ADDENDUM TO FINAL PRIMARY REPORT

IDENTIFICATION OF AREAS OF CONCERN AT GRIFFISS AIR FORCE BASE ROME, NEW YORK

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Prepared for:

BUREAU OF EASTERN REMEDIAL ACTION DIVISION OF HAZARDOUS WASTE REMEDIATION

U.S. Army Corps of Engineers Kansas City District 601 East 12th Street Kansas City, Missouri 64106

Prepared by:

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ADDENDUM TO FINAL PRIMARY REPORT

IDENTIFICATION OF AREAS OF CONCERN AT GRIFFISS AIR FORCE BASE ROME, NEW YORK

Under the requirements of the Federal Facility Agreement (FFA) and the March 1992 Resolution of Disputes, the U.S. Air Force is required to identify Areas of Concern (AOCs) at Griffiss Air Force Base (AFB). Thirty-nine AOCs were identified by the U.S. Air Force in the April 1992 Final Primary Report "Identification of Areas of Concern at Griffiss AFB, Rome, New York" submitted for review and approval by the New York Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency, Region II (EPA) (Law, 1992).

The Final Primary Report was determined by the regulatory agencies to be generally consistent with the FFA and March 1992 Resolution of Disputes and to adequately present the AOCs at Griffiss AFB (NYSDEC, 1992; EPA, 1992). However, the following exceptions were noted by the regulatory agencies to be addressed in an addendum to the Final Primary Report:

- Provision by the U.S. Air Force of monthly reports on the results of leak detection and monitoring system for the hydrant system and associated underground storage tanks located at Building 775, Pump House 3.
- Designation of an additional AOC (Building 133 Storage Vault) to be addressed during the Remedial Investigation/Feasibility Study (RI/FS) at Griffiss AFB
- Addition of polychlorinated biphenyl (PCB) contamination to the Building 222
 Battery Acid Disposal Pit (BADP) AOC description.

This addendum to the Final Primary Report has been prepared to address the regulatory agency comments. Updated information acquired since the April 1992 submittal of the Final Primary Report is also provided for the following AOCs:

- Landfill No. 5
- Glycol Storage/Use Areas
- Suspected Fire Training Area

The U.S. Air Force has recently revised the site code designations for Installation Restoration Program (IRP) sites. Some of the IRP sites and AOCs at Griffiss AFB have been affected by these changes. The revised IRP site codes are presented in this addendum and a revised Site Location Map reflecting the IRP site code changes, as well as the addition of the Building 133 AOC, are presented as an attachment to this document.

1.0 MONTHLY MONITORING AT PUMP HOUSE NO. 3

In accordance with Article II G.3. of the Resolution of Disputes, the U.S. Air Force will provide monthly reports of the leak detection and monitoring system for the hydrant system and associated underground storage tanks located at Building 775, Pump House 3, over a period of six months following the 13 March 1992 date of the Resolution of Disputes.

2.0 BUILDING 133 STORAGE VAULT

In accordance with the 27 May 1992 letters from NYSDEC and EPA to Griffiss AFB (Attachment 1), the U.S. Air Force agrees to designate the Building 133 Storage Vault as an AOC to be addressed under the requirements of the FFA and March 1992 Resolution of Disputes. A Site Characterization Summary for the Building 133 Storage Vault is provided as Attachment 2 and the location of the AOC is shown on the revised Areas of Concern and Investigation Location Map provided as Attachment 3 to this document.

3.0 BUILDING 222 BATTERY ACID DISPOSAL PIT

Pursuant to the request of the NYSDEC, the site characterization summary for the Building 222 Battery Acid Disposal Pit AOC has been modified to include polychlorinated biphenyl (PCB) contamination in accordance with analytical data for surface soils from the AOC provided by UNC Geotech, Inc. in its report "Hydrogeology Study Report, Griffiss Air Force Base, Rome, New York" (UNC Geotech, 1989). A revised site characterization summary for this AOC is included as Attachment 4 to this document.

4.0 LANDFILL NO. 5

The site characterization summary incorrectly states that surface water drainage from this AOC is to Six Mile Creek, rather than Three Mile Creek. A revised site characterization summary for Landfill No. 5 has been appended as Attachment 5 to correct this error.

5.0 GLYCOL STORAGE/USE AREAS BASEWIDE

The site characterization summary for this AOC contained in the Final Primary Report suggests that de-icing fluids were used at Griffiss AFB to de-ice runways and flight aprons. According to information provided by Griffiss AFB, deicing fluid has <u>not</u> been used in the past, and is not currently used to de-ice runways and/or flight aprons, only aircraft. A revised site characterization summary for this AOC has been appended as Attachment 6 to provide the corrected information regarding the use of de-icing fluids at the base and update the information known to date regarding the storage and use of glycols at Building 43, Building 220 and Building 785.

6.0 SUSPECTED FIRE TRAINING AREA

Additional information regarding the previous use of the AOC designated as the Suspected Fire Training Area has been obtained recently. According to information provided by

Griffiss AFB, a KC-97 display craft located at the circular drive approximately 500 feet northwest of Gate 10 was used by Griffiss AFB firefighters to simulate aircraft fuel fires. The fire training area was located only within the base boundaries at a static aircraft present at this location. JP-4 fuel contaminated with water was collected from engine cells and stored in approximately 2,000 gallon bowzer tanks. The bowzer tanks were moved to the site and approximately 200 to 250 gallons of fuel were placed on the natural ground surface under each wing 15 to 20 minutes before it was ignited and the training activities began. A total of approximately 500 gallons of fuel were used in each exercise. The year in which training exercises were started at this location is uncertain; however, during the early 1970s, fire training exercises took place once a week and lasted approximately 1.5 hours. The training area was used until approximately 1973 or 1974, after which time it was demolished (GAFB, 1992a). An aerial photograph taken on 9 May 1974 showed the aircraft to be present at this location; a later aerial photograph taken 27 September 1974 indicates that the aircraft had been removed from the site (GAFB, 1992b). A revised site characterization summary for this site to provide updated site information is provided as Attachment 7 to this document.

7.0 INSTALLATION RESTORATION PROGRAM SITE CODE REVISIONS

The Griffiss AFB IRP sites designated under the "OT" IRP site code have been recoded in accordance with recent IRP site identification changes. The sites affected by the IRP code change are summarized in Table 1. The Reference List for the Site Location Map has been revised to indicate both the new code and the old IRP site code for these sites.

TABLE 1

REVISED IRP SITE CODES
Griffiss AFB, Rome, New York

SITE IDENTIFICATION	OLD IRP SITE CODE	NEW IRP SITE CODE
Building 3 Former Drywell	OT-11	DP-11
Building 301 Former Drywell	OT-12	DP-12
Building 255 Drywells	OT-13	DP-13
Building 219 Drywell	OT-15	DP-15
Building 20 Contaminated Soil (Locomotive Roundhouse)	OT-23	SS-23
Building 771, Pumphouse 5	OT-37	ST-37
Building 775, Pumphouse 3 TCE Contamination	OT-38	SS-38
Weapons Storage Area	OT-40	SS-40
Off-Base Ground-Water Contamination	OT-43	SD-43
Industrial Soils Pad	OT-45	SS-45
Glycol Storage/Use Areas - Base Wide	OT-46	SS-46
On-Base Ground-Water Contamination	OT-52	SD-52

IRP = Installation Restoration Program

8.0 REFERENCES

- Law, 1992. Final Primary Report Identification of Areas of Concern at Griffiss Air Force
 Base, Rome, New York, April 1992. Kennesaw, GA: Law Environmental Inc.,
 Government Services Division Contract No. DACW-41-89-D-0124.
- NYSDEC, 1992. Letter from J. DeMurley, Federal Facilities Section, U.S. Environmental Protection Agency, Region II to B. Mero, Chief, Environmental Management Flight,
 Griffiss AFB, Rome, NY. 27 May 1992.
- EPA, 1992. Letter from J. Greco, Federal Projects Section, Div. of Hazardous Waste
 Remediation, New York State Department of Environmental Conservation to B. Mero,
 Chief, Environmental Management Flight, Griffiss AFB, Rome, NY. 27 May 1992.
- UNC Geotech, 1991. Hydrogeology Study Report, Griffiss Air Force Base, Rome, New York.
 UNC Geotech: Grand Junction, CO. January 1991.
- GAFB, 1992a. Memorandum from M. Corr, Environmental Management Flight, Griffiss AFB.

 Memo for Record: Site Visit to Suspected Fire Training Area, B-52 Crash Site and Fire

 Demonstration Area. 8 September 1992.
- GAFB, 1992b. Memorandum form D.B. Watkins, SMSgt, USAF, Superintendent,

 Bioenvironmental Engineering. Memorandum: Recollections of KC-97 on Suspected

 Fire Training Area. 12 May 1992.

Regulatory Agency Letters Designating Building 133 Storage Vault as Area of Concern



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278

2 7 MAY 1992

Mr. Bruce Mero, Chief Environmental Management Flight Department of the Air Force 416 GSG/DEV Griffiss Air Force Base, N.Y. 13441-5000

Re: Griffiss Air Force Base Interagency Agreement (IAG) Final Primary Report - Identification of Areas of Concern (AOC)

In accordance with our IAG, the U.S. Environmental Protection Agency (EPA) has reviewed the subject final primary report on AOCs and we find it generally consistent with the IAG and the March 1992 Resolution of Disputes.

We have noted the reported analyses of heavy metals found on the soils at Building 133 and feel that the levels are sufficient that this building should be placed upon the list of AOCs as or in an addendum.

Although Building 775 - Pump house 3 was not listed on the March 1992 Resolution Disputes as an AOC requiring further sampling, the Resolution does require the Air Force to provide monthly reports of the leak detection and monitoring system for this area over a period of six (6) months following the date of the Resolution. We believe this should be indicated in the final primary report and could appear as an addendum.

If further clarification is required pleae contact me at (212) 264-2597.

Sincerely yours,

John S. DeMurley

Federal Facilities Section

cc: M. Corr, GAFB

J. Greco, NYSDEC

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233 - 7010



MAY 2 7 1992

416th CSG/DEV Griffiss Air Force Base Rome, NY 13441-5000

ATTN: Ms. Marie Corr

Re: Final Identification of Areas of Concern Report Griffiss Air Force Base ID No. 633006

Dear Ms. Corr:

The New York State Department of Environmental Conservation has reviewed the referenced document and finds that it adequately presents the Areas of Concern to be investigated under the Interagency Agreement (IAG). The following comments should be addressed in a letter-addendum to this report.

1. I would like to take this opportunity to add the Building P-133 storage vault as a new Area of Concern based upon information conveyed verbally to me through Mr. Bruce Mero, Griffiss Air Force Base's Environmental Coordinator, in which it was stated that the tank received effluent from a vapor degreasing gun cleaning operation. As such, the tank qualifies as a solid waste management unit at which hazardous substances may be located, thereby meeting the agreed definition of an AOC.

Moreover, recently obtained sampling results show metals contamination within tank sediments to be at concentrations which may ultimately exceed regulatory established levels (i.e., EP-Tox or TCLP), however, these tests have not yet been run.

 I would also like to take this opportunity to request that the Bldg. 222 AOC be augmented in description to include PCB contamination as referenced in the final Griffiss Air Force Base Hydrogeologic Study Report.

Please contact me if you have any questions or comments regarding this matter.

Sincerely,

Jonathan Grear

Jonathan Greco Federal Projects Section Bureau of Eastern Remedial Action Division of Hazardous Waste Remediation

Site Characterization Summary Building 133 Storage Vault





GRIFFISS AIR FORCE BASE Rome, New York

		Prepared: September 21, 1992 U.S. Army Corps of Engineers Contract No. DACW 41-89-D-0124
Lav	w E	nvironmental, Inc. Government Services Division Job No. 11-0568/ML-45
A.	GE	ENERAL
	1.	Site Name: Building 133 Storage Vault Other Name: None
	2.	Air Force Installation Restoration Program Identifier No.: ST-53
	3.	Map Location No.: 45
	4.	Key Words: Storage vault/waste oil/solvents
B.	DE	ESCRIPTION
	1.	Location (Approximate): South side of Building 133 (Flight Simulator Building)
	2.	Type: Underground storage vault
	3.	Design Features: The site consists of an out-of-service 4,000-gallon concrete underground storage
		vault. The floor drain system in Building 133 formerly discharged to an O/W separator system, from
		which waste oils (non-aqueous phase) were discharged to the storage vault via underground steel
		piping. The aqueous phase was discharged to the sanitary sewer system. In 1992, the floor drain system
		discharge was diverted to the sanitary sewer system.
	4.	Operating History: The storage vault was constructed in 1977. It is suspected to have been used until
		1988 to collect waste oils from gun cleaning operations in Building 133. The vault was used from 1988
		until 1992 to collect wastewater from dehumidifiers used in the flight simulators located in Building 133.
		The vault was scheduled for removal in May 1992. At the time of the scheduled removal, the vault
		reportedly contained approximately 1,000 gallons of waste. The waste was pumped from the vault into
		a tanker truck. What appeared to be water was observed in cracks in the south wall of the vault at the
		time it was empty. The waste hauler determined, after the contents of the vault had been pumped.
		that he could not transport the waste because it had not been chemically characterized. The mixture
		of the vault waste, plus additional waste of unknown origin that had been present in the tanker
		prior to pumping out the vault, was then pumped back into the vault. An estimated 1,700 gallons
		of waste material was reportedly placed back into the vault.
	5.	Period of Operation: 1977 to May 1992
	6.	Site Features: Site is located beneath a grassed area south - southwest of Building 133.

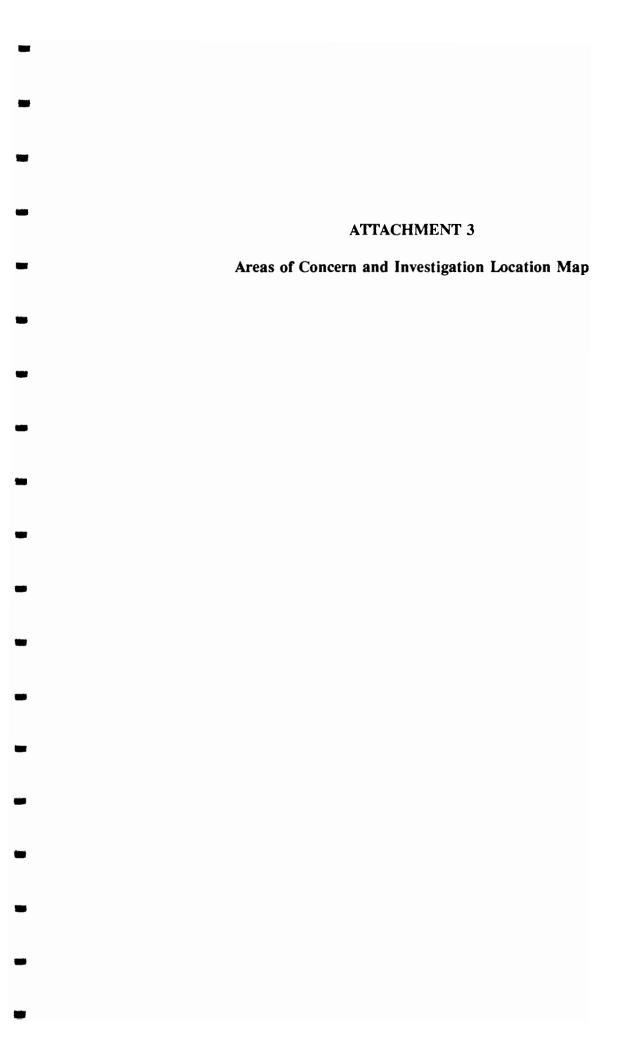
0635.91 ATT 2-1

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

D	ate P	repared: September 21, 1992 U.S. Army Corps of Engineers Contract No. DACW 41-89-D-0124
La	w E	nvironmental, Inc. Government Services Division Job No. 11-0568/ML-45
C.	CC	ONTAMINANT PROFILE
	1.	Types and Approximate Quantities of Waste Material: It is suspected that waste oils from gun
		cleaning operations were collected in the storage vault from 1977 until 1988. From 1988 to 1992,
		dehumidifier waste water was collected in the vault. The total volume of waste contained in the vault
		during the period of its use is unknown.
	2.	History of Spills/Releases: There is no previous history of spills or releases at this site.
	3.	Contaminants: Petroleum hydrocarbons, solvents, and metals were identified in samples of sludge
		obtained from the storage vault in May 1992 by AF Bioenvironmental and NYSDEC
	4.	Contaminated Media: The potential exists for soil and ground-water contamination at this site.
	5.	Potential Migration Pathways: Contaminants have the potential to migrate from soils in the vicinity
		of the storage vault and enter ground water. Surface water contamination via ground water discharge
		to surface water bodies may occur.
D.	PR	ESENT MONITORING SYSTEM: The site is not presently monitored for contaminants.
E.	TH	REAT POSED TO HUMAN HEALTH OR ENVIRONMENT: Human exposure to contaminants
	ma	y occur via exposure to contaminated drinking water and surface water, and aquatic exposure may occur
	via	exposure to surface water contaminated by ground-water recharge. Potential for on-site worker
	exp	osure to contaminated soils and ground water exists during investigation and/or remedial activities.
F.	FA	CILITY STATUS: The storage vault is out-of-service and scheduled to be pumped out in the near future
G	DF	GULATORY STATUS: NYSDEC Spill No. 9201395. Designated under Federal Facility Agreement as
J .		OC on May 27, 1992 by letter from EPA and NYSDEC.
	<u> </u>	On May 21, 1772 by lotter from Li A and 1410DLC.



REFERENCE LIST FOR SITE LOCATION MAP GRIFFISS AIR FORCE BASE ROME, NEW YORK

MAP NO.	IRP ^a SITE CODE	SITE NAME	STATUS
1	LF-01	Landfill No. 1	AOCb
2	LF-02	Landfills No. 2 and 3	AOC
3	LF-03	Landfill No. 7	AOC
4	ST-04	Bulk Fuel Storage Area - Barge Canal	Removal AOC
5	ST-06	Bldg. 101 Yellow Submarine Inactive Holding Tank and Battery Acid Disposal Pit	AOC
6	SF-07	Landfill No. 5	AOC
7	SS-08	Bldg. 112 PCB Spill and Leak Area	AOC
8	LF-09	Landfill No. 6	AOC
9	DP-11 (OT-11) ^d	Bldg. 3 Former Drywell	AOC
10	DP-12 (OT-12)	Bldg. 301 Former Drywell (Entomology Building)	AOC
11	DP-13 (OT-13)	Bldg. 255 Drywells (2)	AOC
12	DP-15 (OT-15)	Bldg. 219 Drywell	AOC
13	SS-17	Lot 69 Former Hazardous Waste Storage Area	AOC
14	SS-20	Tank Farms 1 and 3 (Former Bulk Fuel Storage Area)	Removal AOC
15	ST-21	Bldg. 210 Underground Storage Tank	Removal AOC
16	DP-22	Bldg. 222 Former Battery Acid Disposal Pit	AOC
17	SS-23 (OT-23)	Bldg. 20 Contaminated Soil (Locomotive Roundhouse)	AOC
0625.01		ATT 2 1	

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ATTACHMENT 3 (Continued)

REFERENCE LIST FOR SITE LOCATION MAP GRIFFISS AIR FORCE BASE ROME, NEW YORK

MAP NO.	IRP ^a SITE CODE	SITE NAME	STATUS
18	SS-24	Fire Demonstration Area	AOC
19	SS-25	T-9 Storage Area	AOC
20	ST-26	Bldg. 43 Refueling Station	Removal AO
21	LF-28	Landfill No. 4	AOC
22	FT-30	Fire Protection Training Area	AOC
23	SD-31	Three Mile Creek	AOC
24	SD-32	Six Mile Creek and Lagoon	AOC
25	SD-33	Coal Yard PCB Contamination	AOC
26	SS-34	Bldg. 786 Soil Contamination	AOC
27	ST-35	Bldg. 26 Underground Storage Tanks	Removal AO
28	ST-36	Bldg. 110 Aqua System	Removal AO
29	ST-37 (OT-37)	Bldg. 771 Pumphouse 5	Removal AO
30	SS-38 (OT-38)	Bldg. 775 Pumphouse 3 TCE Contamination	AOC
31	ST-39	Bldg. 117 Contamination	Removal AO
32	SD-41	Nose Docks #1 and #2 Contaminated Soil, including O/W Separators (Bldg. 782)	AOC
33	SD-43 (OT-43)	Off-Base Ground-Water Contamination	AOC
34	SS-44	PCB Substation Adjacent to Bldg. 27	AOC
35	SS-46 (OT-46)	Glycol Storage/Use Areas - Base Wide	AOC
36	FT-48	Suspected Fire Training Area	AOC
0635.91		ATT 3-2	

ATTACHMENT 3 (Continued)

REFERENCE LIST FOR SITE LOCATION MAP GRIFFISS AIR FORCE BASE ROME, NEW YORK

MAP NO.	IRP ^a SITE CODE	SITE NAME	STATUS
37	SD-50	Bldg. 214 Former Vehicle Maintenance and O/W Separator	AOC
38	ST-51	Bldg. 100 Fuel Hydrant System	Removal AOC
39	SD-52 (OT-52)	On-Base Ground-Water Contamination	AOC
40	SS-05	Former Entomology Storage Shed	Pending Sampling
41	SS-45 (OT-45)	Industrial Soils Pad	Pending Sampling
42	LF-49	Hardfill Areas (4)	Pending Sampling
43	SS-40 (OT-40)	Weapons Storage Area	Pending Sampling
44	SD-47	Bldg. 215/216 O/W Separator	Pending Sampling
45	ST-53	Bldg. 133 Storage Vault	AOC

^a IRP = Installation Restoration Program

0635.91 ATT 3-3

b AOC = Area of Concern

c Removal AOC = Site currently undergoing removal action(s) in accordance with the requirements of the National Contingency Plan.

^d Former IRP site codes are designated in parentheses

Pending Sampling = Site designated for study prior to determination of AOC status.

Revised Environmental Site Characterization Summary Building 222 Battery Disposal Pit

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

	te Prepared: <u>September 21, 1992</u> U.S. Army Corps of Engineers Contract No. <u>DACW 41-89-D-0124</u> w Environmental, Inc. Government Services Division Job No. <u>11-0568/ML-16</u>
F.	FACILITY STATUS: The disposal pit is no longer in use. Its contents were reported to have been excavated, and the pit has been sealed with cement.
G.	REGULATORY STATUS: Designated as FFA AQC.

0635.91 ATT 4-2

ATTACHMENT 5 Revised Environmental Site Characterization Summary Landfill No. 5

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

Α.	GE	ENERAL					
	1.	Site Name: Landfill No. 5 Other Name: None					
	2.	Air Force Installation Restoration Program Identifier No.: LF-07					
	3.	Map Location No.: 6					
	4.	Key Words: Landfill/Ground Water/Metals					
В.	DE	SCRIPTION					
	1.	Location (Approximate): This site is located south of Patrick Square between Perimeter Road and					
		Threemile Creek.					
	2.	Type: Landfill					
	3.	Design Features: Inactive 4 acre unlined landfill located on the flood plain and wetland area of					
		Threemile Creek. The site is covered with a shallow layer of local soils and is not clay capped.					
		Waste is evident in the wooded portions of the landfill.					
	4.	Operating History: Following the abandonment of Landfill No. 6 in 1959, this site was operated by					
		Griffiss AFB for the disposal of general refuse. The northern portion of the landfill was constructed					
		using the area method to an excavated depth of 6 feet. The southern portion of the landfill was not					
		excavated but built directly onto the flood plain of Threemile Creek to a height of approximately 12					
		feet above the flood plain,					
	5.	Period of Operation: 1959 to 1960					
	6.	Site Features: The site is well vegetated by grass in the northern portion and woods in the remaining					
		areas. Drainage is to the southwest towards Threemile Creek. There is a steep slope leading westward					
		toward Threemile Creek along the southern boundary of the site. A pond exists directly adjacent to the					
		southeastern boundary of the landfill.					
2.	CO	CONTAMINANT PROFILE					
	1.	Types and Approximate Quantities of Waste Material: Received an estimated 18,000 cubic yards of					
		general refuse. Base personnel reported that underground fires occurred and were difficult to extinguish					

0635.91 ATT 5-1

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

Da	te P	repared: September 21, 1992 U.S. Army Corps of Engineers Contract No. DACW 41-89-D-0124
Lav	w E	nvironmental, Inc. Government Services Division Job No. 11-0568/ML-6
	3.	Contaminants: Metals have been detected in ground water in the vicinity of Landfill No. 5, both
		upgradient and downgradient. It is unknown whether Landfill No. 5 is a source of ground-water
		contamination.
	4.	Contaminated Media: Ground water
	5.	Potential Migration Pathways: The absence of clay liner and cap may allow contaminants to migrate
		through the landfill and into the surficial ground-water aquifer. Surface water of Threemile Creek may
		receive recharge from ground water emanating from beneath the landfill. The steep edges of Landfill
		No. 5 are subject to contaminant release via soil erosion opening the landfill and allowing precipitation
		to percolate through the landfill and transport contaminants into the ground-water aquifer.
D.	PR	ESENT MONITORING SYSTEM: One well (TMC-MW8) installed in 1982 by Roy F, Weston to
	mo	nitor ground water downgradient of Landfill No. 5; one well installed by the USGS in 1987.
	<u>(T</u>	MC-USGS-MW-7) upgradient of Landfill No. 5.
E.	TH	REAT POSED TO HUMAN HEALTH OR ENVIRONMENT: Contaminants associated with landfills
	hav	ve the potential to migrate into surface water and ground-water sources, thus presenting a threat to
	hui	man health and the environment via the food chain and drinking water.
F.	FA	CILITY STATUS: Landfill No. 5 is a listed IRP site and has been examined in Phase I and II of the
	<u>IR</u>	P study. The site is covered by local soils and lacks a clay cap. IRP investigations have identified
	me	tals in ground water both upgradient and downgradient from this site. The landfill is inactive.
	cov	vered and re-vegetated.
G.	RF	GULATORY STATUS: Designated as FFA AOC.

0635.91 ATT 5-2

ATTACHMENT 6 Revised Environmental Site Characterization Summary Glycol Storage/Use Areas Basewide

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

		nvironmental, Inc. Government Services Division Job No. 11-0568/ML-35
A.	GE	ENERAL
	1.	Site Name: Glycol Storage/Use Areas Other Name: None.
	2.	Air Force Installation Restoration Program Identifier No.: SS-46
	3.	Map Location No.: 35
	4.	Key Words: Glycol/Underground tanks/Above ground tanks
В.	DE	ESCRIPTION
	1.	Location (Approximate): Glycols have been stored at Building 785, Building 43, and are found in the
		base fuel systems and in vehicle anti-freeze. Areas near Buildings 220 and 215/216 have been used for
		glycol disposal. Glycols have been used for deicing aircraft at the flight aprons.
	2.	Type: Ethylene glycol, propylene glycol
	3.	Design Features: Building 785: One 2,600-gallon aboveground glycol storage tank with an earthen
		dike was reportedly formerly located southeast of Building 785. A room located inside Building 785 is
		currently used to store glycol in 55-gallon drums for use in aircraft lavatories. A floor drain exists in
		this room that discharges to the O/W separator system located adjacent to Nosedock 1.
		Building 43: Two propylene glycol USTs, installed in 1986 and currently in service, are located at
		Building 43. These are steel tanks with respective capacities of 25,000 and 30,000 gallons. The
		25.000-gallon UST has no secondary containment; the 30,000-gallon UST is a double-walled tank.
		Building 220: The area west of Building 220 was reportedly used in the past for the annual discharge
		of antifreeze from the base vehicle fleet. Fifty-five gallon drums of ethylene glycol are currently
		stored on pallets near the east side of Building 220.
		Building 215/216: Drums of antifreeze were reportedly emptied in the past (1970s) near the north-
		eastern corner of Building 215/216 and into the floor drain system inside the building. The floor drain
		system at Building 215/216 discharges via an O/W separator system to the sanitary sewer.

0635.91 ATT 6-1

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

Date	e Prepared: <u>September 21, 1992</u> U.S. Army Corps of Engineers Contract No. <u>DACW 41-89-D-0</u>
Law	Environmental, Inc. Government Services Division Job No. 11-0568/ML-35
	4. Operating History: Glycol compounds have been used in anti-freeze for all base fleet vehicles, the
	water used in the fuels system and for deicing aircraft. Glycols are currently stored in the (2) USTs
	mentioned above for deicing aircraft during winter months. Storage of glycols in 55-gallon drums for
	minor applications is also a current practice. Previous storage of glycols occurred in an aboveground
	tank at Building 785.
4	5. Period of Operation: Ethylene glycol was the predominant deicing compound used prior to 1987-198
	Propylene glycol is the predominant compound currently used at the base; however, quantities of
	ethylene glycol are stored in 55-gallon drums for minor uses.
6	6. Site Features: Most sites where glycols were used or disposed are relatively flat and drain into the
	storm drainage system or sanitary sewer.
C. (CONTAMINANT PROFILE
1	1. Types and Approximate Quantities of Waste Material: No data available.
2	2. History of Spills/Releases: Diluted glycols have been used during winter months for deicing aircraft.
	The base's entire vehicle fleet reportedly released anti-freeze annually west of Building 220. Discharge
	of glycols at and near Building 215/216 occurred in the past.
3	3. Contaminants: Ethylene and propylene glycol.
4	4. Contaminant Media: Ground water and soils.
5	5. Potential Migration Pathways: <u>Infiltration through soils into ground water and potential for surface</u>
	water contamination via storm drainage system.
D. I	PRESENT MONITORING SYSTEM: On- and off-base ground-water monitoring wells are tested
	periodically for contaminants.
E. 7	THREAT POSED TO HUMAN HEALTH OR ENVIRONMENT: Potential for drinking water exposure
7	via ground-water resource contamination and aquatic exposure via surface water contamination.
F. I	FACILITY STATUS: Glycol contamination has been detected in wells in the vicinity of Griffiss AFB.
_	The public in affected areas has been supplied with bottled water and/or connection to City of Rome
<u>1</u>	municipal water.
J. 1	REGULATORY STATUS: Designated as FFA AOC.

0635.91 ATT 6-2

Revised Environmental Site Characterization Summary Suspected Fire Training Area

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

Law Environmental, Inc. Government Services Division Job No. 11-0568/ML-36		
A.	GI	ENERAL
	1.	Site Name: Suspected Fire Training Area Other Name: None.
	2.	Air Force Installation Restoration Program Identifier No.: _FT-48
	3.	Map Location No.: 36
	4.	Key Words: Fire Training Area
В.	DE	ESCRIPTION
	1.	Location (Approximate): Approximately 500 feet north-northwest of Gate No. 13 and 150 feet east of
		Perimeter Road.
	2.	Type: Former area of fire training exercises.
	3.	Design Features: Level gravel and sandy surface with sparse vegetation. No surface runoff
		containment.
	4.	Operating History: The site was reported to have been the former location of borrow pits for obtaining
		sand for base construction activities. The site was then used by Griffiss AFB firefighters to simulate
		aircraft fuel fires and conduct training activities. The fire training exercises were conducted at the
		former location of a KC-97 display craft in the area of a circular, gravel-covered drive. Approximately
		500 gallons of JP-4 fuel contaminated with water collected from engine cells were placed on the natural
		ground surface beneath the aircraft. The fuel was then ignited and the training activities were
		conducted. The year in which exercises at this site began is uncertain. During the early 1970s, fire
		training exercises took place once a week and lasted approximately 1.5 hours. The training area was
		used until approximately 1973 or 1974. An aerial photograph taken 27 September 1974 indicates that
		the craft had been removed from the site.
	5.	Period of Operation: 1940s - 1974
	6.	Site Features: Area in the vicinity of gravel-covered, circular drive is characterized by sandy soils with
		scattered low-lying vegetation. Areas in proximity of the site to the north and east are wooded.
		Site is bordered to the west by a fence, and to the south by the former Gate 13 access road onto the
		installation. A pond and stream that drain into Sixmile Creek are located south and west of the site.
C.	CC	NTAMINANT PROFILE
	1.	Types and Approximate Quantities of Waste Material: JP-4 fuel was used in quantities of approximately
		500 gallons per weekly fire training event.

0635.91 ATT 7-1

ENVIRONMENTAL SITE CHARACTERIZATION



GRIFFISS AIR FORCE BASE Rome, New York

Da	ite P	repared: September 21, 1992 U.S. Army Corps of Engineers Contract No. DACW 41-89-D-0124
La	w E	nvironmental, Inc. Government Services Division Job No. 11-0568/ML-36
	2.	History of Spills/Releases: Suspected site of flammable liquid release and burning.
	3.	Contaminants: No previous investigations have been conducted at the site. Past practices suggest the potential for petroleum fuels and metals contamination.
	4.	Contaminant Media: No data available. A potential for soil and/or ground-water contamination exists.
	5.	Potential Migration Pathways: Contaminants, if present, have the potential to percolate through soils
		into ground water. Surface runoff to surface water near the site may occur.
D.	PR	ESENT MONITORING SYSTEM: This site is presently not monitored for contaminants.
E.		REAT POSED TO HUMAN HEALTH OR ENVIRONMENT: Contaminants, if present, have the ential to migrate into surface water or ground-water drinking water sources.
F.	FA	CILITY STATUS: The area has been abandoned without any evidence of recent use.
G.	RE	GULATORY STATUS: Designated as FFA AOC.

0635.91 ATT 7-2