vapor extraction. A technology in which a vacuum is applied to a porous contaminated media to strip volatile chemicals adhering to the media as air flows through it.

*Superfund:* The trust fund, created by CERCLA out of special taxes, used to investigate and clean up abandoned or uncontrolled hazardous waste sites. Out of this fund USEPA either: (1) pays for site remediation when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work or (2) takes legal action to force parties responsible for site contamination to cleanup the site or pay back the federal government for the cost of the remediation. Federal facilities are not eligible for Superfund monies.

*To Be Considered (TBC):* Federal and state policies, advisories, and other non-promulgated health and environment criteria, including numerical guidance values, that are not legally binding. TBCs are used for the protection of public health and the environment if no specific ARARs for a chemical or other site conditions exist, or if ARARs are not deemed sufficiently protective.

*Unsaturated Zone:* The volume located between the ground surface and the water table. Also known as the vadose zone.

*USEPA:* United States Environmental Protection Agency

*Volatile Organic Compounds (VOCs):* Organic constituents which tend to volatilize or to change from a liquid to a gas form when exposed to the atmosphere. Many VOCs are readily transported in groundwater.

